Gender Differences in Caregiver Stressors, Social Resources, and Health: An Updated Meta-Analysis

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This meta-analysis integrates results from 229 studies on gender differences in caregiver psychological and physical health, caregiving stressors, and social resources. Contrary to common perceptions, gender differences in caregiving variables were small to very small. Women had higher levels of burden and depression, and lower levels of subjective well-being and physical health. They reported that their care recipient had more behavioral problems; they provided more caregiving hours, helped with more caregiving tasks, and assisted with more personal care. Women and men did not differ in the use of informal and formal support. Statistically controlling for gender differences in stressors and resources reduced the size of gender differences in depression and physical health to levels that have been observed in noncaregiving samples. The results support stress-and-coping theories on gender differences in caregiving.

CAREGIVING has been identified as a chronic stressor that places caregivers at risk for physical and emotional problems (Aneshensel, Pearlin, Mullan, Zarit, & Whitlach, 1995). According to the National Caregiver Survey, the majority of caregivers (71.5%) are daughters and wives (Stone, Cafferta, & Sangl, 1987).

Several theories have suggested that gender differences in caregivers’ outcomes exist because, compared with male caregivers, female caregivers face higher levels of caregiving stressors, have fewer social resources, and report lower levels of psychological and physical health. These suggestions have been made, for example, in the gender-role socialization framework (Gilligan, 1982), the gender-role expectation framework (Barusch & Spaid, 1989), and in theories of labor marked segregation and household labor (Ross, 1987). However, only a portion of the available studies have found empirical support for gender differences in caregiver variables (for qualitative review, see Yee & Schulz, 2000). In contrast, it has been suggested that observed gender differences in caregiver health merely reflect gender differences in general well-being rather than caregiving-specific factors (e.g., Vitaliano, Zhang, & Scanlan, 2003).

Available qualitative reviews have not addressed several crucial questions, including whether gender differences in stressors, social resources, and health that were observed in individual studies are statistically significant when averaged across a large number of studies. Furthermore, these reviews did not assess how large the observed gender differences are, and in particular, whether they are of practical significance. For example, in the case of large sample sizes, even the smallest gender differences may be statistically significant but have no practical meaning. Although available results were heterogeneous, sources of between-study heterogeneity could not be tested by these reviews. Finally, because it has been suggested that gender differences in caregiver health may not be based on caregiving-specific factors, it remains unclear whether the size of gender differences in caregiver health would be larger than the size of gender differences observed in samples not selected for caregiving, and whether gender differences in caregiver health would be explained by related differences in stressors and resources.

Meta-analysis is ideally suited for answering these questions, but two existing meta-analyses on gender differences in caregiving variables were based on a low number of studies: one (Miller & Cafasso, 1992) used 14 studies, and another (Vitaliano et al., 2003) used only 4. Therefore, the meta-analyses could not address these questions. The present meta-analysis is based on more than 200 studies and provides reliable answers to these questions.

RESEARCH QUESTIONS

The Statistical and Practical Significance of Gender Differences in Caregiver Stressors, Social Resources, Psychological Health, and Physical Health

Several interrelated theoretical explanations for observed gender differences in caregivers’ stressors, resources, and health have been put forward in recent reviews (Yee & Schulz, 2000; Lutzky & Knight, 1994; Miller & Cafasso, 1992; Vitaliano et al., 2003).

First, the gender-role socialization framework (Gilligan, 1982), the gender-role expectation framework (Barusch & Spaid, 1989), and theories of labor marked segregation and household labor (Barusch & Spaid; Ross, 1987) suggest that women provide more care (in hours as well as duration) than do men. These theoretical frameworks also suggest that women may be confronted with higher levels of care recipient (CR) impairments, as reflected in the need for help with activities of daily living (ADLs), because they are less likely to institutionalize their ill relative. Empirical results, however, are inconsistent. For example, the narrative review by Yee and Schulz (2000) summarizes four studies in which women spend more time providing care than men, but two studies in which
there was no significant gender difference and one study in which men provided more care.

Second, with regard to social resources, Stoller (1990) has proposed that male caregivers are more likely than female caregivers to seek social support because they are less comfortable with the caregiving role. However, gender differences in social support may be smaller than expected because women have larger social networks and more available sources of informal support (Antonucci, 1990). Thus, male caregivers may be more motivated to use informal support than are female caregivers, but they may have less access to it. Again, available results are inconsistent: In their narrative review of caregiver studies, Yee and Schulz (2000) found that men use more informal support in four out of six studies and more formal support in three out of five studies than women.

Third, based on stress-and-coping models of caregiving (e.g., Pearlin, Mullan, Semple, & Skaff, 1990), more stressors and fewer social resources for female caregivers are suggested to result in lower levels of psychological and physical health in female than in male caregivers. However, empirical results are, again, heterogeneous. For example, Yee and Schulz (2000) identified seven studies in which female caregivers were more depressed than male caregivers and two in which there were no differences. With regard to subjective well-being (SWB), three studies showed gender differences, but other cited studies did not replicate this finding. Physical health was poorer for female than for male caregivers in a recent meta-analysis of four studies (Vitaliano et al., 2003), but other studies did not find the same result.

A main reason for the observed inconsistency between studies may be that gender differences in caregiving variables are often small and, therefore, only detected in studies with large sample sizes. Because a meta-analysis pools results across studies, small gender differences can be reliably identified. Thus, on the basis of the gender-role expectations framework, gender-role socialization framework, theories of household labor, and stress-and-coping theories, we expect with regard to the first research question that, compared with men, women would (a) provide more care, (b) spend more hours providing care, and care for individuals with greater (c) physical, (d) cognitive, and (e) behavioral symptoms. Women would (f) report lower levels of social support, and they would show lower levels of (g) psychological and (h) physical health.

In addition to statistical significance, we evaluated the practical significance of results. Although there are no generally accepted criteria of practical significance, Cohen (1992) and Rosenthal (1991) suggest that a variable should explain at least 1% of variance of the dependent variable, and at least 55% of women or men, respectively, should be in the group with above-median levels of the dependent variable. With regard to our second research question, we use Cohen’s criteria and the binomial effect size display (BESD; Rosenthal) for evaluating which gender differences in caregiving variables are practically significant.

Sources of Between-Study Heterogeneity

As the studies varied considerably in whether they found gender differences in caregiving variables (Yee & Schulz, 2000), our third research question focuses on sources of between-study heterogeneity. We analyzed two groups of moderator variables, namely the study quality and the sample characteristics that are theoretically linked to the size of gender differences.

Study quality.—Common criteria for high-quality studies are the use of a probability sample, the use of theoretically sound measures, and the publication in a peer-reviewed journal (Lipsey & Wilson, 2001). More reliable results are found in studies using probability samples than convenience samples and in studies using well-established, validated measures. Because convenience samples and studies with “homemade” measures may overestimate or underestimate the size of gender differences, we stated no specific expectation on the effect of these variables on the size of gender differences. As non-significant results are less likely to be published (the file-drawer problem; see Rosenthal, 1991), we expected larger gender differences to appear in peer-reviewed articles than in other papers. Because file-drawer problems are more common for variables that are the central focus of the study, we expected larger gender differences in articles with a main focus on gender differences.

Percentage of spouses.—We expected that gender differences in caregiving would be smaller in spouses than in adult children because distributing caregiving responsibilities between daughters and sons can be based on gender-role and related expectations, whereas spouses have less choice to select gender-specific caregiving tasks (e.g., Stoller, 1992).

Cohort and age differences.—There is some evidence that gender roles have become more flexible over time (e.g., Gerson, 2002; Miller, 1996). Thus, we expected that gender differences in caregiving variables would be smaller in more recent studies and in younger individuals who have received a less traditional gender-typed socialization.

Are Gender Differences in Caregiver Health Specific to the Caregiving Experience?

In our final research question we asked whether larger gender differences in psychological and physical health would be found in caregiver studies than in population-based studies not specific to caregiving, and whether elevated gender differences in caregiver health could be explained by gender differences in caregiving stressors and social resources.

Because there are gender differences in depression, SWB, and physical health in the general adult population, Vitaliano and colleagues (2003) have suggested that gender differences in caregiver health may reflect factors not specific to caregiving. In fact, a meta-analysis on depression among adults, who were not identified as caregivers, found higher levels of depression in women than in men (Davis, Matthews, & Twamley, 1999). Similarly, another meta-analysis on samples not specific to caregiving found that women had significantly lower levels of SWB and of perceived physical health than did men (Pinquart & Sörensen, 2001). However, these gender differences were very small.

Stress-and-coping models of caregiving suggest that gender differences in caregiver health can be explained by gender differences in caregiver stressors and resources (e.g., Lutzy & Knight, 1994; Pearlin et al., 1990). Thus, we expected with regard to our fourth research question that gender differences in
caregivers’ mental and physical health would exceed those found in the general population, and that statistically controlling for gender differences in caregivers’ stressors and support use would reduce the size of gender differences in caregiver health.

**Methods**

**Sample**

We identified studies from the literature through electronic databases (PsycINFO, MEDLINE; search terms caregiving or caregivers or carer and elderly or old age) and cross-referencing. Criteria for inclusion of studies in the present meta-analysis were as follows:

1. The studies were written in English.
2. Informal caregivers of older adults (60+ years) were assessed.
3. Standardized gender differences in caregiving variables could be computed.

We had to eliminate approximately 20% of the total number of studies surveyed, mainly because insufficient information about the magnitude of relationship between variables had been reported. After exclusion of such studies, we were able to include 229 studies in the meta-analysis. The articles were from The Gerontologist (29 articles), Psychology and Aging (13), the International Journal of Geriatric Psychiatry (10), the Journals of Gerontology (8), the International Journal of Aging and Human Development (7), Research on Aging (7), and other journals (125). In addition, we included 23 unpublished studies and 7 book chapters. Studies used in the meta-analysis are listed in the Reference section. The individual studies included in the analyses and the studies with probability samples are marked with superscript symbols and letters.

We entered the number of female and male caregivers, the type of illness of the CR, the sampling procedure (1 = probability samples, 0 = convenience samples), year of data collection, publication status (1 = peer-reviewed journal, 0 = other), the measurement of the variables, the quality of the measures (1 = widely used and theoretically sound measures, 0 = other), the standardized size of gender differences in the variables studied, and correlations of the study variables. If no exact information on the year of data collection was provided in the paper, we estimated a delay of 3 years between year of data collection and year of publication, based on the studies that had provided this information. If gender differences were provided for several subgroups in the same publication (e.g., for children and spouses), we entered these separately into our analysis instead of entering the global association measures. If papers reported results from one data set but for different variables, we omitted duplicate results.

**Measures**

We found that caregiver burden was most often assessed with the Caregiver Burden Interview (Zarit, Reever, & Bach-Peterson, 1980; 42 studies) and other related scales (93 studies), and depression was most often assessed with the Center for Epidemiologic Studies–Depression scale (Radloff, 1977; 40 studies), and other measures (38 studies). SWB was measured with life-satisfaction scales (13 studies) and other scales (11 studies). Caregiver health was assessed with single-item indicators of perceived health (34 studies) and symptom checklists (12 studies).

We found that the CR’s physical limitations were measured with indicators of ADLs and instrumental ADLs (IADLs; 34 studies). Cognitive deficits were assessed with the Mini-Mental State Examination (Folstein, Folstein, & McHugh, 1975; 15 studies) and similar scales (13 studies). Behavior problems were measured with the revised Memory and Behavior Problem Scale (Teri et al., 1992; 13 studies) and other scales (19 studies). The number of hours of care provision, the number of caregivers, and the number of months in the caregiving role were assessed with single items.

Informal support was most often assessed by the use of help from the informal network (29 studies) and the availability of network members as potential support source (21 studies). Formal support use was assessed by the frequency of receipt of support from sources other than family, friends, and neighbors (24 studies).

**Statistical Integration of the Findings**

1. We used random-effects models (Hedges & Vevea, 1998).
2. We tested the homogeneity of effect sizes by using the homogeneity statistics, Q.
3. We computed the weighted mean effect sizes, as suggested by Hedges and Vevea (1998).
4. We tested the significance of the mean by dividing the weighted mean effect size by the estimated standard deviation. Then we computed confidence intervals that include 95% of the effects for each effect size. We interpreted differences between two conditions as significant when the 95% intervals did not overlap.
5. As a tool for interpreting the practical significance of the results, we used the BESD (Rosenthal, 1991). For example, if the same number of men and women is assessed and caregivers with above-average and below-average burden are split at the median, then the percentage of women with above-average burden is computed by 0.5 + r/2, and the percentage of above-average burden in men is 0.5 – r/2; r is computed by transforming mean effect size d.
6. To test the simultaneous effect of more than one variable, we computed a weighted multiple linear regression analysis.

**Results**

**Sample Description**

The studies we included were published or presented between 1983 and June 2005. Sixty-four studies compared caregiving wives and husbands, 29 studies compared daughters and sons, and 136 studies combined spouses, adult children, and other informal caregivers. About 46% of the studies focused on dementia caregiving; 15% of the studies focused on caregiving for physically frail older adults; and 39% of the
studies included both dementia caregivers and other caregivers. About 22% of the studies used probability samples. The number of participants of the studies ranged between 17 and 5,627 (M = 283, Mdn = 116). About 29% of the studies had an explicit focus on gender differences (as indicated by their title).

The caregivers had a mean age of 59.5 years (SD = 8.0 years). About 69% were women. We included data from 18,831 wives, 9,283 husbands, 19,131 daughters, and 8,236 sons in the meta-analysis. The CRs were, on average, 75.8 years old (wives, 9,283 husbands, 19,131 daughters, and 8,236 sons in the 5.2), and approximately 60% of them were women.

Gender Differences in Caregiver Health, Stressors, and Resources

In support of our first expectation, caregiving women reported higher levels of CRs’ behavior problems, more hours of care provision, more caregiving tasks, higher levels of caregiver burden and depression, and lower levels of physical health and subjective well-being than did caregiving men (Table 1). Interestingly, when analyzing specific caregiving tasks, we found that significant gender differences emerged only for personal care. Contrary to our expectation, we found no significant gender differences for the other stressors, formal support use, and use and availability of informal support.

With regard to practical significance, gender explained 2.8% of the variance of depression, 2.7% of the variance of burden, and 1% of the variance of the number of caregiving tasks (Table 1). According to Cohen’s (1992) criteria, gender differences in burden, depression, and number of caregiving tasks were small (d < 0.50) and the other differences very small (d < 0.20). As another tool for interpreting the practical significance of gender differences, we computed BESDs. When an equal number of men and women are assessed, 58% of women are in the group with above-average levels of burden and depression, as compared with 42% of men. In addition, 55% of women help with an above-average number of caregiving tasks, as compared with 45% of men. However, despite the fact that gender differences in SWB were statistically significant, the percentages differed only slightly for men and women: 52.5% of women as compared with 47.5% of men reported below-average SWB.

**Moderator Variables**

All observed gender differences were heterogeneous (Table 1). To test for variables that explain this heterogeneity, we computed weighted multiple linear regression analyses based on random effects models (Table 2). Positive regression coefficients indicate that higher levels of the independent variable are associated with larger levels of the outcome variable in women and lower levels of the outcome variable in men.

With regard to study quality, we found that women reported less depression in studies using well-established, theoretically sound measures. In addition, women reported lower levels of depression and SWB, and more hours of care provision than men in convenience samples as compared with probability samples. Three effects of publication status appeared: In peer-reviewed articles, women reported more cognitive deficits in their CR, more hours of care, and less use of informal support than men compared with articles that were not peer reviewed. In studies with an explicit gender focus, women showed lower levels of SWB than men, and they provided care for a longer time.

In samples with a lower percentage of spouses, women were more likely to report cognitive deficits and behavior problems. Finally, gender differences varied by caregiver age and year of publication. In older samples, women reported lower levels of...
formal support, higher levels of behavior problems, and less SWB than men. In addition, women reported more CR cognitive deficits in older than in more recent studies. Thus, stronger gender differences emerged in older samples and in older studies.

Are Gender Differences in Caregiver Health Caregiving Specific?

With regard to our fourth research question, we had expected that gender differences in depression, SWB, and physical health would be larger in caregiver studies than in population-based studies. Because no population-based studies were available that compared the size of gender differences in caregivers versus noncaregivers, we compared the results of our meta-analysis with those of previous meta-analyses with samples not selected for caregiving. In support of our expectation, gender differences in depression were larger for caregivers (d = 0.34, 95% confidence interval or CI = 0.29 to 0.40) in our meta-analysis than they were in the meta-analysis by Davis and colleagues (1999; d = 0.25, CI = 0.21 to 0.29). Similarly, gender differences in caregiver physical health (d = 0.17, CI = 0.17 to 0.12) exceeded those among adults in general that have been reported in a previous meta-analysis (d = 0.08, CI = 0.09 to 0.07; Pinquart & Sörensen, 2001). However, the size of gender differences in the SWB of caregivers (d = 0.09, CI = 0.17 to 0.01) did not differ significantly from the size of gender differences in adults in general (e.g., life satisfaction: d = 0.08, CI = 0.09 to 0.06; Pinquart & Sörensen).

Table 3. Predictors of Caregiver Burden, Depression, Subjective Well-Being, and Physical Health (Hierarchical Multiple Linear Regression Analysis)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Burden (Step 1)</th>
<th>Burden (Step 2)</th>
<th>Burden (Step 3)</th>
<th>Depression (Step 1)</th>
<th>Depression (Step 2)</th>
<th>Depression (Step 3)</th>
<th>Subjective Well-Being (Step 1)</th>
<th>Subjective Well-Being (Step 2)</th>
<th>Subjective Well-Being (Step 3)</th>
<th>Physical Health (Step 1)</th>
<th>Physical Health (Step 2)</th>
<th>Physical Health (Step 3)</th>
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<tbody>
<tr>
<td>Female gender</td>
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<tr>
<td>CR physical impairments</td>
<td>.13***</td>
<td>.10***</td>
<td>.09***</td>
<td>.17***</td>
<td>.15***</td>
<td>.15***</td>
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<tr>
<td>CR cognitive impairments</td>
<td>.03**</td>
<td>.03**</td>
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<td>.06**</td>
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<tr>
<td>CR behavior problems</td>
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<td>.03**</td>
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<tr>
<td>No. of caregiving tasks</td>
<td>.32***</td>
<td>.32***</td>
<td>.24***</td>
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<td>.24***</td>
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<tr>
<td>Hours of care per week</td>
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<td>.09***</td>
<td>.01</td>
<td>.01</td>
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<td>.01</td>
<td>.05**</td>
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<tr>
<td>Years in caregiver role</td>
<td>.13**</td>
<td>.14***</td>
<td>.11**</td>
<td>.11**</td>
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<td>.11**</td>
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<td>Use of informal support</td>
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<tr>
<td>Explained variance by gender</td>
<td>.017</td>
<td>.009</td>
<td>.008</td>
<td>.029</td>
<td>.022</td>
<td>.021</td>
<td>.004</td>
<td>.002</td>
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<td>Total R²</td>
<td>.017</td>
<td>.20</td>
<td>.22</td>
<td>.029</td>
<td>.12</td>
<td>.15</td>
<td>.004</td>
<td>.032</td>
<td>.064</td>
<td>.003</td>
<td>.048</td>
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<td>64</td>
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<td>7,848</td>
<td>6,830</td>
<td>7,288</td>
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</tr>
</tbody>
</table>

Notes: All table data are standardized partial regression coefficients. CR = care recipient; R² = explained variance; k = number of included samples; N = average number of participants.

*p < .05; **p < .01; ***p < .001.
Thus, gender differences in caregiver health were larger than those observed in general populations for two out of three outcome variables. To investigate potential reasons for this difference, we tested whether gender differences in psychological and physical health of caregivers would be reduced after we controlled for gender differences in caregiver stressors and social support. We computed a correlation matrix of these variables, based on the meta-analytic approach of Rosenthal (1991). We ran separate hierarchical regression analyses with burden, depression, SWB, and physical health as the dependent variables, and gender (Step 1), stressors (Step 2), and social resources (Step 3) as the independent variables. In the first steps of the analysis, gender explained 1.7% of the variance of burden, 2.9% of the variance of depression, 0.4% of the variance of SWB, and 0.3% of the variance of physical health (Table 3). After we included stressors, the variance explained by gender dropped to 0.9%, 2.2%, 0.2%, and 0.2%, respectively. Nonetheless, the effect of gender remained statistically significant. Controlling for social support variables further reduced the amount of variance in caregiver burden explained by gender. Still, gender differences for all caregiving outcomes remained significant. However, after converting the effect sizes of gender from the third step of the regression analysis back to the metrics of standard deviation units (Lipsey & Wilson, 2001), we found that the remaining gender differences in caregiver depression (d = 0.29, CI = 0.26 to 0.32) no longer differed from those observed in population-based samples (d = 0.25, CI = 0.21 to 0.29; Pinquart & Sörensen, 2001). Similarly, after controlling for caregiver stressors and social resources, we found that the remaining gender differences in physical health (d = −0.08, CI = −0.11 to −0.05) are similar to those in population-based samples (d = −0.06; CI = −0.09 to −0.07).

**DISCUSSION**

The present meta-analysis expands our understanding of both the extent of and reasons for gender differences by including a broader range of indicators of caregiver stressors, social resources, and caregiver health in the analysis than is found in prior reports. We found that most gender differences in stressors, social resources, and health were very small. When applying Cohen’s (1992) criteria, we found that only gender differences in burden, depression, and the number of caregiving tasks were of practical importance. We then identified study characteristics that moderate the observed effect size. Finally, we showed that gender differences in caregiver depression and physical health were larger than those observed in the general adult population, and, in part, they were explained by gender differences in caregiver stressors.

**Gender Differences in Caregiving Variables**

Consistent with previous meta-analyses (Miller & Cafasso, 1992; Vitaliano et al., 2003), the present study supports the finding that gender differences in psychological health, physical health, and caregiving stressors are present, but that they are small or very small in magnitude. On the basis of 229 studies, we found that statistically reliable gender differences appeared: Compared with male caregivers, female caregivers reported higher levels of behavior problems, more hours of care provided, higher number of caregiving tasks, more caregiver burden and depression, and lower SWB and physical health. According to Cohen’s (1992) criteria, only gender differences in burden, depression, and amount of care were of practical significance. Gender differences in the provision of personal care were at the threshold of being practically significant. Our results suggest that there are more similarities than differences between female and male caregivers, and that most caregiving stressors, such as the number of caregiving hours, are probably more strongly determined by actual needs of the CR and the availability of additional helpers than by gender differences in socialization, identity, or caregiving motives, as has been previously suggested.

Contrary to theoretical suggestions (e.g., Stoller, 1990), female and male caregivers did not differ in the use of informal and formal support. Women’s more extensive formal support system (Okun & Keith, 1998) may have counterbalanced the effects of male caregivers’ greater tendency to seek support. In addition, gender differences in formal support use may vary by the source of support (e.g., self-help group vs home care services), thus reducing the chance of finding significant gender differences (e.g., Barusch & Spaid, 1989). Unfortunately, we did not find enough studies addressing the effects of different forms of formal support to test for gender differences.

**Impact of Study Characteristics**

On average, study characteristics explained 26% of the between-study heterogeneity of effect sizes. Less variance was explained in analyses with larger numbers of studies, because they include more study-specific sources of variance. Because only sample means rather than the distribution of the variables were available for analysis for age and percentage of spouses, the amount of explained variance by these variables is reduced.

Study quality was related to gender differences in three instances. Gender differences were larger in probability samples. Because convenience samples are often biased toward highly distressed caregivers and show restricted variance (Pinquart & Sörensen, 2003), gender differences were probably smaller in these studies. We also found some evidence for file-drawer problems: In studies with an explicit gender focus and in peer-reviewed articles, there were stronger (and more significant) gender differences, which confirmed common theoretical frameworks on gender differences.

We found smaller gender differences in cognitive deficits and behavior problems for samples with high a percentage of spouses, probably reflecting the fact that spouses have less choice to select caregiving tasks and to avoid caregiving stressors. However, no other kinship effects appeared. Stronger effects of spousal status may appear when comparing gender differences in homogeneous samples of spouses versus adult children.

On the basis of changing gender roles (e.g., Gerson, 2002), we had expected smaller gender differences in more recently published studies and in younger age groups (i.e., in more recent cohorts). Our expectation was supported for 4 out of 24 comparisons. Effects of the year of data collection may even have been underestimated in our study, as no exact information on that variable was available in many studies. Nonetheless, we conclude that caregiving experiences of men and women have become more similar in recent cohorts. However,
because gender roles are slow to change (Cafferata, Horn, & Wells, 1997), only a few cohort effects were detected.

**Gender Differences: Caregiving-Specific Versus Caregiving-Unspecific**

It has been suggested that gender differences in caregiver health may merely reflect gender differences in population health (e.g., Vitaliano et al., 2003). Because previous reviews could not test this hypothesis, the present study makes an important contribution in stating rather unequivocally that gender differences in depression and physical health of caregivers are indeed larger than those found in general populations.

Our meta-analysis supports the explanation of gender differences in caregiver health by the stress-and-coping framework (e.g., Lutzky & Knight, 1994), in that statistically controlling for the level of stressors reduces gender differences in psychological and physical health. Because the gender differences in depression and physical health that remain after stress intensity and social support are controlled for are not larger than those reported by people in the general population, we conclude that higher levels of caregiving stressors and, in part, lower levels of social resources among female (vs male) caregivers account for the elevated gender differences in these measures. This has implications for the design of interventions, because gender differences in caregiver health can be reduced by reducing women’s levels of stressors. The remaining gender differences may be based on differences in resources and stressors that are not specific to caregiving (Pinquart & Sörensen, 2001; Sinnott & Shifren, 2001), and on women’s greater readiness to disclose negative feelings and health problems (Verbrugge, 1985).

**Limitations and Conclusions**

The present paper has several limitations. First, because many bivariate effect sizes were heterogeneous, the multivariate analyses must be interpreted with caution. Second, too few studies were available for some variables to be included in the present meta-analysis, such as caregiving–work conflicts. Third, the size of gender differences in caregiving variables may also be influenced by other sample characteristics, such as gender of the CR (Bédard et al., 2005). Unfortunately, we did not find enough studies to meta-analyze the interplay of gender of caregivers and CR. Finally, searching for moderators for 12 variables increased the likelihood that we would make a Type I error. We dealt with this source of error by focusing our discussion on moderators that were significant in more than one analysis.

Despite these limitations, five conclusions can be drawn from our study. First, because gender differences in burden, depression, amount of care provision, and quality of the relationship with the CR were of practical significance according to Cohen’s criteria, interventions tailored at negative caregiver outcomes should include these aspects. For example, interventions may focus on actual and previous relational stressors and on getting help with ADL assistance. Gender differences are usually smaller than would be expected from gender-role theories.

Second, we conclude that caregiving increases gender differences in depression and physical health, primarily because women experience more caregiving stressors. Third, the magnitude of gender differences is somewhat overestimated in peer-reviewed studies and in studies with explicit gender focus. This suggests that results that do not confirm common stereotypes about strong gender differences are more difficult to get published. Fourth, on the basis of the effects of caregiver age and year of data collection on the size of gender differences, we conclude that gender differences in caregiver variables are subject to social change, because—at least for some variables—smaller differences appear in more recent studies and for younger caregivers. Finally, our results suggest that husbands’ and wives’ experience of caregiving is fairly similar, whereas sons’ and daughters’ experience may be somewhat different, but not as much as one might expect. Though sons are less likely than daughters to take over the caregiver role than husbands compared with wives (Stone et al., 1987), once they have become caregivers, they both report similar behaviors and feelings as do wives and daughters.

With regard to future research, we need, first, more differentiated research questions. For example, rather than asking for gender differences in formal support use in general, we must ask which sources of support are more likely to be used by female and male caregivers. Second, more research is needed that directly tests theories on gender differences in caregiving stressors (e.g., socialization experiences and time availability). Third, more research is also suggested regarding whether caregiving stressors and resources affect women differently than they do men. For example, it is possible that tensions in the relationship with the CR may cause more stress for women than for men. Finally, because there is some evidence that the size of gender differences in caregiving variables may change over time (Schulz & Williamson, 1991), more longitudinal work is needed as well.

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**References**

References marked with an asterisk indicate studies included in the meta-analysis. Superscript letters indicate studies used in analyses of, respectively, a, caregiver burden; b, depression; c, subjective well-being; d, caregiver health; e, physical impairment of CR; f, cognitive impairment of CR; g, behavior problems of CR; h, number of years in caregiver role; i, number of caregiving hours per week; j, number of caregiving tasks; k, informal support; and L, formal support. The superscript m is used for studies with probability samples.


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