The Link Between Gender and Depression in young Adults Providing Care for Older Family Members

Mark C. Gillen & Catherine Roland

This study focused on the level of depression in young adult caregivers (age 18-40) relative to gender, employment, health and relationships. Previous research found significant relationship between gender and depression. In this study, gender was found to be a contributing factor in depression among young adult caregivers; however, not a significant factor. This information may lead to broader ways of thinking about caregiving by counselors and individuals working with older adults.

Keywords: Young adult, caregiving, gender, depression

The number of Americans living into their 90s is increasing, creating an unprecedented societal change (Dellman-Jenkins, Blankemeyer, & Pinkard, 2001; Miller, Shoemaker, Willyard & Addison, 2008). In 1900, only four percent of the population was 65 years old or older (Hooyman & Kiyak, 2002). It is probable that, by 2030, the population of older adults will be approximately 7.5 million in the United States (Administration on Aging, 2004; Hooyman & Kiyak, 2002). In addition, the overall declining birthrate has created a family structure known as the beanpole family or verticalization (Gierveld & Dykstra, 2008; Martin, 1997). Verticalization occurs when the number of generations in a family increases due to declining mortality, and the number of members of each generation decreases due to declining birth rates (Martin, 1997). More people are living longer, thus the responsibility of caregiving for older adults is falling to more people. Adult children and spouses used to be the sole option for performing this task, but today male and female members of the younger generations are taking on this responsibility as well.

Younger adults who take on a caregiving role, voluntarily or by virtue of necessity in the family structure, have been given a task that may seem daunting at times, causing tension, frustration and at times, depression. A broad study of over 43,000 adults over the age of 45, who responded that they were caregivers, illuminated the need for counseling and case management interventions for mid-life and older caregivers (Roth, Perkins, Wadley, Temple & Haley, 2009). Although the Roth et al. (2009) study looked at multiple strains of caregiving, and incorporated several variables, an overriding issue that continued to emerge was caregiver strain, regardless of
the amount of care or the severity of the family member’s physical/cognitive issue. An earlier study demonstrated that adult caregivers, who availed themselves of counseling in some form, reported reduced strain and tension for dealing with spousal caregivers of Alzheimer’s patients (Roth, Mittelman, Clay, Madan, & Haley, 2005). Men and women may differ in the seeking of counseling or intervention services, therefore making it difficult to assess the counseling needs of men who fulfill the caregiver role, and traditionally appeared more stoic as to stress and tension in their everyday lives. Counseling professionals need to take into consideration that young adult men, as well as young adult women, perform varied caregiving duties, and to that end, tailor helping strategies to that population and to their busy lives (Baker & Robertson, 2008). Providing counseling services with a focus on age, stage, and gender variables may yield a unified intervention strategy for younger caregivers that does not fit the traditional expected and experienced mode of older adults, taking care of older, older adults.

Care Provision, Gender, and Depression

Providing care for an aging family member has traditionally been organized according to set role patterns and structure (Crispi, Shiaffino, & Berman, 1997; Sachs, 1997; Smith, 2004). Families were sometimes heavily influenced by gender roles; for example, Western women were considered better suited to household duties, therefore being seen as the primary providers of care for the elderly (Adams & Steinmetz, 1993; Smith, 2004). Likewise, men who are not supportive of the caregiving role of their wife contributed to a decline in marital satisfaction for both partners (Suitor & Pillemer, 1994). Therefore, conflict can occur for women when they engage in transitions that conflict with cultural mandates (Suitor & Pillemer, 1994). This conflict is something that can be addressed within the counseling process; comfortability with role and actual caretaking responsibilities can be daunting and a supportive process, such as counseling, will help.

Gender

Brody, Litvin, Hoffman, and Kleban (1995) stated that in 1982, 83% of caregivers were women. Daughters seemed to provide 70 to 80% of caregiving (Mui, 1995; Smith, 2004). Women assume the caregiving role because they view caregiving as their family role, or because siblings and other family members are unwilling to provide care (Brazil, 2008; Brody et al., 1995). Women with no siblings who lived close to the care recipient have a greater chance of becoming care providers (Marks, 1996). However, caregiving among females affects their economic status and perpetuates poverty, especially among older women (Brewer, 2001).

Females seem to feel more responsible for caregiving than males, and are more likely than men to provide transportation, check on the care recipient by phone, visit, give emotional support, provide housekeeping, and bring meals (Brazil, 2008; Miller, 2008; Mui, 1995; Neal, Ingersoll-Dayton, & Starrels, 1997). Although women provide most of the care for older relatives, men do provide some care (Miller, 2008; Stoller, 2002). Males provide stereotypical masculine instrumental tasks, those most closely associated with male roles, including yard work and household repairs (Carpenter & Miller, 2002; Stoller, 2002). In fact Burack-Weiss (1995) found that men participated in caregiving only when required, or when a female caregiver was not available.
However, in a recent study of 23,000 Australians, Burns, LeBlanc, Abernethy, & Currow, (2010) reported that younger caregivers had an almost equal proportion of female to male, something not seen or reported in the U.S. Burns et al. (2010) focused on patients who were diagnosed with terminal illness and their young adult caregivers in Australia. The specific medical issues may vary in some sense, but the spirit of the article remains parallel to our study. The study was conducted on former caregivers who had lost those for whom they were doing the caregiving. Caregiving, according to the current research, is being conducted by a range of age/stages for adults, and the counseling issues may seem to be a bit different given that demographic. Where before older children and relatives participated in the caregiving for the most part, currently there is reason to believe that younger adults are as well, and those individuals bring career, family and developmental issues to the counseling process. The assistance needed would be different, in that it may be the first time young adults in this role were completely responsible for another person, for care and management. A significant finding in the Burns et al. (2010) study showed:

Young active caregivers were more likely to be a close family member. Interestingly, young people were almost also as likely to care for friends and others as did those over 30. Our data identified almost as many young males were actively caring as females; this is different from past generations when caregiving responsibilities were predominantly the purview of women. Secondary analysis of U.K. data from the 1990s confirmed the trend of increasing numbers of men providing informal care to their spouse or partner. (p. 1232)

According to Stoller (2002), attempts by previous researchers to explain the differences in type and level of care provision between males and females were limited by definitive understanding on how learned behavior and cultural norms were developed. Social scripts are often associated with gender and reinforced socialized concepts when performing tasks (Stoller, 2002). The amount of caregiving responsibility shouldered by women may also relate to a woman’s greater concern with relationships and relational connections in families (Goldenberg & Goldenberg, 2000; Jordan, Kaplan, Miller, Stiver, & Surrey, 1991). Caregiving is linked with the functional description of the expressive nature of females and their connection to the domestic sphere, just as males providing care is viewed as unnatural and inconsistent (Stoller, 2002). Counseling for issues of depression and helplessness would seem to be a helpful addition to the life of the caregiver but often hospitals and families either do not consider counseling or cannot pay for it. Regardless of the reason, depression may go unchecked for a period of time, possibly making it more serious.

**Depression**

Depression rates among adult children caregivers range from 30% to 50% (Cochrane, Goering, & Rogers, 1997; Haggan, 1998). When age and education are considered, adult children still experience greater levels of depression than non-caregivers (Strawbridge, Wallhagen, Shema, & Kaplan, 1997). As early as 1989, Gallagher, Rose, Rivera, Lovett, and Thompson found that on average 36% of all caregivers, 31% of men caregivers, and 49% of women caregivers suffer from depression.
The National Family Caregiving Association (NFCA) (2000) found that 61% of caregivers providing at least 21 hours of caregiving per week suffered from depression. Recently, it was posited that for younger caregivers, aged 15 – 30 years old, depression and sometimes debilitating grief and bereavement impacted their lives in a profound manner (Burns et al., 2010). However, new studies are needed on younger caregivers to fully understand the level of depression experienced (or not) by younger caregivers.

Depression has been the focus of caregiver studies because of concern that depressed caregivers may be less responsive to the needs of the elderly (Steffen, Futterman, & Gallagher-Thompson, 1998). Markers of depression include drug use, family strain, institutionalization of the care recipient, and discontinuation of care (Arai, Suguira, Washio, & Kudo, 2001; Gallagher et al., 1989). However, information concerning caregiver depression has been primarily limited to studies where samples included family members caring for dementia patients, spousal caregivers, and a small percentage of caregivers below 35 years of age (Whitlatch, Feinberg, & Sebesta, 1997; Zunzunegui, LlacerCentro, & Beland, 2002). The grief that comes from loss of the family member or friend, from the time they are diagnosed, is another instance where depression can emerge in a more insidious way – not necessarily being observed quickly or at times at all, especially for younger adults (Burns, et al.).

### Caregiving Strain, Depression and Gender

According to Smerglia, Deimling, and Schafer (2001), depression is the most widely examined indicator of caregiver or chronic strain. A commonly examined variable of depression and strain is gender, as women are expected to provide care and maintain family obligations (Pinquart & Sorensen 2006; Suitor & Pillemer, 1994). Gender differences can be viewed as related to caregiver strain, and these differences are related to social and emotional characteristics such as day-to-day life management, resource availability, and impairment between caregiving and the other parts of one’s life (Mui, 1995; Pinquart & Sorensen, 2006).

In an older study, Gaynor (1990) stated that women providing for an older family member over a long period of time have a higher perceived caregiver burden. While results from studies vary, most researchers examining depression in middle-age children and spouse care providers found a significant relationship between gender and depression. However, as mentioned previously, little research has been conducted with respect to the emotional and personal efforts of caregiving responsibilities and younger adults. Therefore, the major purpose of our study was to examine the relationship between level of depression and the gender of the young adults providing care for older adult family members, even though other variables were considered.

### Method

The research in this study involved a correlational design utilizing a cross-sectional survey methodology. The design was based on the purpose of the study: the examination of the relationship between depression, gender, employment, physical health, and relationships in young adults providing care for older adult family members. For the purpose of this study young adult was defined as adults between the ages 18 and 40.

### Participants
A purposeful, heterogeneous sample of young adult caregivers of older adults was recruited at two public universities and one private college. The participants were selected according to the following criteria: (a) between 18 and 40 years old, (b) provided assistance for at least one activity of daily living (ADL) or for at least one instrumental activity of daily living (IADL), (c) assistance had been provided within the last month, (d) relatives receiving assistance were age 65 or older, and (e) caregiver did not receive pay for providing the service.

There are seven ADL, the most commonly used measures of functional health, including activities of personal care such as dressing, bathing, toileting, and eating (Hooyman & Kiyak, 2002). IADL focus on a care recipient’s performance within their environment and include managing money, meal preparation, making a phone call, and grocery shopping (Hooyman & Kiyak, 2002). These five participant selection criteria have been used in previous caregiver studies to determine inclusion (Barnes, Given, & Given, 1995; Clark, 2002; DeVries & Hamilton, 1997; Scharlach, Midanik, Runkle, & Soghikian, 1997).

The data were analyzed using multiple regression techniques; therefore the number of predictor variables influenced the sample size. In this research study there were four predictor variables: (a) gender, (b) employment, (c) physical health, and (d) relationships.

The CES-D measures the respondent’s levels of depressive symptomatology for the current week, and has been used to measure middle age caregiver depression (Given, Given, Stommel, & Azzouz, 1999; Radloff, 1977). Because scores for the CES-D have been standardized for the general population of the United States, it was possible to compare findings in community samples and assess clinically defined mental health states by utilizing a criterion value (Raveis, Siegel, & Sudit, 1990). Gerald (1997) stated that a score of 16 or above was the common threshold for possible depression on the CES-D. Less than 20% of the general population scored at that level.

Using the CES-D our participant caregivers evaluated 20 events that may have occurred in the last week. Examples of questions included: (a) I was bothered by things that usually do not bother me; (b) My sleep was restless; and (c) I enjoyed life. Caregivers evaluated each statement on a Likert scale ranging from 0 (rarely or none of the time, less than 1 day) to 3 (most or all of the time, 5-7 days). A total score of 16 and above on the CES-D indicated possible clinical depression. The test-retest reliability of the CES-D was .40, and the internal consistency was .80 or above (Radloff, faculty or graduate assistants, and 79% (n = 134) had a household income of less than $40,000 per year.

Instrument

A survey questionnaire utilizing design techniques described by Dillman (2000) was developed for our study. The survey integrated the Center for Epidemiological Studies Depression Scale (CES-D), a published assessment tool, and predictor variables: (a) gender, (b) employment, (c) physical health, and (d) relationships.

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In the current study reliability was .89. Participant gender was revealed through the use of a categorical scale with 0 representing male and 1 representing female.

**Procedure**

The data analysis was guided by the purpose of this study: the examination of the relationship between the level of depression in young adult caregivers, gender, employment, physical health, and relationships. Initial data analysis began with examination of the bivariate relationships between depression, gender, health, employment and relationships. This was followed up with a hierarchical multiple regression, which was well suited to predicting a dependent variable from a set of predictors, especially naturally occurring predictors (Glass & Hopkins, 1996; Hatcher & Stepanski, 1999; Stevens, 1986).

Since regression models assume that variables were measured without error, and since there were missing values in the dependent variable, depression as measured by the CES-D, a method for dealing with the missing values had to be determined. Crown (1998) stated that one method for imputing missing data was to substitute the mean value of the variable for the missing observations. This method was used to determine the missing values on the CES-D. Multicollinearity was dealt with through principal component analysis as a method for creating combinations of explanatory variables (Crown, 1998). A Varimax rotation was utilized to make factors more identifiable. To determine if the data met the assumption of bivariate normality the distribution of the dependent variable, depression, with each of the predictor variables was assessed for normal distribution and homogeneity of variance (Crown, 1998). Homogeneity of variance was confirmed by examining Levene’s statistic. Due to lack of normal distribution in the dependent variable a square root transformation was conducted, bringing the variable closer to a normal distribution. Normality of the dependent variable was confirmed by the Kolmogorov-Smirnov test of normality.

**Results**

**Depression**

In response to the question, “Do young adults who provide care for older adult family members have higher levels of depression than the general population,” the answer was determined by examining the caregivers’ scores on the CES-D. A score of 16 or above on the CES-D is commonly considered the threshold for possible depression (Radloff, 1977). Twenty percent of the general population scores at, or above, this level (Gerald, 1997; Given, et al., 1999). In this sample of caregivers 34.1% \((n = 58)\) scored 16 or higher, and 22.2% \((n = 36)\) scored 20 or above, indicating probable clinical depression.

**Depression and Gender**

Bivariate analysis tests were performed to determine whether the means between groups in the sample were statistically different. This analysis examined the levels of depression between groups not controlling for other variables by testing at a much more stringent level of .001 (Stevens, 1986). ANOVAs did not reveal significant effects for gender of the caregiver.

Depression correlated significantly with gender of the caregiver \((r = .17)\). There were also significant correlations detected
between caregiver health and gender \((r = - .19)\), and education and gender \((r = - .17)\).

In the hierarchical multiple regression model, with variables based on previous research, depression scores were regressed on the linear combination of four levels of variables: (a) gender of the caregiver, (b) living arrangement, family support, length of time providing care, value of caregiving, and number of children in the home, (c) health, and (d) employment impact, education, and income. The equation containing all of these variables, level four, accounted for 31% of the variance of depression, \(F (10, 156) = 6.94, p < .001\), adjusted \(R^2 = .26\). However, in model one, when all independent variables except caregiver gender were deleted from the model there was an \(R^2\) change of .030 \((F = 5.03), p = .03\), indicating that, as a group, the independent variables made a significant difference. Gender did account for 3% of the variance of depression in model one, and 7% when combined with length of time providing care in model two. Beta weights were reviewed for each model. Caregiver gender displayed significant beta weights in model one, .17 \((p = .026)\), and model two, .16 \((p = .032)\). The summary of the regression model is shown in Table 1 (see Appendix).

**Discussion**

**Depression**

There has been a paucity of studies focused on young adults providing care for older adult family members, including information on levels of depression among this population. While depression rates for the general population are only about 20% it has been estimated that depression rates are 30% to 50% among middle-age adult children caring for parents (Gerald, 1997; Haggan, 1998). Steffen et al. (1998) found that 30% of caregivers who suffered from chronic stress also suffered depression. Gallagher et al. (1989) found that on average 36% of all caregivers suffered from depression. Because the levels of depression in young adult care providers was relatively unknown, one of the important findings of the current study was that 34.1\% \((n = 58)\) of the young adult caregivers surveyed scored 16 or higher on the CES-D, indicating possible clinical depression, and 22.2\% \((n = 36)\) scored 20 or above, indicating probable clinical depression.

**Gender and Depression**

In the current study 67\% \((n = 115)\) of the caregivers surveyed were female, slightly below the percentages reported in other studies. Historically, caregiver gender has been reported as a significant predictor of depression in caregivers (Brewer, 2001; Gallicchio et al., 2002; Given et al., 1999; Martin, 1997). However, analysis in the current study did not reveal a significant difference between levels of depression in male and female caregivers, although female caregivers did have higher mean scores on the CES-D than did male caregivers. The results of this study require researchers to reconsider gender as a predictor for depression among young adult caregivers.

**Limitations**

This study was an initial attempt to gather data on a previously little studied population of care providers using a non-random heterogeneous sample. Previous studies of care providers utilized easily accessible samples, often care providers connected with care facilities. The current study was designed to access young adults in the general population performing some level of care for an older family member. The participants were employees of...
universities who had agreed to support the research, provided some level of care for an older adult family member, and who met the age definition. It is impossible to determine if caregivers who chose to participate were different from caregivers who declined.

The two universities and one college that participated were from the Midwestern section of the United States. The sample might not be representative of other areas of the country relative to geography, socioeconomic status, urban vs. suburban or rural, or to other cultures or countries. The effects of socioeconomic status were addressed by contacting participants who were employed at all levels within the institutions, which may have been a limitation; in order to better understand the impact of the predictor variables on depression, a study that incorporates private and public sector employees seems warranted.

**Implications for Counseling**

With limited quantitative studies of young adult care providers in the United States available, determination of a problem was a necessary first step. This study was a step in providing pertinent, useful information for counselors and caregivers. Researchers interested in aging, adult development across the life span and gender issues in a developmental arena should continue to seek knowledge on imaginative techniques and interventions for counselors to assist clients and families. Caregiving, although not at all a new role in society, has broadened to include populations of younger adults who have had no training or information and, at times, no prior warning on how this activity may affect their lives, families, careers, and emotional well-being.

One of the most important conclusions of the current study is the recognition that young adult caregivers do suffer from depression at rates comparable to middle-age caregivers, as substantiated by the recent Australian study (Burns et al., 2010). This may mean that young adults who provide care to older adults are emotionally taxed at a greater rate than their cohorts. The call for counselors to learn more about the caregiving instances among their existing clients, and the fear and pre-grieving that caregivers might be feeling would be areas for concern within the counseling process.

Our results illustrate a more even range of depression between younger male and female caregivers, which may significantly alter perceptions within the counseling venue. Previously, counseling professionals accepted more generally that, since women traditionally provided more care, they would suffer more depressive symptoms, and perhaps be more depressed throughout life. We now can look at the possibility that men and women suffer depression more similarly; the counseling process can embrace this by employing imaginative strategies and interventions, such as groups with both males and females, in-home-interventions with full family present, and other creative functions to address caregiving stress and depression in younger adults.

Since young adult male and female care providers suffer from depression at levels above the population in general, counselors might utilize the information provided by this study to understand the extra burden of being a young adult caregiver. We are beginning to look at the life span issues associated with caretaking for younger adults; perhaps increased depth of empathy will be achieved by counselors and counselors-in-training who aspire to work with a familial, caregiving population. Further research is needed in this broad area. Normalization is an important counseling tool, and providing normalization
information requires that counselors have more than anecdotal information, as well as data-based research studies.
References


York: John Wiley & Sons.
Pinquart, M., & Sorensen, S. (2006). Gender differences in caregiver stressors, social resources,


Appendix

Table 1
Summary of Regression Analysis for Variables Predicting Young Adult Caregiver Depression (N = 170)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Unstandardized B</th>
<th>SE B</th>
<th>Standardized β</th>
<th>t</th>
<th>p</th>
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<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>10.30</td>
<td>1.24</td>
<td>8.28</td>
<td>8.28</td>
<td>.000**</td>
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<tr>
<td>Caregiver Gender</td>
<td>3.24</td>
<td>1.51</td>
<td>.16</td>
<td>2.13</td>
<td>.034*</td>
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<tr>
<td>Step 2</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>8.2</td>
<td>4.82</td>
<td>1.7</td>
<td>1.7</td>
<td>.091</td>
</tr>
<tr>
<td>Caregiver Gender</td>
<td>3.22</td>
<td>1.52</td>
<td>.16</td>
<td>2.11</td>
<td>.036*</td>
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<tr>
<td>Children</td>
<td>-.15</td>
<td>.44</td>
<td>-.03</td>
<td>-.35</td>
<td>.73</td>
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<tr>
<td>Length of time caregiving</td>
<td>1.96</td>
<td>.92</td>
<td>.17</td>
<td>2.14</td>
<td>.034*</td>
</tr>
<tr>
<td>Living arrangement</td>
<td>-1.33</td>
<td>2.22</td>
<td>-.05</td>
<td>-.6</td>
<td>.55</td>
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<tr>
<td>Family support</td>
<td>3.27</td>
<td>2.36</td>
<td>.11</td>
<td>1.38</td>
<td>.17</td>
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<tr>
<td>Value</td>
<td>-.35</td>
<td>.79</td>
<td>-.03</td>
<td>-.44</td>
<td>.66</td>
</tr>
</tbody>
</table>

Note. * R² = .027; Δ R² = .027 for step 1; R² = .074; Δ R² = .047 for Step 2.
** R² = .021; Δ R² = .027 for step 1; R² = .039; Δ R² = .047 for Step 2.
\[ \text{p} < .05 \quad \text{** p} < .001 \]
Author Note

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