# Emotional Well-Being and Self-Perceived Physical Health Over Time Among African American and White Male Caregivers of Older Adults

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## Abstract

This study is a longitudinal, secondary data analysis of the Family Relations in Late Life (FRILL) 2 study. Using the Pearlin stress process model (SPM) as a guide, the purpose of this study was to examine emotional well-being and self-reported physical health over 36 months among African American and White male caregivers of older adults living in the community. A two-level Hierarchical Linear Model (HLM) was used to predict changes over time for anger, anxiety, depressed affect, resentment, and self-reported physical health and examined the influence of race and constructs suggested by the Pearlin SPM.

Race was not a significant predictor of any of the outcome variables, suggesting that African American and White male caregivers are similar in their responses to the demands of caregiving and that these responses remain relatively stable over time. Mutual communal behavior, activity restriction, and perceived social support were significant predictors of outcomes over time. Caregivers who reported higher mutually communal behavior reported less anxiety and resentment and better health over time. Greater activity restriction was linked to more anger, anxiety, depressed affect, and resentment over time, and more perceived social support was linked to less depressed affect and resentment over time. These findings are consistent with previous research showing that increased social isolation and lack of support from family and friends contributes to negative emotional well-being. Further, these deficits may have a cumulative effect over time for both African American and White male caregivers.

## Research Questions

1. How do the emotional well-being and the self-perceived physical health of African American and White male caregivers of older adults change over a three-year period?
2. Are there differences between African American and White male elder caregivers in changes in emotional well-being and self-perceived physical health over time?
3. How do caregiver context variables, primary stressors, subjective stressors, and resources predict the trajectories of caregiver emotional well-being and self-perceived health over three years?

Figure 1. Pearlin Stress Process Model



Source: Pearlin, et al., 1990
Aneshensel et al., 1995

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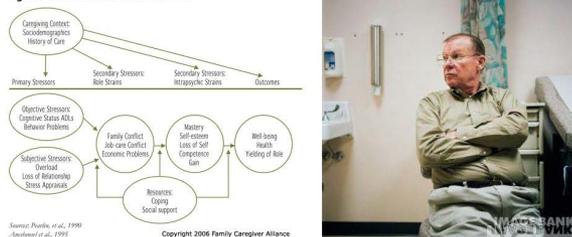
## Measures

Table 1. Variables Used in Study

| Caregiving Context | Primary Stressors | Secondary Stressors | Resources | Outcomes |
|---|---|---|---|---|
| CG Age  CR Age Years Caregiving | ADL/IADL | Perceived Income Adequacy | Social Support | Anger  Anxiety |
| Spouse/Non-spouse  Race | Dementia Diagnosis | Activity Restriction | Formal Services | Depressed Affect |
| CG Education  CG Income | | | | Resentment |
| Pre-Illness Relationship Quality | | | | Self-Perceived Health |

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## Sample

Data for 130 African American and White male caregivers from three waves of the Family Relationships in Late Life (FRILL) 2 Project (n = 444) were used in these analyses. Caregiver dyads were recruited from three sites (Athens, GA; Tuscaloosa, AL; and Pittsburgh, PA) and interviewed in their homes three times approximately 18 months apart.

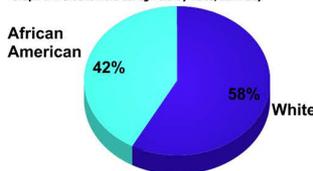Graph 1. Percent Male Caregivers by Race/Ethnicity



African American 42%

White 58%

Table 2. Male Caregiver Demographics by Race/Ethnicity

| Demographics | Mean (SD) / % White (n = 75) | Range | Mean (SD) / % African American (n = 55) | Range |
|---|---|---|---|---|
| CR Age | 72.9 (8.7) | 55 - 94 | 72.8 (10.6) | 56 - 100 |
| CG Age** | 66.5 (13.6) | 21 - 85 | 59.1 (15.9) | 20 - 87 |
| Years Caregiving | 6.1 (7.0) | .08 - 34 | 8.1 (8.6) | .42 - 45 |
| % CR Female | 82.2% | | 86.5% | |
| % Spouse* | 76% | | 58.2% | |
| % Dementia Diagnosis | 19% | | 13% | |
| % Education High School or Less* | 52% | | 71% | |
| % Household income Less Than $40,000** | 46% | | 86% | |
| % Perceived Income Adequacy Reported as Inadequate** | 33% | | 47% | |

*Significance at .01 level. **Significance at .05 level.

## Methods

Step 1. Descriptive analyses were conducted to describe the profile of the overall sample, and bivariate analyses were used to compare differences between African American and White male caregivers at baseline. Pearson correlation analyses were used to determine the relation between outcome variables.

Step 2. Hierarchical Linear Modeling (HLM) was used to estimate the trajectory of the outcome variables over the three waves.

## Results

● Research Question 1: Anxiety and depression did not change significantly for either White or African American caregivers. Anger and resentment significantly decreased over time suggesting that these feelings may lessen as men adapt to the caregiving role. Health remained relatively stable over time.

● Research Question 2: Race/ethnicity was not a statistically significant predictor of any of the outcome variables suggesting African American and White male caregivers may be similar in their emotional and physical response to the demands of caregiving.

● Research Question 3: Caregivers in this study were experienced in the caregiving role (average 7 years, only 15 caregivers ≤ 1 year). Effect of caregiver age, such that, as caregivers aged, depressed affect increased. Non-spousal male caregivers may experience more feelings of anger and depression as they proceed through the caregiving career. Caregivers with less education reported more anxiety and depressed affect and worse self-perceived health over time.

In regards to social context, caregivers who reported a higher quality pre-illness relationship reported less anxiety and resentment and better self-perceived health over time. Caregivers who reported more activity restriction also reported more anger, anxiety, depressed affect, and resentment over time. Caregivers who reported greater social support reported less depressed affect and resentment over time.

## Figure 2. Initial HLM Model

$$\text{Level 1 model:} \quad Y_{ij} = \pi_{0j} + \pi_{1j}(\text{time}) + \pi_{2j}(\text{ADL/IADL}) + e_{ij} \quad (\text{I})$$

$$\text{Level 2 model:}$$

$$\pi_{0j} = \beta_{00} + \beta_{01}(\text{race}) + \beta_{02}(\text{dementia diagnosis}) + \beta_{03}$$
(relationship to CR) + $\beta_{04}$(income) + $\beta_{05}$(perceived income adequacy) + $\beta_{06}$(education) + $\beta_{07}$(pre-illness relationship quality) + $\beta_{08}$(social support) + $\beta_{09}$(activity restriction) + $\beta_{010}$(formal services) + $\gamma_{0j}$ (II)

$$\pi_{1j} = \beta_{10} + \beta_{11}(\text{CG age}) + \beta_{12}(\text{CR age}) + \beta_{13}(\text{years caregiving}) + \gamma_{1j} \quad (\text{III})$$

$$\pi_{2j} = \beta_{20} + \beta_{21}(\text{social support}) + \beta_{22}(\text{activity restriction}) + \beta_{23}(\text{formal services}) + \gamma_{2j} \quad (\text{IV})$$



Table 3. Predictor and Outcome Variables at Baseline by Race/Ethnicity

| Predictors | Mean (SD) White (n = 75) | Range | Mean (SD) African American (n = 55) | Range |
|---|---|---|---|---|
| ADL/IADL | 7.0 (4.2) | 0 - 18 | 7.0 (5.2) | 0 - 18 |
| Formal Services | 0.6 (0.9) | 0 - 4 | 1.0 (1.4) | 0 - 5 |
| Social Support | 19.4 (4.3) | 7 - 24 | 20.1 (3.6) | 11 - 24 |
| Activity Restriction | 13.4 (4.7) | 6 - 28 | 14.0 (7.0) | 0 - 40 |
| Pre-Illness Rel. Quality | 34.3 (5.4) | 20 - 40 | 34.2 (5.1) | 20 - 40 |
| **Outcomes** | | | | |
| Self-perceived Health* | 3.3 (1.0) | 2 - 5 | 2.9 (1.0) | 1 - 5 |
| Anger | 13.0 (3.7) | 10 - 26 | 13.0 (4.5) | 10 - 28 |
| Anxiety | 33.7 (10.9) | 20 - 77 | 35.3 (10.0) | 20 - 61 |
| Depression | 10.0 (9.5) | 0 - 40 | 11.2 (9.7) | 0 - 47 |
| Resentment | 29.0 (12.2) | 17 - 62 | 28.6 (12.7) | 17 - 57 |

Figure 3. Outcome Variables Over Time
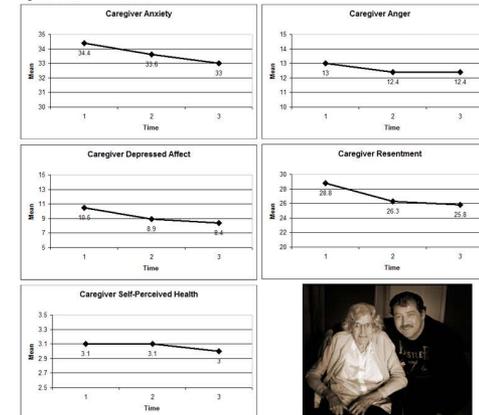


## Research & Practice Implications

● Results suggest African American and White male caregivers are more similar than they are different. This suggests that services targeted toward male caregivers may be effective regardless of race.

● Both African American and White male caregivers reported a low use of formal services. Developing creative programs that target male caregivers is necessary; however this may not be enough. Strategies are needed that encourage men to take the first step in reaching out for services.

● It may be helpful to assist male caregivers in expanding informal support. This includes increasing participation in activities, identifying informal support systems and help men understand the important role of social support. One approach could be to strengthen already existing networks of family and friends.

● Future research should: include larger samples of men in studies, particularly subgroups of men; design studies with only male caregivers; design qualitative studies that help us understand the process; conduct comparisons with similar non-caregiving men; design mixed method studies that triangulate measures commonly used in the caregiving literature; and include variables that may be important to examine with men.