Comparison of African American and Caucasian Caregiver Self-Efficacy

ABSTRACT
Self-efficacy influences one’s behavior and can determine the degree to which one is motivated to take action. The current study explores changes in caregiver self-efficacy pre- and post-participation in a Resources for Enhancing Alzheimer’s Caregiver Health (REACH II) program, a multi-component intervention aimed at caregivers of individuals with Alzheimer’s disease. The study specifically compared this construct in African American and Caucasian populations, which may give indications of how to empower dementia caregivers and whether REACH II is culturally sensitive and thus, an important component to examine. Nurses are the connection between families and community resources and must serve as referral sources to programs that work. Although African American and Caucasian caregivers showed comparable rates of increase in self-efficacy, African American caregivers started and ended at higher rates of self-efficacy for obtaining respite and overall self-efficacy. Applications of the results and directions for future research are discussed. [Journal of Gerontological Nursing, 44(3), 16-21.]

Nursing has always targeted empowering the individual, thus the concept of self-efficacy is important to the nursing field of study. Self-efficacy is the belief in one’s ability to succeed in specific situations or accomplish a task or reach a goal (Bandura, 1977, 1997). The capacity of self-efficacy has not been given much attention to date.

Self-efficacy is a modifiable characteristic, which can be enhanced with appropriate teaching (Gallagher et al., 2011). Self-efficacy and the degree to which caregivers feel capable of obtaining respite care and responding to upsetting behaviors in action are relatively understudied in prior studies on Resources for Enhancing Alzheimer’s Caregiver Health (REACH II), a multicomponent, evidence-based intervention for caregivers of individuals with dementia. The REACH II intervention provides tailored, caregiver-specific education, support, and enhancement of stress management skills through one-on-one visits and telephone conversations over a 6-month period. The current study takes a new look at the cultural responsiveness of REACH II in relation to self-efficacy with a comparison between African American and Caucasian caregivers of care recipients with dementia. Limited earlier studies identified that African American caregivers gained more benefit than Caucasian caregivers (Belle et al., 2006; Schulz et al., 2003) in intervention studies. More studies are needed to confirm these findings. Largely, African American individuals have been underrepresented in health research studies (Corbie-Smith, Thomas, Williams, & Moody-Ayers, 1999), and the findings of the current study add to knowledge about possible cultural differences.

Little information is available regarding self-efficacy and its relationship to respite use and comparison between cultural groups. This issue is relevant because self-efficacy is related to a caregiver’s ability to accurately appraise and respond appropriately to the caregiving situation and deal with the disruptive behaviors of dementia. Self-efficacy has been demonstrated to predict health behaviors within the arena of chronic illness (King et al., 2010). Nurses, on the frontline of care...
referring families to resources, must be knowledgeable about self-efficacy and community programs that are culturally sensitive and outcome oriented.

CAREGIVING

Caregiving can be a demanding and exhausting role. Caregivers take on numerous tasks, such as bathing, dressing, managing and driving to health care appointments, and feeding—many times at the expense of self. Caring for the self is often left for last and addressed when the caregiver is in crisis mode. Caring for an individual with dementia is a difficult caregiver role with a continual downward course trajectory of the disease. The frequency of troubling dementia behaviors is most frustrating for family caregivers. As time passes, the disease progresses with the number of disturbing behaviors increasing and often, caregivers seeking respite to survive (AARP & National Alliance for Caregiving, 2015; Grady & Rosenbaum, 2015). Seeking respite, responding to disruptive patient behaviors, and controlling upsetting thoughts are among the goals to be achieved if one is to survive the caregiving journey, which is usually ≥5 years.

RESPITE

Respite can be defined as time spent away from the caregiving situation or temporary relief from caregiving concerns (Brodaty & Gresham, 1992; Lyons, 2005). Respite care services are quite broad and may be provided by individuals with a variety of backgrounds ranging from skilled nurses to relatively untrained volunteers as well as in a variety of settings, including in-home services and out-of-home programs, such as adult day care or overnight residential facilities. Research has demonstrated that respite care can benefit caregivers in numerous ways. These benefits include reductions in caregiver stress (Empeño, Raming, Irwin, Nelsen, & Lloyd, 2011) and depression (Mensie & Steffen, 2010; Tompkins & Bell, 2009) and increases in rest (Lee, Morgan, & Linds-say, 2007), socialization (Evans, 2013), well-being (Zarit et al., 2011), perceived quality of life (Salin, Kaunonen, & Åstedt-Kurki, 2009), and resilience (Donnellan, Bennett, & Soulsby, 2015). Respite has also been found to have benefits for the care receiver, such as increased socialization and engagement (Evans, 2013) and physical functioning (Henwood, Wooding, & de Souza, 2013). Clearly, respite has potential value for a caregiver entrenched in caring for another. However, caregivers may not be aware of these services in their community or feel empowered to seek respite (Greenwood & Smith, 2015; Neville, Beattie, Fielding, & MacAndrew, 2015).

REACH II INTERVENTION AND TRANSLATION

REACH II was a randomized controlled trial originally sponsored by the National Institute on Aging and National Institute on Nursing Research (Belle et al., 2006) and was implemented with caregivers of loved ones with dementia. This multicomponent intervention assessed the risk of the caregiver and, based on the results of this assessment, provided tailored, caregiver specific education, support, and enhancement of stress management skills. Delivery of this 6-month intervention occurred through in-home visits and telephone conversations. The current study is a translation of this clinical trial in a community setting. Protocols, inclusion and exclusion criteria, and measurements were the same as the original trial, but with no control group.

In the current study, overall self-efficacy and subcategories (i.e., self-efficacy for obtaining respite, responding to disruptive behaviors, and controlling upsetting thoughts about caregiving) before and after participation in REACH II were assessed. Previous REACH II studies have noted differences between African American caregivers and Caucasian caregivers on social support and caregiver well-being, (Belle et al., 2006; Burgio, Stevens, Guy, Roth, & Haley, 2003; Cho, Ory, & Stevens, 2016; Easom, Alston, & Coleman, 2013; Elliott, Burgio, & DeCoster, 2010; Haley et al., 2004; Nichols, Martinade-Adams, Burns, Graney, & Zuber, 2011; Roff et al., 2004). However, self-efficacy has been relatively unstudied. Consistent with previous research noting improved intervention-related benefits for African American versus Caucasian caregivers (Belle et al., 2006; Burgio et al., 2003), the authors aimed to contribute to the growing body of knowledge surrounding culture and intervention participation and benefit. It was believed that African American caregivers in the current study would show increased self-efficacy following participation in the REACH II intervention.

METHOD

Design and Participants

A pre/post research design was used with metrics assessed at baseline (first home visit) and program end (last home visit). The study was approved by an Institutional Review Board and each caregiver participant provided informed consent.

Participants were recruited from an Area Agency on Aging (AAA) client database and through solicitation to a variety of sources, including the Alzheimer’s Association, senior services, Senior Citizens, Inc., senior
centers, hospice and home health agencies, assisted living and nursing homes, adult day care centers, and health care provider offices. Eligibility criteria were: (a) being a co-resident caregiver or responsible for daily meal preparation for an individual with Alzheimer’s disease or related dementia; (b) verbally expressing that the care recipient has memory problems; (c) providing a minimum of 4 hours of care per day; and (d) rating themselves as having stress at a level of ≥5 on a scale of 1 to 10, with higher scores indicating higher stress. Exclusion criteria were limited to the intention to place the care recipient in a nursing home within 6 months of enrollment and an inability to speak English. Inclusion and exclusion status were determined on the basis of caregiver self-report during the initial interview. Two caregiver coaches (AAA staff) received the same training and were certified to deliver the REACH II intervention.

Although care recipient dementia severity was not an inclusion/exclusion criterion, this information was collected using the Global Deterioration Scale (Reisberg, Ferris, de Leon, & Crook, 1982). This scale has seven categories with descriptions of behavioral characteristics associated with levels of dementia with a range of “no cognitive decline” to “very severe dementia.” The information from this assessment scale provided caregiver coaches with some knowledge of the intensity of the caregiving situation and assisted them to best plan with caregivers. Care recipients in the current study were reported by their caregivers to have moderate to severe dementia, although those data were used for intervention guidance purposes only and were not available for general analysis.

Measures

Participants self-reported demographic variables, including race, gender, age, and education achieved. Known psychometric instruments were used to measure self-efficacy (three domains/subscales), caregiver burden, depression, problem behaviors, and desire for institutionalization. The REACH II protocol contains several other instruments measuring various aspects of the caregiving situation, including the Zarit Burden Scale (Zarit, Reever, & Bach-Peterson, 1980), the Center for Epidemiologic Studies Depression Scale short form version (Andresen, Malmgren, Carter, & Patrick, 1994), the Revised Memory and Behavior Problem Checklist (Teri et al., 1992), the Desire to Institutionalize scale (Morycz, 1985), the Risk Appraisal Assessment (adapted from REACH II, Czaja et al., 2009), and an author-generated program evaluation.

Demographics. Demographic information was collected using the Caregiver General Questionnaire (CGQ). This 16-item survey contains general demographic questions specific to hours per week for caregiving duties and vigilance, as well as current status of caregivers’ physical health. Caregivers rated their health compared to 6 months ago on a 5-point scale, where lower scores indicated better health and well-being, and answered five questions on health lifestyles rated as never, sometimes, or often. Reliability was not assessed, as participant responses were simply summarized and tallied.

Self-Efficacy. The Revised Scale for Caregiving Self-Efficacy (Steffen, McKibbin, Zeiss, Gallagher-Thompson, & Bandura, 2002) is a 15-item checklist to assess caregiver confidence in caregiving skills on a scale of 0 to 100, with higher scores indicating a higher self-efficacy. Reliability coefficients range from 0.70 to 0.76 for each of the subscales. This scale measures overall self-efficacy and three aspects of self-efficacy in the subscales. Subscales for self-efficacy include obtaining respite, response to disruptive behaviors, and controlling upsetting thoughts about caregiving. An example of a question for obtaining respite is: “Can you ask a friend/family member to stay with ____ for a day when you need to see the doctor yourself?” For disruptive behaviors, an item is: “When you get angry because ____ repeats the same question over and over, can you say things to yourself that calm you down?” For controlling upsetting thoughts, an example is: “Thinking how unfair it is that you have to put up with this situation (taking care of ____).” The reliability in this study was α = 0.80, and for each subscale ranged from 0.64 to 0.85.

Data Analysis

Statistical analysis was performed using SPSS 22. Paired-samples t test examined differences within the mean from baseline to follow-up data for the variables measuring different aspects of self-efficacy.

RESULTS

Sample Characteristics

Of 178 caregivers who initially enrolled in the program and completed one session, 123 completed nine of the 12 sessions and data measurements within 6 months of beginning the program, representing an attrition rate of 31%. Power analysis indicated this was a sufficient sample size using a medium effect. Reasons for attrition included death of the care recipient (n = 16), relocation or institutional placement of the care recipient (n = 7), inability to communicate/make appointments after multiple contacts (n = 11), and care recipient requested to stop the intervention (n = 21). The high attrition is understandable as this was an in-home intervention with the dementia care recipient usually present and the change of individuals in the home was disturbing. Demographic characteristics of the sample are presented in Table 1.

Self-Efficacy

Of 123 caregivers who completed the nine in-home sessions and three caregiving coach telephone conversations, 66 were African American and 49 were Caucasian. These two groups of caregivers were examined for changes in reported self-efficacy in general and respite capability in particular from baseline to program end.
Results of these analyses are shown in Table 2. African American and Caucasian caregivers showed significant improvements in overall self-efficacy as well as self-efficacy for obtaining respite, responding to disruptive patient behaviors, and controlling upsetting thoughts about caregiving. Although the magnitude of improvement was similar across the two caregiving groups, which contradicted the initial hypothesis, African American caregivers both started and finished with higher levels of self-efficacy than Caucasian caregivers in all areas measured.

**DISCUSSION**

The current study assessed changes in dementia caregivers’ respite self-efficacy following participation in an evidence-based intervention. Of special interest was the comparison of African American and Caucasian populations due to the need to better understand the resources and needs of different groups for the purpose of developing and providing more effective and culturally responsive interventions.

As predicted, African American and Caucasian caregivers reported improvements in several aspects of self-efficacy following participation in the REACH II intervention. Contrary to expectations, African American caregivers did not show greater improvements than Caucasian caregivers in obtaining respite, responding to upsetting behaviors or overall self-efficacy following participation. However, it was noted that compared to Caucasian caregivers, African American caregivers scored higher on these measures both pre- and post-intervention. The reason for these differences is unclear, particularly as African American individuals have been reported to benefit more than Caucasian individuals in earlier research studies (Belle et al., 2006; Burgio et al., 2003). African American individuals have not been adequately included in health care research samples, thus information is sparse with more research needed to examine whether the results reported herein represent an anomaly unique to the current sample or a larger trend that can help guide more culturally specific intervention efforts.

African American individuals had lower pre-participation scores and greater gains in the self-efficacy subscale of “controlling upsetting thoughts about caregiving.” Both groups demonstrated increased self-efficacy in this area following participation. Perhaps exposure to positive thinking and imagery of pleasant events (which is encouraged in the education portion of REACH II) allowed for new learning.

Facilitating respite care may decrease burden and improve the mental health of family caregivers (Buchanan, Radin, & Huang, 2011). The REACH II intervention includes multiple components, such as education, behavior management training, and increasing pleasant activities. A question generated by the current study is whether specific aspects of a multicomponent intervention are more influential and have more impact on self-efficacy. Or is the “whole” effect of the intervention larger than the individual parts? It is difficult to know whether the improvements noted in the current study can be attributed to a particular component of this intervention or, possibly, to the combined effect of several components. Although there has been evidence in the literature that respite is beneficial for caregivers, examination of what programs are effective to encourage caregivers to reach out for respite is only beginning.

More broadly, further studies on the application of this caregiver support program and its effect on a more racially diverse group would also be beneficial. In the current study, African American and Caucasian caregivers demonstrated a statistically significant increase in the capability to obtain respite as well as other aspects of self-efficacy that also have relevance for the caregiving relationship. As mentioned earlier, the specific cause of these changes is as of yet unidentified, so it cannot currently be determined whether the improvements shown here are direct results of some component of the intervention or indirect results of another variable not identified. More studies are needed to examine the effect of intervention programs on building self-confidence and other skills broadly.

**LIMITATIONS**

Some limitations of the current study should be noted. The small sample and limited geographical area influence the generalizability of the results. Caregiver race groups were not
matched for dementia severity and this may have caused a bias in the findings. Additional limitations include the one group and quasi-experimental design, which limit the ability to make causal inferences from the data.

NURSING IMPLICATIONS

As more individuals are living longer with chronic conditions such as dementia, the management of the illness is shifting from formal health care providers and settings to individuals, their families, and the communities in which they live. Nurses are the health care providers in the community that spend the most time with patients and caregivers and focus on improving the health and quality of life of caregivers. As many as 501 million individuals in the United States alone have Alzheimer’s disease (Alzheimer’s Foundation of America, 2016) and represent one of the largest groups seen by nurses. Nurses must be prepared to guide these families to culturally sensitive community programs with a confidence of program fit and established outcomes. Such programs increase the self-efficacy and enable caregivers to seek respite and address disturbing behaviors appropriately. Nursing student educational curriculums should address cutting-edge evidence-based caregiving support programs so that students entering the field could offer these resources to their patients and families.

CONCLUSION

The current study raises some positive implications regarding the capability of caregiver support programs to increase the self-efficacy of dementia caregivers, particularly in relation to obtaining respite. Respite can possibly be a source of relief for caregivers, extending the length and improving the experience of caregiving for caregivers and care recipients. Evidence exists that correlates reduction of stress levels and respite (Harper, Taylor Dyches, Harper, Olsen Roper, & South, 2013; Zarit et al., 2011). High levels of stress are often precursors to the development of physical and mental health problems. If the caregiver is experiencing additional health problems, the ability to continue care may be greatly reduced, potentially resulting in abuse or institutionalization for the care recipient as well as emotional and other problems for caregivers. Thus, it would seem that reducing stress by increasing respite capability would be a natural solution. Although more research is needed to answer this question more definitively, the current study provides some indication of the potential effectiveness of intervention programs and directions for future studies in this area.

REFERENCES


Corbie-Smith, G., Thomas, S., Williams, M., & Moody-Ayers, S. (1999). Attitudes and

### TABLE 2

<table>
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<tr>
<th>Self-Efficacy Component</th>
<th>African American Caregivers</th>
<th>Caucasian Caregivers</th>
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<td>Obtaining respite</td>
<td>51.54</td>
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<td>Responding to disruptive patient behaviors</td>
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<td>68.05</td>
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<tr>
<td>Controlling upsetting thoughts about caregiving</td>
<td>64.27</td>
<td>65.91</td>
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<td>Overall self-efficacy</td>
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<td>57.76</td>
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<th></th>
<th>Pre</th>
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<th>Pre</th>
<th>Post</th>
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<td>57.76</td>
<td>70.51</td>
<td>+22</td>
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</table>

Note. Statistical significance set at p < 0.05.


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The authors thank Gayle Alston, MS, for her insight on this project and contributions to the many reports and data analysis discussions in the manuscript process. Address correspondence to Leisa Easom, PhD, RN, Executive Director, Rosalynn Carter Institute for Caregiving, Georgia Southwestern State University, Americus, Georgia; and Mr. Ramos is Research Coordinator, Marriage & Family Research Institute, University of Central Florida, Orlando, Florida. The authors have disclosed no potential conflicts of interest, financial or otherwise. This project was supported in part by grant 90AE0339 from the U.S. Administration on Aging, U.S. Department of Health and Human Services.

Received: March 8, 2017
Accepted: August 25, 2017
doi:10.3928/00989134-20171023-01

doi:10.3928/00989134-20171023-01

doi:10.1016/j.maturitas.2015.07.013