Resilience: resistance factor for depressive symptom

P. R. SMITH PHD RN
Assistant Professor, The University of Oklahoma Health Sciences Center, College of Nursing, Oklahoma City, OK, USA

Keywords: depression, geriatric psychiatry

Correspondence:
P. R. Smith
The University of Oklahoma Health Sciences Center
College of Nursing
PO Box 26901
Oklahoma City
OK 73126-0901
USA
E-mail: Patsy-Smith@ouhsc.edu

Accepted for publication: 23 May 2009
doi: 10.1111/j.1365-2850.2009.01463.x

Accessible summary

- Resilience is the ability of an individual or group to carry on and solve problems so that survival of hard times is more likely. Resilience protects individuals from depression and includes behaviours that can be taught to persons who are vulnerable to hardships including physical illness, psychosocial isolation and aloneness, and mental illness.

- Older adults who rated their overall health as relatively good were also more willing to talk with health providers about depressive symptoms if it was affecting their social activities, making them feel useless to others, or affecting how well they could think or concentrate.

- New research needs to occur to learn more about how to build resilience in older adults with symptoms of depression in hopes of encouraging them to talk about depressive symptoms with the health provider. The goal is to prevent symptoms from progressing to a diagnosable disorder.

- The more resilience a person demonstrates, the more likely that person is to talk with health professionals about depressive symptoms and seek care to relieve those symptoms. New research is also needed to learn which factors other than resilience and depressive symptoms have an influence on how willing older African Americans are to seek mental health care for those symptoms.

Abstract

The purpose was to explore influence of resilience on the willingness of African Americans aged 65 and over to seek mental health care for depressive symptoms. Specifically, the study examined relationships between personal resilience and willingness of undiagnosed, community dwelling older adults to seek mental health care for depressive symptoms. A cross-sectional, correlational, causal modelling design was used to study older African Americans (N = 158; 121 women and 37 men) recruited from churches, retirement organizations and senior nutrition centres. Participants completed study instruments to measure depressive symptoms, resilience, willingness to seek mental health care, and general demographics information. Descriptive statistics and multiple regression analyses were preformed. Depressive symptoms and resilience accounted for 15.4% of the willingness to seek mental health care variance; extraction of resilience lowered variance to 0.9%. A direct, predictive relationship between resilience and willingness to seek mental health care was documented. Understanding resilience and willingness to seek mental health care supports future research for interventions that bolster resilience in older adults. Identifying the influence of resilience on such willingness may provide direction for developing interventions for older African Americans and may be applicable to vulnerable, marginalized and minority older adults worldwide.
Introduction and background

Late-life depression is a global issue (Andreescu et al. 2008). Older African Americans are less likely than others in their age cohort to be diagnosed with or treated for depression (Gallo et al. 2005, Switzer et al. 2006). The exact prevalence of depression in older adults is unknown, because of non-diagnosis, misdiagnosis and under-treatment (Department of Health and Human Services 1999, Gallo et al. 2005). Overall estimates vary from 1% to 4% depending on severity or diagnoses (Blazer 2003). Older African Americans may subscribe to a cultural model of depression that forms a barrier to treatment seeking (Cooper et al. 2003, Switzer et al. 2006). This makes them less likely to accept antidepressant medications and more likely to use spiritual or religious approaches (prayer) (Cooper et al. 2003). The cultural model adopted by many older African Americans is shaped by beliefs that depression is an attitude, and therefore is one’s individual responsibility (Switzer et al. 2006). As such, one must take personal action to improve or change one’s attitude. Paradoxically, these beliefs may delay treatment seeking, but may shape fortitude and resilience.

Advancements in health care enable many adults to lead rich, fulfilling lives in the midst of ongoing psychosocial losses (Department of Health and Human Services 1999, Smedley et al. 2003). Biological, psychological and social factors influence the development of depressive symptoms in later life (Blazer & Hybels 2005). Life stressors of older adulthood are linked to depressive symptoms and include medical co-morbidity, disability and decreasing social network (Blazer & Hybels 2005). Identified barriers to services utilization include trust, communication, insurance and ability to pay for prescribed medicines (Cooper et al. 2003, Thompson et al. 2004). Exploration of personal characteristics that form the cultural model within population subgroups may inform the development of interventions to enhance services utilization (Cooper et al. 2003, Ayalon & Alvidrez 2007).

Research regarding depression management has proliferated in the past decade (Cohen et al. 2005a,b). These studies focus on treatment interventions and not on factors that motivate older adults to seek mental health care initially. Less abundant are studies exploring the relevant factors affecting the likelihood of seeking care for depression among symptomatic but undiagnosed older community dwelling African Americans. Studies of older groups of symptomatic Blacks show that mental health resource use varies with different demographics (Cohen et al. 2005a) even within the larger ethnic category (African American, African Caribbean, and African).

Depression in minority populations is not limited to African Americans. A report of elder abuse (WHO/INPEA 2002) indicates that older adults in India describe ‘emotional problems, lack of emotional support, neglect by the family members, feelings of insecurity, loss of dignity, disrespect by the family’ (p. 9), which are associated with depressive symptoms. The report also describes older adult abandonment in hospitals in Kenya and Brazil, indicating reduced family support. African and African Caribbean immigrants are settled in countries other than just the United States (World Health Organization 2003), making their mental health utilization a global issue.

Differences in the effect of race on syndromal and sub-syndromal depression by racial group indicate financial strain as a statistically significant influence (Cohen et al. 2005b). Barriers to care commonly associated with minority and elderly populations (Department of Health and Human Services 1999) are poverty, including financial strain, and limited access to mental health facilities (Department of Health and Human Services 2002, National Center for Health Statistics 2005). Why some experiencing these barriers do not seek mental health care while others do, remains unclear. Studies of the association between depressive symptoms, resilience, and willingness to seek help among older adults, specifically African Americans, were not found in the literature.

Factors that influence older African American’s willingness or reluctance to seek mental health care have been explored, but few studies examined resilience as an attribute affecting depressive symptoms (Edward 2005) and the willingness to seek treatment once symptoms occur. Therefore, this study explores the predictive impact of depressive symptoms and resilience on the willingness of older African American adults to seek health care for depressive symptoms. Specifically, this study seeks to determine relationships among depressive symptoms, resilience, and willingness to seek mental health care.

Enhanced understanding of the relationships between sub-clinical depressive symptoms, resilience and services utilization supports the development of effective intervention strategies to improve mental health services utilization. Better understanding of the resilience characteristics that contribute to older African Americans’ willingness to seek mental health care for depressive symptoms could provide the basis for strategies to help improve and manage mental health care. Identified strategies may be applicable in marginalized population subgroups around the globe.

Conceptual framework

The conceptual framework for this study is built on the resilience model, the defining attributes of which apply
along a continuum from vulnerability to survival using protective factors that enhance resilience (Werner & Smith 1992, Dyer & McGuinness 1996). The resilience model consists of a sense of carrying on, enduring values, problem-solving, appreciation for interaction with others, and comfort with some degree of aloneness (Werner & Smith 1992, Dyer & McGuinness 1996). Resilience is viewed as a protective factor that can be enhanced through intervention (Edward 2005). Resilience, ability to rebound, involves improvement in physical and psychosocial condition, and in recovery from an illness or loss (Felten 2000, Felten & Hall 2001). Exemplars are women whose actions demonstrate motivation, contributions to others’ lives, and improvements in their own lives through regular professional health care. Strengthening of coping skills, improving knowledge about affordable and available care, receipt of culturally competent and sensitive care, and encouragement to nurture and work with others also exemplify the concept of resilience (Felten 2000). Resilience involves personal coping qualities that help individuals survive and thrive despite adversity or misfortune (Connor & Davidson 2003) and encompasses hope for recovery, sense of self, determination, and pro-social attitudes and behaviours (Dyer & McGuinness 1996). Resilience is modifiable, suggesting that the tendency to develop desirable or undesirable outcomes (depressive symptoms) is alterable within the individual’s maturation and environment, or as a result of pharmacological treatment, specifically for persons experiencing post-traumatic stress disorder (Vaishnavi et al. 2007), and therefore, is an important component of behavioural health adjustments and outcomes.

Psychosocial problems associated with experiences of racial discrimination, socio-economic disadvantage and financial strain affect the coping ability of older adults (Cohen et al. 2005a,b). Stressful psychosocial experiences including the legacy of slavery, the civil rights struggles and unjust restriction to the margins of society, influence the mental health and well-being of older African Americans (Mills & Edwards 2002). Coping ability and adjustment to stressful psychosocial events contribute to personal resilience, and highlight the need for greater understanding of the mental health of older adults, the in-depth exploration of which was beyond the scope of this study.

The guiding framework incorporates selected concepts: depressive symptoms, resilience, and the willingness of older African American to seek mental health care. In this framework, the level of depressive symptoms predicts resilience which, then, predicts willingness to seek mental health care. Level of depressive symptoms is viewed to negatively affect resilience (Felten & Hall 2001). Resilience is viewed as a protective factor that can influence a person’s likelihood to avoid depressive symptoms (Aroian & Norris 2000, Edward 2005, Edward & Warelow 2005). This framework suggests that resilience may prevent depressive symptoms, or lessen the impact. If symptoms do appear, they may be less likely to ‘take hold’ or ‘cause problems’. Higher levels of depressive symptoms are expected to predict lower levels of resilience (see Fig. 1). The path from resilience to willingness to seek mental health care for depressive symptoms is predicted as positive (Felten & Hall 2001) and is based on the view that resilience is adaptive and evolving (Glantz & Johnson 2002, Rolf & Johnson 2002). These complex relationships reflect normal changes of ageing but do not include the mental problems that affect the health status, disability status and suicide rate of older adults.

**Methods**

**Design, sampling and procedure**

This cross-sectional, correlational, causal modelling study examined predictors of older African American’s (N = 158) willingness to seek mental health care for depressive symptoms; this paper reports a sub-set of data from a larger study. The target sample size of at least 145 was based on recommendations for at least 15 subjects for each independent variable to obtain a stable regression equation (Newton & Rudestam 1999, Stevens 2002) and that there be five subjects per item to determine Cronbach’s alpha (Ferketich 1990). The final sample size was 158.

Over 250 potential participants were contacted for the study through recruitment strategies including word of mouth, snowballing and direct recruitment at three senior nutrition centres, seven churches, two retirement groups, five independent living centres and one university programme. A convenience sample of participants was successfully recruited from these sites. Inclusion criteria included (1) self-identification as African American; (2) aged 65 or over; and (3) able to speak and read English. Participants may or may not have reported feeling depressed at the time of the study and they may or may not have been diagnosed with a depressive disorder. Persons with self-reported

© 2009 Blackwell Publishing
current psychiatric disorders involving psychosis, hallucinations, hearing voices, or a lack of awareness of surroundings were excluded.

**Variables and instruments**

Participants completed four questionnaires to obtain data on target variables: level of depressive symptoms, resilience, and willingness to seek mental health care for depressive symptoms. Demographic information was documented on the 12-item General Information Form (GIF) with five items for insurance coverage and education serving as proxies for socio-economic status; six items for general health information; and a single item to rate willingness to seek mental health care for depressive symptoms if needed. Depressive symptoms were measured using the Center for Epidemiologic Studies Depression (CES-D) scale (Radloff 1977), an established, non-diagnostic, 20-item self-report depression scale to measure the level of depressive symptoms in the general population, according to perceived feelings over the previous week. The reported coefficient alpha measure of internal consistency reliability for each subgroup was 0.80 or above, and 0.85 in the total group representing the general population. Scores of 8–15 represent depressive symptoms and are viewed as sub-syndromal, typically including the presence of two or more symptoms (Cohen et al. 2003b). A score of 16 is viewed as the threshold for clinical referral (Radloff 1991, Beekman et al. 2002). Scores of 16 or greater in persons who do not meet the Diagnostic and Statistical Manual of Mental Disorders (American Psychiatric Association 2000) criteria for depressive disorder are viewed as sub-threshold (Beekman et al. 2002).

The Connor-Davidson Resilience Scale (CD-RISC) measured the level of positive or negative responses in various life situations (Connor & Davidson 2003). The 25-item CD-RISC (0–4 point range of responses) quantifies resilience in the general population and in clinically ill individuals (Connor & Davidson 2003). There is no specific cut-off score for the CD-RISC, but higher scores indicate higher levels of resilience; high internal consistency reliability (Cronbach’s alpha = 0.89) was reported for the general population non-help seeking group (Connor & Davidson 2003).

The Willingness to Seek Health Care for Depressive Symptoms (WSHC-DS) scale developed by the researcher measured willingness to seek care if select symptoms were experienced. The five-item WSHC-DS was designed for this study to assess the individual’s perception of potential willingness to seek mental health care if faced with the experience of depressive symptoms. Respondents specified on a scale of 0 (not at all willing) to 10 (completely willing) the degree to which they perceived themselves willing to seek mental health care if needed for depressive symptoms. Items were developed to assess selected concepts from the CES-D that were representative of depressive symptomatology but scores on each are not interdependent. Review by content experts validated item content, wording and directions. Content validity of the five-item WSHC-DS (i.e. willingness to seek health care) was estimated by five content experts from psychiatric nursing, clinical psychiatry, and advanced practice psychiatric nursing, providing a high content validity index of 1.00 (by 3–4 of the raters involved). The closer the rating is to 1, the higher the content validity (a rating of 0.5 is not acceptable) (Waltz et al. 1991).

Correlations among variables were conducted to demonstrate the strength of relationships among them and to help characterize persons most willing to seek mental health care for depressive symptoms. Correlations between the single-item willingness responses on the GIF and the responses to the five-item WSHC-DS offer an assessment of concurrent validity assessing willingness.

**Data collection and analysis**

Data collection and administration of the five study questionnaires occurred either in participant’s homes or in community settings after determination of eligibility and obtaining informed consent. Addressed stamped envelopes were provided for those wishing to return the signed consent forms and completed instruments by mail. Over 250 study packets were distributed, and 163 were returned (five were incomplete) resulting in 158 completed questionnaires. More than 85% chose to have the assistance of the researcher to read the study items. Human subjects protection approval was obtained through appropriate Institutional Review Boards (IRB approval #13032).

Data analyses were performed using SPSS 15.0 for Windows statistical software package.

Concurrent validity, determined by Pearson’s Product Moment Correlations among the one-item rating of willingness to get mental health care for symptoms of depression (i.e. an item on the GIF), the individual WSHC-DS items, and total score of the WSHC-DS, showed significant, positive, but weak relationships. These analyses yielded a low concurrent validity estimate ($r = 0.25$) with the one-item willingness rating. Cronbach’s alpha for the CES-D (0.845) and the CD-RISC (0.913) were satisfactory. Multiple correlation procedures and descriptive statistics were used to address the research question (Mertler & Vannatta 2002) regarding the relationships among depressive symptoms, resilience, and willingness to seek mental health care for depressive symptoms in older African Americans.
Standard multiple regression analysis was the predictive research procedure (Pedhazur & Schmelkin 1991) used to address the research question regarding the significant predictors of willingness to seek mental health care. Study variables were ordinal and interval levels, appropriate for multiple correlation and regression analysis (Newton & Rudestam 1999).

**Results**

The sample of African American community dwelling older adults ($n = 158$) was fairly homogenous in nature (see Table 1). Nearly 85% completed high school or a general educational development credential and most were from a fairly moderate socio-economic status.

**Psychometric testing of the WSHC-DS, CES-D and CD-RISC**

Psychometric testing on the WSHC-DS shows Cronbach’s alpha of 0.895 for this sample, with item-to-total correlations above 0.69, indicating that items were measuring the same concept. Pearson’s Product Moment Correlations among the five willingness items ranged from 0.472 to 0.741 indicating moderate to high correlations among the five items of depressive symptoms and verifying that the five items measured the same concept. The WSHC-DS (Cronbach’s alpha $= 0.895$; item-to-total correlations above 0.69) measured the concept of willingness to seek care for depressive symptoms. The significant correlations ($P < 0.01$; $r = 0.472–0.741$) among the five willingness items indicate moderate to high correlations and verify that the five items measured the same concept.

The CES-D has four dimensions, or factors (depressed affect, positive affect, somatic, interpersonal), for which the Cronbach’s alpha ($\alpha = 0.84$) was high. The item-to-total correlations for Factor 2 (positive affect) ranged from –0.0 to 0.20; the items for this dimension were all reverse-scored. When these four items (i.e. Factor 2) were removed from the analysis, Cronbach’s alpha was 0.89, and the item-to-total correlations yielded only one item (people were unfriendly) that had a value less than 0.30 (Cronk 2002). The decision was made to keep all 20 items as part of further analysis because all were conceptually important and have been used with the CES-D in other studies.

The CD-RISC had a high internal consistency estimate ($\alpha = 0.92$) with this sample. Corrected item-total correlations were above 0.3 (Cronk 2002). Principal components factor analysis conducted with varimax rotation resulted in communalities above 0.47, and five factors accounted for 57.66% of the total variance (Munro 2001). The Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO = 0.874) was significant ($P < 0.0001$). All CD-RISC items were retained in the analyses. Pearson’s Product Moment Correlations revealed significant, moderate to strong, positive correlations ranging from 0.438 to 0.800 between the five factors of the CD-RISC. Most met criteria of 0.55–0.70 for internal consistency (Hinshaw & Atwood 1982).

**Depressive symptoms and resilience**

The relationships among depressive symptoms, resilience, and willingness to seek mental health care revealed a significant correlation ($r = 0.39$, $P < 0.0001$) between resilience and willingness to seek care. Respondents tended to disagree with the (CES-D) items on the depressed effect, somatic and retarded activity, and interpersonal factors, while relatively agreeing with the items in the positive affect factor. Pearson’s Product Moment Correlations were significant ($r = 0.80$, $P < 0.01$) between the depressed effect factor of the CES-D and the somatic factor, between the depressed affect and interpersonal factors ($r = 0.479$, $P < 0.01$), and between the somatic and interpersonal factors ($r = 0.480$, $P < 0.01$).

Correlations between willingness to seek mental health care for symptoms of depression, current mood from ‘happy’ to ‘sad’, and overall health with the resilience factors and overall score, showed only willingness to seek mental health care significantly correlated ($r = 0.197$, $P < 0.05$) with the positive resilience factor. This suggests that willingness to seek mental health care was related to positive resilience, but not to other factors of resilience or to overall resilience. Participants’ current mood (happy to
Overall health was weakly related to willingness to talk to a professional healthcare provider about mood if it was affecting how often they participated in social activities \((r = 0.185, P < 0.05)\), how well they could think or concentrate \((r = 0.172, P < 0.05)\), or made them feel useless to others \((r = 0.269, P < 0.01)\). The correlation of overall health to total willingness to talk about mood \((r = 0.210, P < 0.01)\) indicated that individuals with relatively good health tended to have greater willingness to talk to a professional healthcare provider. It was not significantly related to willingness to talk to a professional healthcare provider if mood affected enjoyment in being with others or was making them tired. Differences in total willingness between the two age groups indicated that participants aged 65–74 were significantly more willing to talk to a healthcare provider than were participants aged 75 and over \((t = 2.14, P < 0.05)\). Similar significance was not found among the individual items, multivariate \(F(5, 151) = 1.35, ns\), but, the means indicated higher scores among younger participants for three WSHC-DS items: affecting how often they participated in social activities; affecting how much you enjoyed being with others; affecting how well you could think or concentrate.

### Willingness to seek mental health care

To determine which variable, resilience or depressive symptoms, would significantly predict willingness to seek mental health care, data were examined for multicollinearity, outliers and statistical assumptions before regression analysis. The associations among the variables were low to moderate, ranging from \(-0.049\) to \(0.367\); thus, multicollinearity was not an issue. Standard multiple regression revealed a low \(R^2\) value \((R^2 = 0.154)\) explaining 15.4% of the overall variance among the variables by the predictors resilience and depressive symptoms. Hierarchical regression, adding the predictor variables in sequence (depressive symptoms and resilience), showed associations between resilience scores (CD-RISC) and willingness to talk to a healthcare provider about depressive symptoms (WSHC-DS) \((\beta = \ldots)\).
All indicators for resilience and willingness were retained in the model. A significant measurement path was identified between resilience and willingness to talk to a professional healthcare provider about mood. These results support a positive influence of resilience on willingness to seek care for depressive symptoms. Results revealed chi-square values confirming no difference between the data and the final measurement model.

Discussion

Participants who self-reported ‘sad mood’ had higher scores on the CES-D and three of its factors (i.e. depressed affect, somatic or diminished behaviour, and interpersonal symptoms), but not on the fourth factor ‘positive affect’. Those with higher depressive symptom scores also tended to rate their health poorer. Findings that persons with higher overall health ratings tended to report low depressive symptom scores and higher resilience scores on the CD-RISC were consistent with reports emphasizing resilience as a protective factor from depression (Edward 2005), and as a factor that potentially can be strengthened (Edward & Warelow 2005). Persons with a greater overall level of health also reported more willingness to talk to a professional healthcare provider about mood if it was affecting social activities, thinking or concentration, or usefulness to others. Participants aged 65–74 were more willing than persons aged 75 and over to discuss mood with health professionals. These findings support the need for increased attentiveness to possible depressive symptoms in older adults over age 75 years by members of their socio-environmental network and by health professionals.

Resilience was theorized as a positive predictor of willingness to seek mental health care. The direction of each pathway was as predicted in the model with a significant pathway from resilience to willingness to talk about mood. The relationship between resilience and willingness to seek care was consistent with existing literature describing ‘successful and unsuccessful adaptations’ (Felten 2000, Connor & Davidson 2003) to enhance recovery or rebound from adverse situations. Consequently, willingness to seek care may represent the potential for successful coping and adaptation. Depressive symptoms, measured by the CES-D, were theorized as a negative predictor of resilience, measured by the CD-RISC. The predicted negative (yet non-significant) relationships were evident between depressive symptoms and the willingness total. As depressive symptoms increased, willingness to seek care decreased and higher scores on depressive symptoms were related to lower willingness to talk about issues of mood.

Study findings suggest that depressive symptoms and resilience account for a small part of the variance (15.4%) in willingness of older African Americans to seek mental health care for depressive symptoms. It is therefore reasonable to conclude that other unexplored variables are significant to this model. These findings suggest the need to consider the impact of multiple medical conditions on the model. The significant influence of resilience suggests that interventions to strengthen resilience in the African American community dwelling older adult may be effective in mental health promotion. Successful adaptation skills that build resilience can be learned and enhanced (Tusaie & Dyer 2004, Edward 2005, Edward & Warelow 2005), supporting development and implementation of prevention, adaptation and intervention programmes for older African Americans.

Summary and conclusions

Results show significant correlations of overall health with CES-D and CD-RISC. Education and higher resilience influenced willingness to talk to health providers about mood-affecting social activities, thinking or concentration and suggests adding an educational variable to the model in future studies. Participants with higher resilience scores had more knowledge of their mental health care coverage, suggesting that providing health care and Medicare insurance coverage information to those with lower resilience scores could decrease mental health treatment delays. Challenges for researchers and clinicians in geriatric care are to develop and test interventions to treat vague symptoms related to mood while increasing opportunities for clients to talk about them. Despite current recommendations for depression management (Unutzer et al. 2000, 2003), more work is necessary to identify older adults who suffer needlessly with late-life depression and other forms of poor quality mental health, and to prevent its occurrence (Schoevers et al. 2006). Study limitations include self-selection and convenience sample, making the findings non-generalizable. Study direction was predicted in the hypothesized model, and the study does not reflect significant life events. Further testing of these instruments in minority populations is encouraged.

Nursing research is needed to study contributions of medical co-morbidities to the model and to discern how resilience is developed and supported (Glantz & Johnson 2002). There is evidence that resilience can be influenced and strengthened by psychosocial, behavioural, cognitive and physiological factors (Felten & Hall 2001) within the realm of nursing intervention, which may enhance the adaptive capacity of older adults to avoid depression (Aroian & Norris 2000). Such new evidence can provide the basis for developing and testing supportive interventions for older adults.
Acknowledgments

This study was conducted with support of funding from the Substance Abuse and Mental Health Services Administration, Minority Fellowship Program, administered by the American Nurses Association.

References


