African American Men and Women's Attitude Toward Mental Illness, Perceptions of Stigma, and Preferred Coping Behaviors

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Abstract

Background—Although research focused on African Americans with mental illness has been increasing, few researchers have addressed gender and age differences in beliefs, attitudes, and coping.

Objective—To examine African Americans' beliefs about mental illness, attitudes toward seeking mental health services, preferred coping behaviors, and whether these variables differ by gender and age.

Method—An exploratory, cross-sectional survey design was used. Participants were 272 community-dwelling African Americans aged 25-72 years. Data analysis included descriptive statistics and general linear regression models.

Results—Depression was the most common mental illness and there were no gender differences in prevalence. Both men and women believed they knew some of the symptoms and causal factors of mental illness. Their attitudes suggested they are not very open to acknowledging psychological

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problems, are very concerned about stigma associated with mental illness, and are somewhat open to seeking mental health services, but they prefer religious coping. Significant gender and age differences were evident in attitudes and preferred coping.

Discussion—Our findings have implications for gender and age-specific psychoeducation interventions and future research. For instance, psychoeducation or community awareness programs designed to increase openness to psychological problems and reducing stigma are needed. Also, exploration of partnerships between faith-based organizations and mental health services could be helpful to African Americans.

Keywords

African Americans; mental illness; beliefs; coping behaviors

An estimated 57.5 million American adult's experience mental illness each year (Kessler et al., 2005). Although mental illness appears across race, ethnicity, and gender, some groups appear to experience a higher burden associated with mental illness (Williams et al., 2007). For instance, African Americans make up only 12% of the population (40.1 million) of the United States (US), yet they make up 18.7 % (7.5 million) of those affected by mental illness (Davis, 2005; U.S. Census Bureau, 2007). Compared to Caucasians, mentally ill African Americans have more chronic disease, higher levels of disability, higher rates of inpatient service use, lower rates of outpatient mental health service use, and more barriers to seeking mental health treatment (Snowden, 2001; U.S. Department of Health and Human Services [DHHS], 2001; Ward, Clark, & Heidrich, 2009; Williams et al., 2007).

Although research focused on African Americans with mental illness has been increasing, few researchers have addressed gender and age differences in beliefs, attitudes, and coping. Disregarding gender and age ignores within-group diversity and can have critical implications for documenting and understanding prevalence, treatment-seeking behaviors, and the potential need for gender- and age-specific treatment. The purpose of this study was to address this research gap by examining African American's representations and beliefs about mental illness, attitudes towards seeking mental health services, preferred coping behaviors, and variance of all of these by gender and age.

Background

Depression has been identified as one of the most common mental illness, affecting more than 12 million women (12%) and more than 6 million men (7%) in the US within any 1-year period (National Institute of Mental Health, 2011). In a recent large-scale national survey, a lifetime prevalence rate of 10.4% was reported for African Americans (Williams et al., 2007), thus indicating that this group is affected by depression at high rates. Results also showed African American women (13.1%) had a higher prevalence of depression compared to African American men (7.0%), which is consistent with literature indicating women have higher prevalence of depression compared to men (National Institute of Mental Health).

The lower prevalence of depression in African American men is interesting in light of research indicating that African American men have not made the economic gains that

African American women have (Bowie, 2011), as lower income and education is identified as a risk factor for depression. For instance, Lincoln, Taylor, Watkins, and Chatter (2011) reported that African American men with less than 12 years of formal education and who have income levels below poverty had more depressive symptoms than men and women with more formal years of education and higher incomes. However, more research is needed in this area.

The focus of this study was on examining beliefs about mental illness and the Common Sense Model (CSM) was used to guide this work (Leventhal, Nerenz & Steele, 1984; Petrie, Jago, & Devcich, 2007). In the CSM, individuals have common sense beliefs and representations about illnesses that guide how they cope with health threats and illness. A representation is a set of beliefs about the identity or symptoms, cause, timeline, consequences, control and treatment, illness coherence (understanding of the illness), and emotional impact of the health threat or illness. Representations are guided by informal (e.g., family, friends, clergy) and formal sources (e.g., educators, health care providers) of information. Regardless of the source or accuracy of the information, representations influence behaviors chosen to eliminate or control the health threat or illness; these are coping responses.

Studies to examine African American beliefs about mental illness and attitudes toward seeking mental health services have shown mixed results. Several studies, including the seminal report *Mental Health: Culture, Race and Ethnicity*, have shown that African Americans view mental illness as highly stigmatizing, resulting in low treatment-seeking (Gary, 2005; National Mental Health Association, 1998; Thompson-Sanders, Bazile, & Akbar, 2004; DHHS, 2001). Similarly, a recent qualitative study of attitudes and beliefs about mental health among older African American adults revealed that participants viewed mental illness, particularly depression, as a weakness (Conner, Copeland, Grote, Koeske, et al., 2010).

In contrast to the above findings, African Americans have been found to have positive beliefs and attitudes toward seeking mental health services, but these positive beliefs and attitudes do not translate to seeking treatment. For instance, in one study of racial differences in beliefs about how the natural course of mental illness relates to perceptions of treatment effectiveness, African Americans were more likely than Caucasians to believe that mental health professionals could help individuals with mental illness. However, the African Americans were also more likely to believe that mental health problems could improve on their own (Anglin, Alberti, Link, & Phelan, 2008). The belief that mental health problems can resolve on their own seemed to prevent use of mental health services as a coping strategy. Similar results were obtained in another study of racial differences in attitudes toward professional mental health care and use of services; African Americans had more positive attitudes toward seeking mental services than Caucasians, but were less likely to use services. Having a positive attitude toward seeking mental health services did not result in use of mental health services (Diala et al., 2000).

The limited literature suggests preferred coping with mental illness is primarily religious. Ward et al. (2009) found that African American women would use religious coping to deal

with a mental health problem, while indicating they might seek professional treatment. Similarly, more African Americans (90.4%) than non-Hispanic Whites (66.7%) reported use of religious coping in dealing with mental health issues (Chatters, Taylor, Jackson, & Lincoln, 2008). In a qualitative study, high use of religious coping including prayer and developing a relationship with God were found to be ways to cope with depression (Conner, Copeland, Grote, Rosen, et al., 2010). Research examining gender differences in coping among African Americans is sparse.

Method

Study Design and Sample

An exploratory, cross-sectional survey design was used. African American men and women ages 25 to 72 years were recruited regardless of their history of mental illness, because the primary focus was beliefs regardless of experience with mental illness. The broad age range for inclusion was selected to obtain information about the variables of interest across age groups. Adults 25 years and older were recruited because research indicates the median age of onset for mood disorders is 30 years (Kessler et al., 2005). Recognizing the negative impact of mood disorders (major depressive disorder) among African Americans specific to higher chronicity and disability among this group (Williams et al., 2007), focusing on individuals 25 years and older was believed to provide more opportunities to recruit individuals with life experience that could facilitate comprehension of the issues in this study.

The desired sample size was based on having power of .80 to detect a difference between men and women of .25 standard deviations in beliefs, attitudes, and coping. A sample of 180 participants was required. Recognizing challenges associated with recruiting African American men to participate in research, efforts were made to oversample African American men in the Midwestern city and its suburbs where the study was conducted. There was a large interest from the African American community in the study, which lead to a final sample of 272.

Measures

Demographic questionnaire—Year of birth, income, marital status, number of children, perceived economic class, and level of education were collected.

Representations of mental illness—To assess identity and symptoms associated with mental illness, the Brief Symptom Inventory (BSI) was used; it includes 53 symptoms associated with mental illness (Derogatis & Melisaratos, 1983). Response options were changed from a Likert-type scale to dichotomous responses of 1 (yes) or 0 (no) to simplify the measure and reduce participation burden (Ward & Heidrich, 2009). The BSI scores were summed to give a total score. Current research supports construct validity of the BSI with African Americans (Hoe & Brekke, 2009). The BSI has outstanding internal consistency with a reported alpha of .96, consistent with an alpha of .97 in the present study.

Dimensions of representation were measured using the Illness Perception Questionnaire-Revised (IPQ-R), an instrument based on the CSM (Moss-Morris et al., 2002). The IPQ-R

consists of seven subscales: Identity, Cause, Timeline, Consequences, Treatment Cure/ Control, Illness Coherence, and Emotional Representation. For this study, the BSI was used to assess identity because the Identity subscale of the IPQ-R is used to assess individuals' beliefs about symptoms of physical illnesses rather than symptoms associated with mental illnesses. The Illness Perception Questionnaire-Revised (IPQ-R) has shown good discriminant, known-group, and predictive validity as well as acceptable internal reliability with subscale alphas ranging from .79 to .89 (Moss-Morris et al., 2002). However, in the present study, which is only the second published study to use the IPQ-R with African Americans alphas, ranged from .58 to .66.

The 16-item Cause subscale was used to assess beliefs about factors that may cause mental illness; the 8-item Timeline, the degree to which the respondent believes that mental illness has a cyclical course; the 7-item Consequences subscale, the degree to which outcomes of mental illness for self and others are considered serious and negative; the 11-item Treatment Cure/Control subscale, the degree to which the individual believes mental illness is curable or controllable through medical treatment and personal motivation; the 5-item Illness Coherence subscale, the extent to which an individual perceives he or she has a good understanding of mental illness; and the 6-item Emotional Representation subscale, the degree to which an individual believes he or she is affected emotionally by mental illness. All items have 5-point Likert-type response options ranging from 1 (strongly disagree) to 5 (strongly agree) and subscale scores are created by taking a mean of the relevant items.

Minor changes were made in IPQ-R wording, consistent with the developers' suggestions for adapting the scale (Moss-Morris et al., 2002). For example, "My illness will last a long time" was changed to "Mental illness will last a long time." In previous studies, the IPQ-R has shown good discriminant, known-group, and predictive validity, as well as acceptable internal reliability, with subscale alphas ranging from .79 to .89 (Moss-Morris et al., 2002). In the present study, alphas ranged from .58 to .66, a matter which is discussed further in the discussion and limitations section.

Attitudes—Attitudes toward seeking mental health services were measured using the Inventory of Attitude Toward Seeking Mental Health Services (IASMHS). The IASMHS is a 24-item measure designed to assess individuals' attitudes toward seeking professional help for mental health problems (Mackenzie, Knox, Gekoski, & Macaulay, 2004). No literature could be located reporting use of the Inventory of Attitude Toward Seeking Mental Health Services (IASMHS) and internal consistency among African Americans. McKenzie et al., (2004) in examining psychometrics of the IASMHS with a sample of 92.7% (White, Canadian), 5.8% (other minority), 1% East Indian and 0.5% Asian, found the IASMHS to have strong construct validity and reliability. In the present study, which is the first to use the IASMHS with African Americans, the subscales showed acceptable construct validity and internal consistencies were acceptable ranging from 0.73 to 0.81.

The IASMHS has 3 subscales: psychological openness, help-seeking propensity, and indifference to stigma. Psychological openness refers to the extent to which individuals are open to acknowledging mental health problems. Help-seeking propensity reflects the extent to which individuals believe they are willing and able to seek professional mental health

services. Indifference to stigma reflects the extent to which individuals are concerned about what significant people in their lives might think if they found out the individual was seeking professional help for mental health problems (Mackenzie et al., 2004). The items have 5-point response options: *disagree* (0) to *agree* (4). Relevant items are summed to create subscale scores that range from 0 to 32; higher scores indicate more psychological openness, more help-seeking propensity, and less concern about stigma. Previously reported internal consistencies for the subscales are 0.82 for the psychological openness subscale, 0.76 for the help-seeking propensity subscale, and 0.79 for the indifference to stigma subscale (Mackenzie et al., 2004). In the present study, the subscales were acceptable: 0.73 for the psychological openness subscale, 0.81 for the help-seeking propensity subscale, and 0.77 for the indifference to stigma subscale.

Coping—Preferred coping was measured using the 14-item Preferred Coping Scale (PCS) (Ward & Heidrich, 2009). The PCS was developed specifically for African Americans and in previous unpublished research has demonstrated good construct validity. Ward & Heidrich (2009) found among African Americans acceptability construct validity and internal consistency alpha coefficients ranging from 0.62 - 0.708. In the present study subscale reliabilities ranged from 0.64 - 0.84. The PCS has 4 subscales measuring use of Professional Help (6 items), Informal Support Network (4 items), Religiosity (3 items), and Avoidance (6 items). Response options range from 1 (definitely not do) to 4 (definitely do). Subscale scores were created by taking a mean of the relevant items, with higher scores (closer to 4) indicating greater likelihood of coping in that way if faced with a mental illness. In previous research with African Americans, internal consistency alpha coefficients ranged 0.62-0.78 (Ward & Heidrich, 2009). In the present study subscale reliabilities ranged 0.64-0.84.

Procedure

Approval to conduct this study was obtained from the University Health Sciences Institutional Review Board. Packets containing informed consent forms, the demographic questionnaire, the IPQ-R, BSI, IASMHS, PCS, researcher-addressed postage-paid envelope, and a $10 gift card were distributed at churches, local African American barbershops and hair salons, the YWCA, and community events, and through local advertising in the African American community. A snowball sampling strategy (Karasz, 2005) was used. Prospective participants were given the opportunity to complete the packet immediately or to return it by mail. Participants received assistance with reading or completing the research packet if requested.

Statistical Analysis

Descriptive statistics were used to summarize demographic variables and questionnaire subscales. Bivariate analyses were conducted to compare men and women on all study variables. Statistical significance for all comparisons was based on the Pearson χ^2 test for categorical variables and normal theory model for continuous variables. Principal component analysis was conducted on the IPQ-R Cause Subscale to identify groups of casual factors, as suggested by the scale developers (Moss-Morris et al., 2002). General linear models (GLM) were created to examine differences between gender as well as age

group and each of the outcome measures. In addition, a gender by age group interaction term was examined to determine if the subscale level differences among age groups differed between the genders. All results were considered statistically significant at $p < .05$. Models were adjusted for income ($40,000 vs. $40,001-$80,000 or more), perceived economic class (working class vs. middle or upper class vs. retired), education (High school/GED or lower vs. college vs. graduate school), and diagnosed with or sought professional help for a mental illness (yes or no). All analyses were performed in SAS.

Results

Participant demographics are detailed in Table 1. Most participants were male and working or middle class, had a high school or college degree, made $40,000 or less yearly, and had health insurance. Most did not have a diagnosis of mental illness. Significant gender differences in demographics suggest that African American men compared to African American women were more likely to be undereducated (high school education or lower), have an annual income of less than $40,000, and have no health insurance. The women were more likely to have graduate education, incomes of $40,001-$80,000, and health insurance. Thirty percent of participants reported having a mental illness and there were no gender differences. The most common mental illness reported was depression.

Each dimension of the CSM using the BSI and the IPQ-R was examined (Table 2). On the Identity/Symptoms dimension (BSI scale), the following were endorsed as symptoms of mental illness by more than 75% of participants: hostility (84.1%); thoughts of ending your life (78.7%); suddenly scared for no reason (77.5%); experiencing spells of terror or panic (76.5%); and having urges to beat, injure, or harm someone else (76.4%). Least endorsed symptoms were pain in heart or chest (36.7%), nausea or upset stomach (39.5%), hot and cold spells (39.6%), and feeling weak in parts of the body (39.6%), which suggests that most participants did not believe these were symptoms of mental illness.

To understand participants' beliefs about factors they believed could cause mental illness, the 17-item IPQ-R Cause subscale was examined. Mean scores on this subscale indicated the women believed mental illness could be caused by stress, trauma, drug use, alcohol use, heredity, family problems, and work stress. The men believed mental illness could be caused by alcohol use, drug use, trauma, stress, and family problems.

Mean scores for the remaining IPQ-R subscales (Table 2) suggest the women believed mental illness is chronic and cyclic, with negative consequences, but can be controlled. The women's mean scores were near the midpoint (M = 3) for illness coherence and emotional impact, suggesting they neither agreed nor disagreed that they have an understanding of mental illness and are affected emotionally by it. The men believed having a mental illness could result in negative consequences. However, the men's mean scores for the other beliefs subscales were near the midpoint, suggesting they neither agreed nor disagreed that mental illness is chronic and cyclic, can be controlled, they have an understanding of mental illness or are affected by mental illness. Additionally, although both groups believed having a mental illness results in negative consequences, women were statistically significantly more likely to believe there were negative consequences compared to men ($p < .001$). Also,

women compared to men were more likely to believe professional treatment could control mental illness ($p < .001$).

Regarding attitudes toward seeking mental health services, mean scores on the IASMHS subscales are shown in Table 2. Although these scores indicate low psychological openness, some openness to seeking help, and major concerns about stigma, women appeared to be slightly more psychologically open ($p < .03$) and willing to seek mental health services ($p < .02$).

On the PCS, higher scores (closer to 4) suggest higher endorsement of a particular coping behavior. Mean scores on the PCS subscales are shown in Table 2. The mean score for the women and men on religious coping were higher, suggesting they might use or definitely use religious coping. All of the other mean scores on the PCS were closer to the midpoint ($M = 3$) or less than the midpoint, suggesting all participants might use professional and informal coping and that they were not sure if they would use avoidance coping.

Overall, an age group effect was evident in psychological openness and help-seeking propensity. Also, an age group by gender interaction was evident in psychological openness. (Table 3)There were no statistically significant gender or age group effects for indifference to stigma. These findings regarding psychological openness indicate that young women were significantly more open than young men, but middle age and older men and women did not differ (Figure 1). Also, young women had a significantly higher propensity for seeking help than young men, but middle age and older men and women had a higher propensity for seeking help overall compared to the other groups (Figure 1).

Overall, an age group effect was evident in preferred coping including use of professional help, informal support, and religious coping, but not for avoidance coping (Table 4). Younger and middle-age men and women compared to older men and women significantly preferred use of professional help, informal support, and religious coping (Figure 1). There was a statistically significant perceived economic class effect on use of religious coping. There were no statistically significant gender effects regarding use of professional help, use of informal support, religious coping, or avoidance coping.

Discussion

The primary aim of this study was to examine African American women and men's beliefs about mental illness, attitudes towards seeking mental health services, preferred coping behaviors, and whether or not attitudes and coping varied by gender and age. The women and men believed they knew some of the symptoms and causal factors of mental illness. They held beliefs about the timeline, consequences, and controllability of mental illness; were unsure of their own understanding of mental illness; and were unsure whether or not they were affected emotionally by mental illness. However, due to low reliability of five of the IPQ-R subscales (timeline, consequences, controllability, illness coherence, and emotional representation), findings of beliefs in these areas should be interpreted cautiously.

Additionally, low reliability of the IPQ-R subscales could raise concern about whether the CSM may have been an appropriate conceptual framework. Given that the participants held

beliefs about symptoms and casual factors that are consistent with the CSM, the data seem to suggest the CSM is useful for examining lay theories of mental illness among this group. Furthermore, although not part of the CSM, the participants held beliefs related to stigma, psychological openness, and help-seeking which in turn was associated with coping behaviors. These findings are consistent with Ward and Hedrich (2009), who also showed limitations with use of the IPQ-R with African American women, but found the CSM can be helpful in understanding lay theories about mental illness and coping behaviors among this group. The CSM is important even though the IPQ-R is problematic.

Participants were not very open to acknowledging psychological problems, were very concerned about the stigma associated with mental illness, but were somewhat open to seeking mental health services. Religious coping appeared to be the most preferred coping mechanism, and a significant perceived economic class effect on religion was found. Additionally, statistically significant gender and age differences were evident in attitudes toward seeking mental health services and preferred coping.

Sample Demographic Characteristics

Interestingly, the prevalence rate for MDD in the current study was higher than a recent large-scale national survey, which found a lifetime prevalence rate of 10.4% (Williams et al., 2007). It is possible that the higher prevalence of mental illness in our sample might be in part due to the fact that 70% were undereducated (high school or lower) and 88% had income below $40,000; research indicates lower education and socioeconomic position are correlated with MDD. For instance, Lincoln, Taylor, Watkins, and Chatter (2011) found African American men with less than 12 years of formal education and who have income levels below poverty had more depressive symptoms than men with more formal years of education and higher incomes. The finding is consistent with current literature indicating lower education and income may be a significant risk factor for MDD.

Beliefs

Beliefs about symptoms and causal factors were consistent across gender, whereby both female and male participants believed they knew some of the symptoms and causal factors of mental illness and they accurately identified these factors. The findings contrast results of several studies. For example, in a national survey conducted by the National Mental Health Association (NMHA; 1998), it was found that 63% of African Americans believed depression is a personal weakness. Similarly, Johnson (2000) found African American men believed mental health problems are simply a lack of motivation. In a more recent study, Conner, Copeland, Grote, Rosen, et al. (2010) found older African American adults believed depression was a sign of weakness and lack of inner strength. The difference in findings with the present study could be attributed to a number of factors, including cohort effects, participants' exposure to mental illness, and possibly increased knowledge of mental illness among study participants, because 30% of them reported having a mental illness or receiving treatment for a mental illness.

Low reliability of the IPQ-R subscales (timeline, consequences, controllability, illness coherence, and emotional representation) raise questions about use of these subscales with

African Americans. The IPQ-R was used with African American women in only one study (Ward & Heidrich, 2009), and that study revealed problems with poor reliability on the timeline and controllability subscales. No study could be located that used the IPQ-R with African American men. Problems with the IPQ-R subscales in the present study, combined with results from Ward and Heidrich (2009), warrant further investigation into the psychometrics of the IPQ-R. Potential psychometric issues affecting reliability of the IPQ-R in the present study might include lower number of items on the subscales, participants guessing or misinterpreting items, inconsistent responses, low variance in responses to items, and cultural appropriateness (Feldt & Qualls, 1996; Ward & Hedirich, 2009). In addition, use of only coefficient-alpha on the IPQ-R may have led to biased reliability estimates. The IPQ-R is considered a multiple unidimensional scale as the developers recommend use of the subscales rather than the composite of the entire test items. According to Kamata, Turhan, and Darandari (2003) use of coefficient-alpha on multiple unidimensional scales can underestimate the true reliability because tau-equivalent conditions may have not been met. Tau-equivalent condition implies that the test is unidimensional in the factor analytic structure, and all parts must measure the same unitary trait or ability (Feldt & Qualls, 1996). In future research, a factor analysis of the IPQ-R and use of stratified-alpha can improve the reliability test for the IPQ-R.

Attitudes

The finding that both the women and men evidence low endorsement of psychological openness might shed light on African Americans treatment-seeking behaviors. African Americans' low use of mental health services, historically and presently, has been well-documented (DHHS, 2001). As mentioned earlier, several barriers to seeking mental health services have been postulated in current literature, including poor access to care, receipt of poor quality care, low availability of care, and stigma associated with mental illness (DHHS, 2001; Ward & Besson, 2012; Ward & Mengesha, in press). Missing from the treatment-seeking and barriers literature is the relationship between psychological openness and the decision to seek professional help for mental health problems. Another unanswered question is whether or not psychological openness influences type of coping responses or whether it influences treatment adherence and patient or client continuity in treatment. The finding about African American women and men's low endorsement of psychological openness has implications for future research and treatment adherence.

Our finding regarding concerns about stigma, particularly concerns about significant people finding out that mental health services are being sought, is consistent with current literature on stigma. In fact, concerns about stigma are quite prevalent in the African American community (Gary, 2005; DHHS, 2001; Ward, Clark, & Heidrich, 2009; Ward & Collins, 2010). Our findings, however provide new information regarding African American men and stigma. Most of the research on stigma has been gender neutral and has aggregated data and results, with no focus on African American men. However, the findings suggest that stigma is also a concern among African American men. These findings have the potential to inform gender-specific outreach designed to educate and reduce stigma in the African American community.

Despite being very concerned about stigma associated with mental illness and low endorsement of psychological openness, participants were somewhat open to seeking mental health services. Their openness to seeking mental health services is consistent with the finding of positive attitudes by Diala et al. (2000), but in contrast with most of the current literature that suggests African Americans have negative attitudes toward seeking mental health services (Gary, 2005; NMHA, 1998; Thompson-Sanders et al., 2004; DHHS, 2001). It is possible that the participants were somewhat open because 30% of them had a mental illness and sought treatment for mental illness. Thus, it is likely that their own exposure to mental illness and treatment may have fostered some level of openness to seeking mental health services.

Coping Behaviors

Use of religious coping among the female participants is consistent with a number of studies showing the high use of religious practices (praying, talking to a pastor) to cope with mental health issues (Chatters et al., 2008; Dessio et al., 2004). This finding of use of religious coping among African American men is new and makes a significant contribution to the literature.

Consistent with mental health service use literature, the participants appeared apprehensive about seeking professional help (Alegria et al., 2008; Neighbors et al., 2009). Surprisingly, they also seemed tentative about using informal support which is inconsistent with current literature, which shows that use of informal support such as family and friends is very common among African American women and men (Broman, 1996; Johnson, 2000; Snowden, 2001). It is possible that participants' tentativeness about using informal support and seeking professional help might be related to their concern about stigma. Another explanation might include stress from social support network related to financial strain. For instance, Lincoln et al. (2005) found that among African Americans, social support did not mitigate the effects of stress and was affected negatively by financial strain. Given that most participants' incomes were $40,000 or below, it is possible that their tentativeness about use of support network could be related to financial strain.

Gender and Age Differences in Attitudes and Preferred Coping

The study results documenting the existence of gender and age differences in attitudes and preferred coping is novel. In particular, despite both groups having low psychological openness and help-seeking propensity, the findings showed that women were significantly more psychologically open and receptive to seeking professional help compared to the men. It is possible that the women are more psychologically open and receptive to seeking professional help due to their higher level of education, and have higher incomes that increase access to health insurance and health care. African American women have experienced more economic advancement compared to African American men (Bowie, 2011), so the economic advancement of this group might account for some of the gender differences in attitudes.

The findings of age differences showing that older participants were less psychologically open than young participants and that middle-aged participants were more open to seeking

professional help than young participants indicate the importance of research examining within- group differences among African Americans relevant to gender and age group. In addition, this research suggests the need for future research to examine how psychological openness can be increased among older adults and African American men, with the goal of increasing treatment-seeking behaviors. The finding that both older and middle-aged participants compared to young participants were less likely to seek professional help to cope with a mental health problem is critical because it sheds light on which subgroups of African Americans are not seeking professional help.

In contrast to previous literature, older adults as compared to young adults were found to be less likely to use informal support and religious coping. Religious coping is very common among older African Americans; it was identified as the most culturally accepted strategy for dealing with depression (Conner, Copeland, Grote, Rosen, et al., 2010). The difference in findings may be attributed to the diversity with the African American population. Such diversity includes religious beliefs and geographic residence. In addition, it is possible older African Americans are less likely to use informal support due to the impact of morbidity and mortality among their social network.

Limitations

Beliefs about timeline, consequences, illness coherence, and emotional impact should be interpreted cautiously because the internal consistency on these IPQ-R subscales were below acceptable levels (<.70). This is the first report of IPQ-R use with African American men and older African Americans. The low reliability on some of the subscales may indicate lack of validity for use with this population. Another concern involves use of cutoff scores on the subscales and interpretation of differences in scores, hence the importance of focusing on clinically meaning differences to facilitate more substantive interpretation of study results. Another limitation is that no adjustments were made to the type I error rate to account for the multiple models due to the exploratory nature of these analyses. Thus, conclusions were drawn cautiously because some results may be significant due to chance alone. Finally, limits to generalizability of the results should be considered since the sample was drawn primarily from the Midwest. Furthermore, the sample was a convenience sample, thus no claim of representativeness can be made regarding the sample.

Future Research

Future research in this area focused on examining reliability of the IPQ-R for use with African American adults is needed. Also, use of qualitative methodology has the potential to illuminate underlying social and cultural contexts that may influence beliefs, attitudes, and preferred coping strategies in the absence of more reliable measures.

Research is needed to examine how attitudes might be a barrier or how attitudes may facilitate treatment-seeking among this group. For example, investigating how psychological openness (attitude) might influence decision-making to seek professional mental health care. Also, examining whether and how psychological openness influence type of coping responses, treatment adherence, and continuity of professional treatment.

Replication of the present study with African Americans in other regions of the US might reveal higher, lower, or equivalent levels or of religious coping, as well as other coping behaviors among older African Americans. Such a study might yield meaningful and useful results in addressing the mental health needs of older African American adults.

Acknowledgments

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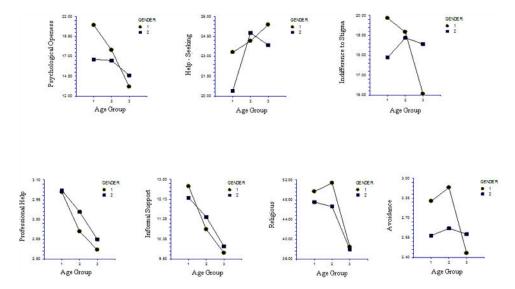
Figure 1. Graphic display of results of GLM adjusting for covariates

Table 1

Characteristics of Study Sample by Gender

	Total *n* = 272 (%)	Male *n* = 158 (%)	Female *n* = 114 (%)	χ² *p*
Age, in years				
Young (25-45)	110 (40.4)	66 (41.7)	44 (38.6)	
Middle (46-59)	95 (34.9)	56 (35.4)	39 (34.2)	
Older (60+)	67 (24.6)	36 (22.8)	31 (27.2)	.699
Perceived economic class				
Working class	139 (52.5)	89 (56.3)	50 (46.7)	
Middle to Upper class	67 (25.3)	37 (23.4)	30 (28.0)	
Retired	59 (22.3)	32 (20.3)	27 (25.2)	.306
Education level				
High school	174 (69.6)	105 (72.4)	69 (65.7)	
College	67 (26.8)	39 (26.9)	28 (26.7)	
Graduate School	9 (3.6)	1 (0.7)	8 (7.6)	.014
Income level				
< $40,000	238 (87.8)	144 (91.7)	94 (82.5)	
$40, 001 - $80, 000	33 (12.2)	13 (8.3)	20 (17.5)	.021
Insurance type				
No	108 (41.5)	81 (53.6)	27 (24.8)	
Yes	152 (58.5)	70 (46.4)	82 (75.2)	.001
Diagnosis of mental illness or treatment for mental illness				
No	189 (69.7)	114 (72.6)	75 (65.8)	
Yes	82 (30.3)	43 (27.4)	39 (34.2)	.228

Table 2

Mean Scores of Illness Perception Questionnaire, Attitudes and Coping Subscales by Gender

		n	Mean	SD	Min	Max	p
IPQ-R (Beliefs)							
Identity/Symptoms	All	272	32.7	14.6	0	53.0	
	Female	114	33.8	14.8	0	53.0	
	Male	158	31.9	14.5	0	53.0	.178
Cause	All	272	3.3	0.6	1.2	4.8	
	Female	114	3.4	0.6	1.5	4.8	
	Male	158	3.3	0.7	1.2	4.8	.135
Timeline	All	272	3.4	0.7	1.0	5.0	
	Female	114	3.6	0.7	1.8	5.0	
	Male	158	3.4	0.8	1.0	5.0	.034
Consequences	All	272	3.7	0.7	1.2	5.0	
	Female	114	3.9	0.6	1.8	5.0	
	Male	158	3.5	0.7	1.2	5.0	.001
Treatment Cure/Control	All	272	3.2	0.5	1.4	4.7	
	Female	114	3.5	0.4	2.5	4.7	
	Male	158	3.0	0.5	1.4	4.1	.001
Illness Coherence	All	272	3.0	0.7	1.0	5.0	
	Female	114	3.0	0.8	1.0	5.0	
	Male	158	2.9	0.7	1.0	4.8	.507
Emotional Representation	All	272	2.7	0.7	1.0	4.3	
	Female	114	2.8	0.7	1.0	4.3	
	Male	158	2.7	0.6	1.0	4.0	.181
IASMHS (Attitudes)							
Psychological openness	All	272	16.9	7.1	0	32.0	
	Female	114	18.0	7.6	0	32.0	
	Male	158	16.0	6.7	0	30.9	.033
Help-seek propensity	All	272	23.5	6.5	0	32.0	
	Female	114	24.6	6.1	0	32.0	

		n	Mean	SD	Min	Max	p
	Male	158	22.7	6.7	3.0	32.0	.019
Indifference to stigma	All	272	18.6	7.3	0	32.0	
	Female	114	18.9	7.5	0	32.0	
	Male	158	18.3	7.2	4.0	32.0	.554
Preferred Coping Scale							
Professional help	All	272	2.8	0.7	0	4.0	
	Female	114	2.8	0.8	0.6	4.0	
	Male	158	2.8	0.7	0	4.0	.955
Informal support network	All	272	3.3	0.8	0	4.0	
	Female	114	3.3	0.8	1.5	4.0	
	Male	158	3.3	0.8	0	4.0	.964
Religiosity	All	272	3.4	0.8	0	4.0	
	Female	114	3.5	0.6	1.3	4.0	
	Male	158	3.4	0.8	0	4.0	.228
Avoidance	All	272	2.7	1.0	0	4.0	
	Female	114	2.8	1.0	0	4.0	
	Male	158	2.6	1.1	0	4.0	.273

Notes. IPQ-R = Illness Perception Questionnaire, IASMHS = Inventory of Attitude Toward Seeking Mental Health Services

The reported p-value is a comparison of male to female.

Table 3

Results of General Linear Modeling of the Inventory of Attitude Toward Seeking Mental Health Services (Attitudes; n = 272)

	F	Numerator df	p
Psychological Openness			
Age group	5.9891	2	.002880
Gender	2.2659	1	.133511
Income	0.0001	1	.990973
Perceived economic class	3.3056	1	.070241
Education	0.0735	1	.786506
Diagnosis of mental illness	0.4085	1	.523341
Age group*Gender	3.145	2	.044778
Help - Seeking			
Age group	4.2089	2	.015930
Gender	2.3537	1	.126247
Income	1.1856	1	.277263
Perceived economic class	2.419	1	.121138
Education	0.0751	1	.784297
Diagnosis of mental illness	1.0915	1	.297152
Age group*Gender	1.7782	2	.171069
Indifference to Stigma			
Age group	0.8221	2	.440709
Gender	0.0069	1	.933649
Income	0.0031	1	.955315
Perceived economic class	1.2331	1	.267864
Education	2.2160	1	.137846
Diagnosis of mental illness	0.2671	1	.605745
Age group*Gender	1.7539	2	.175224

Notes. Denominator = 250

Table 4

Results of General Linear Modeling of Preferred Coping Scale (n = 272)

	F	**Numerator df**	*p*
Professional Help			
Age group	4.1873	2	.016266
Gender	0.7143	1	.398836
Income	0.3093	1	.578636
Perceived economic class	3.4867	1	.063035
Education	0.6974	1	.404453
Diagnosis of mental illness	3.3709	1	.067544
Age group*Gender	0.1904	2	.826756
Informal Support			
Age group	4.5372	2	.011600
Gender	0.0389	1	.843709
Income	0.7115	1	.399742
Perceived economic class	0.2254	1	.635361
Education	0.5993	1	.439586
Diagnosis of mental illness	0.5608	1	.454649
Age group*Gender	0.3519	2	.703701
Religious			
Age group	4.5512	2	.011444
Gender	0.9037	1	.342713
Income	0.8558	1	.355804
Perceived economic class	5.2623	1	.022623
Education	0.5853	1	.444955
Diagnosis of mental illness	2.0889	1	.149625
Age group*Gender	0.2307	2	.794155
Avoidance			
Age group	0.9654	2	.382231
Gender	1.0969	1	.295966
Income	0.0670	1	.795952
Perceived economic class	0.5865	1	.444501
Education	0.6517	1	.420272
Diagnosis of mental illness	0.5954	1	.441081
Age group*Gender	0.9877	2	.373888

Notes. Denominator = 250