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Religiosity and Mental Health Service Utilization among African Americans

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Abstract

African Americans are approximately half as likely as their White counterparts to utilize professional mental health services. High levels of religiosity among African Americans may lead to a greater reliance on religious counseling and coping when facing a mental health problem. This study investigates the relationship between three dimensions of religiosity and professional mental health service utilization among a large (n=3,570), nationally representative sample of African American adults. African American adults who reported high levels of organizational and subjective religiosity were less likely than those with lower levels of religiosity to utilize professional mental health services. This inverse relationship was generally consistent across individuals with and without a diagnosable DSM-IV anxiety, mood, or substance use disorder. No association was found between non-organizational religiosity and professional mental health service use. Seeking professional mental health care may clash with sociocultural religious norms and values among African Americans. Strategic efforts should be made to engage African American clergy and religious communities in the conceptualization and delivery of mental health services.

Keywords

African Americans; health disparities; religiosity; mental health services

African Americans are approximately half as likely as their White counterparts to utilize professional mental health services, even after adjusting for socioeconomic and clinical factors (Gonzalez et al., 2010; Hankerson et al., 2011; Neighbors et al., 2007; Wang et al.,

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2005). Contributors to racial disparities include financial constraints (Sareen et al., 2007), high attrition rates (Warden et al., 2009), distrust of providers (Nicolaidis et al., 2010), and stigma (Ayalon & Alvidrez, 2007; Menke & Flynn, 2009; Mojtabai et al., 2011). Given the disabling nature of mental disorders (Whiteford et al., 2013), addressing disparities in care is a pressing public health concern.

A growing body of research is investigating the relationship between various aspects of religiosity and mental health problems (Ellison & Flannelly, 2009; Hankerson & Weissman, 2012; Himle, Taylor, & Chatters, 2012). Overall, religious involvement is protective against psychological problems, such as major depression and suicidal behavior (Dein, Cook, & Koenig, 2012; Taylor, Chatters, & Joe, 2011; Taylor, Chatters, & Nguyen, 2012). The relationship of religiosity and mental health is especially relevant for African Americans, who have the highest rates of church attendance among all racial/ethnic groups in the United States (U.S.) (R. J. Taylor, Chatters, & Jackson, 2007; R. J. Taylor et al., 2012). The Black Church, classically defined as the set of seven predominantly African American denominations of the Christian faith, has historically provided mental health counseling and tangible resources to community members facing emotional distress (Lincoln & Mamiya, 1990). Church-based programs continue this tradition through education, screening, and brief interventions (Fox, Merwin, & Blank, 1995; Hankerson & Weissman, 2012; R. J. Taylor, Ellison, Chatters, Levin, & Lincoln, 2000). Importantly, African American clergy are the primary conduit to mental health services and/or education for socioeconomically diverse African Americans (Bohnert et al., 2010; Linda M. Chatters et al., 2011; Hankerson, Watson, Lukachko, Fullilove, & Weissman, 2013; Molock, Matlin, Barksdale, Puri, & Lyles, 2008; Young, Griffith, & Williams, 2003). Findings from the National Comorbidity Survey (NCS) show that a higher proportion of Americans seeking treatment for mental disorders sought help from clergy (25%), compared with psychiatrists (16.7%) or general medical doctors (16.7%) (Wang, Berglund, & Kessler, 2003). Given this tradition, many African Americans may view mental health treatment as falling under the purview of religion, as opposed to traditional mental health specialists.

Religiosity encompasses several elements. Chatters et al. (Chatters, Levin, & Taylor, 1992) developed a widely studied multi-dimensional model of religious involvement that includes three dimensions of religiosity: “organizational,” “non-organizational,” and “subjective.” Organizational religiosity refers to formal, institutional activities such as church attendance and participation in church-related activities. Non-organizational religiosity includes behaviors that are private or informal, such as prayer and engaging in religious media. Subjective religiosity describes the importance or significance of religion in an individual’s life (Chatters et al., 1992).

Relatively few studies have investigated the relationship between religiosity and mental health services utilization. Koenig et al. (Koenig, George, Meador, Blazer, & Dyck, 1994) found that among Pentecostals with mental disorders, those who attended church infrequently were less likely to seek professional mental health treatment. A study of older, predominantly White Americans found that respondents who reported higher levels of private (i.e., non-organizational) religiosity were roughly 20% more likely to use mental health services than their less religious counterparts (Pickard, 2006). Harris, Edlund, and

Larson (2006) suggest that the effect of religiosity on service use may differ by respondents' level of distress. Using data from the 2001–2003 National Surveys on Drug Use and Health, the authors reported a positive association between measures of religiosity and use of outpatient mental health services among respondents under serious distress. Among respondents with moderate levels of distress, importance of religion was inversely (however not statistically significantly) related to service use (Harris et al., 2006). These studies are limited by their use of small, predominantly White samples.

Thus, the purpose of this study was to investigate the relationship between religiosity and mental health service utilization among African Americans using a large, nationally representative, community sample. Our primary hypothesis was that greater religiosity would be associated with lower mental health service utilization among African Americans. We also hypothesized that presence of any DSM-IV mood, anxiety, or substance disorders would weaken the association between religiosity and service use.

Methods

Sample

This study used data from the National Survey of American Life (NSAL), a national household probability sample of 6,082 African Americans, non-Hispanic whites, and blacks of Caribbean descent aged 18 and older (Jackson et al., 2004). Analyses were restricted to the NSAL subsample of 3,570 African Americans. Data were collected between February 2001 and March 2003 by the Program for Research on Black Americans at the University of Michigan's Institute for Social Research. Institutionalized populations (residing in prisons, jails, nursing homes, and long-term medical or dependent care facilities) and military personnel living on military bases or reservations were excluded from the study. The NSAL had an overall response rate of 72.3% and a response rate of 70.7% for the African American subgroup (Jackson et al., 2004).

Demographic characteristics of African Americans in the NSAL have been described in detail previously (A. T. Woodward et al., 2008). Briefly, the average age of African American participants was approximately 42 years. A larger proportion of women (56%) were represented than men. Most respondents (62%) had a high-school level of education or less (12 years). The mean annual household income was approximately \$36,000, with two-thirds of the sample (67%) being employed. This study was approved by the University of Michigan Institutional Review Board.

Measures

The dependent variable, professional mental health services, is defined in this study as those services sought within the healthcare system, including specialty mental health providers. Respondents were asked whether they had seen any of the following professionals for problems with their emotions, nerves, or use of alcohol or drugs in the past 12 months: psychiatrist, psychologist, social workers, or counselor; any other mental health professional, such as a psychotherapist or mental health nurse; general practitioner or family

doctor; any other medical doctor, such as a cardiologist or (women: gynecologist/men: urologist); a nurse, occupational therapist, or other health professional.

The main predictors of interest were three dimensions of religiosity (organizational, non-organizational, and subjective) (Chatters et al., 1992). Organizational religiosity was measured using two NSAL questions regarding church attendance. Respondents were asked whether they had attended church or other place of worship as an adult (other than for wedding or funerals). They were also asked how often they typically attended religious services. Responses ranged on a 6-point scale from “never” to “nearly every day.” Respondents were categorized as having “high” church attendance (attended church a few times a month or more) or “low” church attendance (attended church a few times a year or less).

The Non-Organizational Private Participation Scale, a five-item measure, assessed frequency of engaging in the following: reading religious books or other religious materials; watching religious programs on TV; listening to religious programs on the radio (books, television, radio); praying; and asking someone to pray for you. Responses to the 6-point Likert scale were summed across items to produce a total score. The scale’s internal consistency reliability coefficient (Cronbach $\alpha = 0.71$) was moderate. A dichotomous measure (low and high) of non-organizational private participation was created with the median value of the scale as a cut-off point.

Subjective religiosity was measured using self-reported religiosity (i.e., How religious/spiritual would you say you are?) and the Importance of Religion Scale (IRS). Responses to self-reported degree of religiosity ranged from “not at all” to “very religious/spiritual” on a four-point scale. The IRS consists of five items: importance of religion in home while growing up; importance of parents sending or taking children to religious services; importance of religion in the life of the respondent; importance of spirituality in the life of the respondent, and; importance of prayer when dealing with stressful situations. Responses to the IRS ranged on a four-point scale from “not important at all” to “very important,” and were summed across all items to produce a total score. The scale’s internal consistency reliability coefficient (Cronbach $\alpha = 0.76$) was moderate. A dichotomous variable (“low” and “high”) was created to assess importance of religiosity variable using the median IRS score as a cutoff.

Mental disorders were assessed with the *DSM-IV* World Mental Health Composite International Diagnostic Interview (WMH-CIDI), a fully structured diagnostic interview (Kessler & Üstün, 2004; Pennell et al., 2004). Respondents meeting the criteria for having any 12-month DSM-IV anxiety, mood, or substance disorder were categorized as having “any 12-month DSM-IV disorder.”

Demographic characteristics included age in years and gender. Socioeconomic data included education (high school or less or more than 12 years of education), employment (employed or unemployed), health insurance (insured or uninsured). Income was measured as annual household income.

Analysis

Analyses were conducted upon the 3,570 African American respondents of the NSAL, using SAS statistical software 9.1.3, which utilizes the Taylor Series method for calculating estimates of sampling error and inferences based upon complex sample designs. Sampling error code variables were defined in analyses to account for stratification and clustering, and a population weight was applied.

Logistic regression modeling and log-likelihood based statistics were employed to test the relationships between dimensions of religiosity and utilization of professional mental health services. Odds ratios (OR) and corresponding 95% confidence intervals (CI) are presented.

Results

Approximately 8% of the sample used professional mental health services within a year period. Among respondents who met the criteria for any 12-month DSM-IV disorder, 24% utilized professional mental health services.

Table 1 shows the levels of religiosity among African Americans in the NSAL. The overwhelming majority (91%) of respondents reported having attended church as an adult. Approximately 60% of the sample had high levels of church attendance (i.e., attended church a few times a month or more). Levels of private religious participation were also high among African Americans. The mean Private Religious Participation score averaged across five items was 4.2 (range 1 to 6). The mean Importance of Religion score was 3.8 (range 1 to 4). The majority of respondents (84%) reported being “fairly religious” or “very religious.”

Table 2 displays the results of multivariate logistic regression analyses estimating the effects of religiosity on mental health service utilization within the year prior to the study interview. Importance of religion and subjective religiosity were each associated with decreased utilization of professional mental health services (OR = 0.7, 95% CI = 0.5, 1.0; OR = 0.6, 95% CI = 0.4, 0.9, respectively). Similarly, high church attendance was marginally associated with lower odds of using professional mental health services (OR] = 0.7, 95% CI = 0.5, 1.0). Private participation (non-organizational religiosity), however, was not associated with professional mental health services utilization (OR = 1.0, 95% CI = 0.6, 1.6).

Presence of any 12-month anxiety, mood, or substance disorder did not modify the associations between religiosity and utilization of professional mental health services. A marginally significant interaction ($p = .06$), however, was detected between frequency of church attendance (organizational religiosity) and presence of any 12-month DSM-IV disorder. Among respondents who did not meet the criteria for any 12-month DSM-IV disorder, frequency of church attendance was associated with lower odds of using professional mental health services (OR = 0.7, 95% CI = 0.4, 1.0). Among respondents who did meet the criteria for any disorder, the association between frequency of church attendance and utilization of professional mental health services was null (OR = 1.0, 95% CI = .6, 1.6).

Discussion

The findings from this research illuminate how multiple dimensions of religiosity impact mental health services utilization among African Americans (Chatters et al., 1992). We found an inverse association between church attendance and the use of professional mental health services. Subjective religiosity (i.e., importance of religion and degree of religiosity) was also significantly associated with decreased use of formal care. Specifically, African Americans who indicated that religion was highly important in their lives were less likely to use professional mental health services compared to those who indicated a lower level of religious importance. Similarly, African Americans who reported a high degree of religiosity were less likely to utilize professional sources of mental healthcare than were those who reported a low degree of religiosity. Non-organizational religiosity, which involves personal and non-institutionalized practices, did not predict professional service use.

One explanation for these findings is that religious African Americans may have fewer mental health problems, and thus less of a need for mental healthcare. Studies examining religiosity and mental health among African Americans suggest that religiosity is positively associated with improved health and wellbeing (Chatters, 2000; Levin & Chatters, 2008; van Olphen et al., 2003). African Americans engaged in high levels of organizational religiosity in particular may benefit from enhanced social support derived from their religious community, in addition to a supportive religious belief system (Chatters, Taylor, Lincoln, Nguyen, & Joe, 2011; Robert Joseph Taylor, Lincoln, & Chatters, 2005). However, when tested in a logistic regression model and through stratified analyses, 12-month DSM-IV disorder appeared to be only marginally, if at all, responsible for the inverse associations identified between measures of religiosity (organizational and subjective forms) and the use of professional mental health services.

Alternatively, African Americans with high subjective religiosity may be more likely to seek help for mental health problems from informal sources (A. T. Woodward, Chatters, Taylor, Neighbors, & Jackson, 2010). African American clergy have a long tradition of providing care for community members who encounter emotional distress and are trusted gatekeepers for referrals to specialty care. (Hankerson et al., 2013; Mattis et al., 2007; Neighbors, Musick, & Williams, 1998; Stansbury, 2011; Stansbury, Harley, King, Nelson, & Speight, 2012; Young et al., 2003). African American clergy in a large, urban city reported spending more than six hours of counseling work weekly and often addressed serious mental health conditions similar to those seen by secular mental health professionals (Young et al., 2003). Consistent with previous studies, Chatters et al. (2011) recently found that African Americans with a serious personal problem were more likely to seek help from ministers for than family doctors, psychiatrists, and other mental health professionals. Given the central role of clergy, investigators should test the feasibility and acceptability of training African American clergy in brief, evidence-based mental health interventions.

In lieu of or in concert with clergy, highly religious African Americans may prefer to address their mental health problems using strategies that do not involve accessing any type of professional mental health provider. These individuals might rely on both cognitive and behavioral forms of religious coping, such prayer or meditation (Woodward et al., 2009).

Future research should investigate whether highly religious African Americans attribute mental health problems to religious struggles, medical disorders, or other causes.

Results suggest that presence of a 12-month DSM-IV anxiety, mood, or substance disorder may modify the relationship between organizational religiosity and the use of formal mental health services. Among African Americans who did not meet the criteria for any 12-month DSM-IV disorder, church attendance appeared to be associated with decreased formal service use. However, among African Americans who did meet the criteria for any 12-month DSM-IV disorder, church attendance showed a null association with utilization of formal mental health services.

These findings are consistent with findings by Harris et al. (2006) who reported an interaction between illness severity and religious service attendance in their study of the use of outpatient mental healthcare among adults with mental illness. Unlike Harris et al. (2006), however, this analysis did not detect a significant positive association between church attendance and the utilization of professional mental health services among African Americans meeting the criteria for any 12-month DSM-IV disorder.

As mentioned previously, organizational religiosity offers several coping resources, including social support and facilitation of religious coping, to African Americans facing mental health problems (Chatters et al., 2011; Taylor et al., 2005). These resources may be outstripped by the severity of psychiatric symptoms that accompany diagnosable DSM-IV disorders. In some cases, religious resources may also fall short of serving those sub-threshold African Americans who may not suffer from a diagnosable anxiety, mood, or substance disorder, but may nonetheless benefit from professional mental health services. For these individuals, organizational religiosity may discourage use of potentially helpful utilization of formal care.

Some important limitations must be considered when interpreting our results. First, while the NSAL included established and reliable measures of religiosity, the lack of variability associated with these variables may have limited their predictive power. Also, the cross-sectional nature of the NSAL does not allow for causal inferences. Theories regarding religious socialization suggest that these processes begin early in life (Wielhouwer, 2004). Thus, it seems likely that these factors predate the use of professional mental health services within the year preceding the NSAL. Nevertheless, the use of formal mental health services can reasonably affect religiosity, and we cannot confirm the causal direction of the associations revealed in this study. The cross-sectional design and dichotomized treatment of service use also fails to capture the evolutionary character of healthcare utilization. Future research might further examine the relationship between religiosity and pathways to various types of mental healthcare, continuity of care, treatment adherence, and satisfaction.

Finally, while this research helps to explain within-group variations in the use of mental health services among African Americans, it does not increase our understanding of racial disparities in the utilization of mental healthcare. Factors that contribute to differences in the use of mental health services among African Americans may not be the same as those that affect differences in rates of utilization among White Americans (Schwartz & Carpenter,

1999; Schwartz & Meyer, 2010). Future analyses should evaluate whether religiosity may help to explain racial differences in service utilization.

Conclusions

Racial disparities in mental health service utilization are caused by a complex array of sociocultural factors. A greater understanding of how religiosity impacts service use can identify culturally relevant barriers and facilitators of care. Since high church attendance and religious importance are associated with decreased service use, seeking professional mental health care may clash with socio-cultural religious norms and values among African Americans.

Strategic efforts should be made to engage African American clergy and religious communities in the conceptualization and delivery of mental health services. Future research should also investigate how to identify ways in which professional mental health services might complement the concrete and intangible benefits associated with religiosity.

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REFERENCES

- Ayalon L, Alvidrez J. The experience of Black consumers in the mental health system--identifying barriers to and facilitators of mental health treatment using the consumers' perspective. *Issues Ment Health Nurs.* 2007; 28(12):1323–1340. [PubMed: 18058337]
- Bohnert AS, Perron BE, Jarman CN, Vaughn MG, Chatters LM, Taylor RJ. Use of clergy services among individuals seeking treatment for alcohol use problems. *Am J Addict.* 2010; 19(4):345–351. [PubMed: 20653642]
- Chatters LM. Religion and health: public health research and practice. *Annu Rev Public Health.* 2000; 21:335–367. [PubMed: 10884957]
- Chatters LM, Levin JS, Taylor RJ. Antecedents and dimensions of religious involvement among older black adults. *J Gerontol.* 1992; 47(6):S269–S278. [PubMed: 1430864]
- Chatters LM, Mattis JS, Woodward AT, Taylor RJ, Neighbors HW, Grayman NA. Use of Ministers for a Serious Personal Problem Among African Americans: Findings from the National Survey of American Life. *American Journal of Orthopsychiatry.* 2011; 81(1):118–127. [PubMed: 21219283]
- Chatters LM, Taylor RJ, Lincoln KD, Nguyen A, Joe S. Church-based social support and suicidality among African Americans and Black Caribbeans. *Arch Suicide Res.* 2011; 15(4):337–353. [PubMed: 22023642]
- Dein S, Cook CC, Koenig H. Religion, spirituality, and mental health: current controversies and future directions. *J Nerv Ment Dis.* 2012; 200(10):852–855. [PubMed: 23034574]
- Ellison CG, Flannely KJ. Religious involvement and risk of major depression in a prospective nationwide study of African American adults. *J Nerv Ment Dis.* 2009; 197(8):568–573. [PubMed: 19684492]
- Fox J, Merwin E, Blank M. De facto mental health services in the rural south. *J Health Care Poor Underserved.* 1995; 6(4):434–468. [PubMed: 7495936]

- Gonzalez HM, Vega WA, Williams DR, Tarraf W, West BT, Neighbors HW. Depression care in the United States: too little for too few. *Arch Gen Psychiatry*. 2010; 67(1):37–46. [PubMed: 20048221]
- Hankerson SH, Fenton MC, Geier TJ, Keyes KM, Weissman MM, Hasin DS. Racial differences in symptoms, comorbidity, and treatment for major depressive disorder among black and white adults. *J Natl Med Assoc*. 2011; 103(7):576–584. [PubMed: 21999032]
- Hankerson SH, Watson KT, Lukachko A, Fullilove MT, Weissman M. Ministers' perceptions of church-based programs to provide depression care for african americans. *J Urban Health*. 2013; 90(4):685–698. [PubMed: 23471573]
- Hankerson SH, Weissman MM. Church-based health programs for mental disorders among African Americans: a review. *Psychiatr Serv*. 2012; 63(3):243–249. [PubMed: 22388529]
- Harris KM, Edlund MJ, Larson SL. Religious involvement and the use of mental health care. *Health Serv Res*. 2006; 41(2):395–410. [PubMed: 16584455]
- Himle JA, Taylor RJ, Chatters LM. Religious involvement and obsessive compulsive disorder among African Americans and Black Caribbeans. *J Anxiety Disord*. 2012; 26(4):502–510. [PubMed: 22397898]
- Jackson JS, Torres M, Caldwell CH, Neighbors HW, Nesse RM, Taylor RJ, Williams DR. The National Survey of American Life: a study of racial, ethnic and cultural influences on mental disorders and mental health. *Int J Methods Psychiatr Res*. 2004; 13(4):196–207. [PubMed: 15719528]
- Kessler RC, Üstün TB. The World Mental Health (WMH) Survey Initiative version of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). *International Journal of Methods in Psychiatric Research*. 2004; 13(2):93–121. [PubMed: 15297906]
- Koenig HG, George LK, Meador KG, Blazer DG, Dyck PB. Religious affiliation and psychiatric disorder among Protestant baby boomers. *Hosp Community Psychiatry*. 1994; 45(6):586–596. [PubMed: 8088740]
- Levin J, Chatters LM. Religion, aging, and health: Historical perspectives, current trends, and future directions. *Journal of Religion, Spirituality & Aging*. 2008; 20(1–2)
- Lincoln, CE.; Mamiya, LH. *The Black Church in the African American Experience*. Durham and London: Duke University Press; 1990.
- Mattis JS, Mitchell N, Zapata A, Grayman NA, Taylor RJ, Chatters LM, Neighbors HW. Uses of ministerial support by African Americans: a focus group study. *Am J Orthopsychiatry*. 2007; 77(2):249–258. [PubMed: 17535123]
- Menke R, Flynn H. Relationships between stigma, depression, and treatment in white and African American primary care patients. *J Nerv Ment Dis*. 2009; 197(6):407–411. [PubMed: 19525740]
- Mojtabai R, Olfson M, Sampson NA, Jin R, Druss B, Wang PS, Kessler RC. Barriers to mental health treatment: results from the National Comorbidity Survey Replication. *Psychol Med*. 2011; 41(8):1751–1761. [PubMed: 21134315]
- Molock SD, Matlin S, Barksdale C, Puri R, Lyles J. Developing suicide prevention programs for African American youth in African American churches. *Suicide Life Threat Behav*. 2008; 38(3):323–333. [PubMed: 18611131]
- Neighbors HW, Caldwell C, Williams DR, Nesse R, Taylor RJ, Bullard KM, Jackson JS. Race, ethnicity, and the use of services for mental disorders: results from the National Survey of American Life. *Arch Gen Psychiatry*. 2007; 64(4):485–494. [PubMed: 17404125]
- Neighbors HW, Musick MA, Williams DR. The African American minister as a source of help for serious personal crises: bridge or barrier to mental health care? *Health Educ Behav*. 1998; 25(6):759–777. [PubMed: 9813746]
- Nicolaidis C, Timmons V, Thomas MJ, Waters AS, Wahab S, Mejia A, Mitchell SR. "You don't go tell White people nothing": African American women's perspectives on the influence of violence and race on depression and depression care. *Am J Public Health*. 2010; 100(8):1470–1476. [PubMed: 20558811]
- Pennell BE, Bowers A, Carr D, Chardoul S, Cheung GQ, Dinkelmann K, Torres M. The development and implementation of the National Comorbidity Survey Replication, the National Survey of

- American Life, and the National Latino and Asian American Survey. *Int J Methods Psychiatr Res.* 2004; 13(4):241–269. [PubMed: 15719531]
- Pickard JG. The relationship of religiosity to older adults' mental health service use. *Aging Ment Health.* 2006; 10(3):290–297. [PubMed: 16777657]
- Sareen J, Jagdeo A, Cox BJ, Clara I, ten Have M, Belik SL, Stein MB. Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatr Serv.* 2007; 58(3):357–364. [PubMed: 17325109]
- Schwartz S, Carpenter KM. The right answer for the wrong question: consequences of type III error for public health research. *Am J Public Health.* 1999; 89(8):1175–1180. [PubMed: 10432902]
- Schwartz S, Meyer IH. Mental health disparities research: the impact of within and between group analyses on tests of social stress hypotheses. *Soc Sci Med.* 2010; 70(8):1111–1118. [PubMed: 20100631]
- Stansbury KL. Men of the Cloth: African-American Clergy's Knowledge and Experience in Providing Pastoral Care to African-American Elders with Late-Life Depression. *Journal of Ethnic And Cultural Diversity in Social Work.* 2011; 20(4):297–311.
- Stansbury KL, Harley DA, King L, Nelson N, Speight G. African American clergy: what are their perceptions of pastoral care and pastoral counseling? *J Relig Health.* 2012; 51(3):961–969. [PubMed: 20978845]
- Taylor RJ, Chatters LM, Jackson JS. Religious and spiritual involvement among older african americans, Caribbean blacks, and non-Hispanic whites: findings from the national survey of american life. *J Gerontol B Psychol Sci Soc Sci.* 2007; 62(4):S238–S250. [PubMed: 17673537]
- Taylor RJ, Chatters LM, Joe S. Religious involvement and suicidal behavior among African Americans and Black Caribbeans. *J Nerv Ment Dis.* 2011; 199(7):478–486. [PubMed: 21716062]
- Taylor RJ, Chatters LM, Nguyen AW. Religious Participation and DSM IV Major Depressive Disorder Among Black Caribbeans in the United States. *J Immigr Minor Health.* 2012
- Taylor RJ, Ellison CG, Chatters LM, Levin JS, Lincoln KD. Mental health services in faith communities: the role of clergy in black churches. *Soc Work.* 2000; 45(1):73–87. [PubMed: 10634088]
- Taylor RJ, Lincoln KD, Chatters LM. Supportive Relationships with Church Members Among African Americans*. *Family Relations.* 2005; 54(4):501–511.
- van Olphen J, Schulz A, Israel B, Chatters L, Klem L, Parker E, Williams D. Religious involvement, social support, and health among African-American women on the east side of Detroit. *J Gen Intern Med.* 2003; 18(7):549–557. [PubMed: 12848838]
- Viladrich, A.; Abraído-Lanza, A. Religion and Mental Health Among Minorities and Immigrants in the U.S.. In: Loue, S.; Sajatovic, M., editors. *Determinants of Minority Mental Health and Wellness.* New York: Springer; 2009. p. 1-26.
- Wang PS, Berglund PA, Kessler RC. Patterns and correlates of contacting clergy for mental disorders in the United States. *Health Serv Res.* 2003; 38(2):647–673. [PubMed: 12785566]
- Wang PS, Lane M, Olfson M, Pincus HA, Wells KB, Kessler RC. Twelve-month use of mental health services in the United States: results from the National Comorbidity Survey Replication. *Arch Gen Psychiatry.* 2005; 62(6):629–640. [PubMed: 15939840]
- Warden D, Rush AJ, Wisniewski SR, Lesser IM, Thase ME, Balasubramani GK, Trivedi MH. Income and attrition in the treatment of depression: a STAR*D report. *Depress Anxiety.* 2009; 26(7):622–633. [PubMed: 19582825]
- Whiteford HA, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, Erskine HE, Vos T. Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet.* 2013; 382(9904):1575–1586. [PubMed: 23993280]
- Wielhouwer PW. The Impact of Church Activities and Socialization on African-American Religious Commitment. *Social Science Quarterly.* 2004; 85(3):767–792.
- Woodward AT, Bullard KM, Taylor RJ, Chatters LM, Baser RE, Perron BE, Jackson JS. Complementary and alternative medicine for mental disorders among African Americans, black Caribbeans, and whites. *Psychiatr Serv.* 2009; 60(10):1342–1349. [PubMed: 19797374]

- Woodward AT, Chatters LM, Taylor RJ, Neighbors HW, Jackson JS. Differences in Professional and Informal Help Seeking among Older African Americans, Black Caribbeans and Non-Hispanic Whites. *J Soc Social Work Res.* 2010; 1(3):124–139. [PubMed: 21666782]
- Woodward AT, Taylor RJ, Bullard KM, Neighbors HW, Chatters LM, Jackson JS. Use of professional and informal support by African Americans and Caribbean blacks with mental disorders. *Psychiatr Serv.* 2008; 59(11):1292–1298. [PubMed: 18971405]
- Young JL, Griffith EE, Williams DR. The integral role of pastoral counseling by African-American clergy in community mental health. *Psychiatr Serv.* 2003; 54(5):688–692. [PubMed: 12719499]

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Table 1

Levels of Religiosity among African Americans in the National Survey of American Life

Variable	Mean (S.E.)	N*	%
Attended Church as Adult			
1. No		267	9
2. Yes		3302	91
Frequency of Church Attendance	3.8 (.04)		
1. Never		267	9
2. Less than once a year		312	10
3. A few times a year		670	19
4. A few times a month		891	24
5. At least once a week		1226	33
6. Nearly every day		204	5
Private Religious Participation Index	4.2 (.02)	3563	
Importance of Religion Scale	3.7 (.01)	3530	
Degree of Religiosity	3.1 (.02)		
1. Not religious at all		113	4
2. Not too religious		393	12
3. Fairly religious		1852	52
4. Very religious		1198	32

* Reflects unweighted number of respondents.

Table 2

Logistic Regressions of 12-Month Use of Professional Mental Health Services on Religiosity Variables (Weighted)

Variable	Professional Mental Health Services ^f		
	Total Sample AOR (95% CI) [†]	With DSM- IV Mental Disorder OR (95% CI)	Without DSM- IV Mental Disorder OR (95% CI)
Frequency of Church Attendance			
1. Low	1.0	1.0	1.0
2. High	.7 (.5, 1.0) ⁺	1.0 (.6, 1.6)	.7 (.4, 1.0) ^{+ #}
Private Religious Participation			
1. Low	1.0	1.0	1.0
2. High	1.0 (.6, 1.6)	1.2 (.6, 2.4)	.8 (.5, 1.3)
Importance of Religion			
1. Low	1.0	1.0	1.0
2. High	.7 (.5, 1.0) [*]	.9 (.5, 1.4)	.7 (.4, 1.3)
Degree of Religiosity			
1. Low	1.0	1.0	1.0
2. High	.6 (.4, .9) [*]	.6 (.4, 1.2)	.5 (.2, 1.1)

^f Defined as services received from psychiatrists, general practitioners or family doctors, any other medical doctors, psychologists, social workers, counselors, any other mental health professionals, nurses, occupational therapists or other health professionals.

[†] Adjusted for age, education, employment, income, mental health insurance, and sex.

⁺ Significant at $p < .10$.

^{*} Significant at $p < .05$.

[#] Interaction significant at $p < .10$.