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The Influence of Religiosity and Stigma on Mental Health Outcomes for an African American and Latino Clinical Sample

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ABSTRACT

Few studies have explored the link between religion and mental health, especially among ethnic minority groups in the U.S. Although African Americans and Latinos have been found to rely heavily on their religious faith in order to cope with adversities in their lives, both ethnic groups have been traditionally underrepresented in this line of work. Therefore, little is known about the religion-mental health link as it applies to these minority groups, especially for those who have a psychiatric illness.

The aims of the present study were as follows: (1) to determine whether various forms of religion (self-rated religiosity, church attendance, and religious beliefs and practices) would be predictive of fewer psychiatric symptoms among African American and Latino individuals with mental illness, (2) to determine whether the religion-mental health link would remain significant even after controlling social support and other demographic variables, and (3) to determine whether the religion-mental health link would be moderated by the extent to which individuals internalize the stigma of mental illness.

One hundred and four African American and Latino individuals with a history of mental illness, substance abuse, and/or psychological treatment completed a self-report questionnaire on a mini laptop as part of a larger research project. Study results indicated that out of the three religious measures used in the present study, only self-rated religiosity negatively and

significantly predicted lower psychiatric symptomatology. In other words, the more African American and Latino individuals self-identified as religious, the fewer psychiatric symptoms reported. This association was significant even after social support and other variables (e.g., income, gender) were controlled for in the study. Stigma internalization was also shown to positively and significantly predict psychiatric symptoms, as well as moderate the religion-mental health association. These findings suggest that the degree to which one internalizes the stigma of mental illness reduces and even eliminates the salutary effects of religion on mental health. The implications of findings for research and practice are discussed.

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Introduction

Prior to the last two decades, religion has not been adequately addressed by most clinical researchers as an important coping mechanism. This neglect could be traced back to the lasting influence of some classical thinkers, such as Freud, who equated religion with pathology (Freud, 1959). Recently, however, this longstanding negative view of religion has begun to change, partly because of the numerous studies showing a significant association between religion and health, both physical and mental (Koenig, 2009; Pargament, 1997). This positive association has been examined across different populations (e.g., medical patients, college students), countries (e.g., U.S., U.K.), and types of stressors (e.g, physical illness, bereavement), with most of these studies suggesting that religion has a salutary affect on mental health (Koenig, McCullough, & Larson, 2001; Moreira-Almeida, Neto, & Koenig, 2006).

While this burgeoning research area has helped increase our knowledge and understanding of the complex relationship between religion and mental health, there are still some important gaps in this literature. For example, most of these studies have been conducted on European Americans dealing with various life stressors (Koenig, et al., 2001; Moreira-Almeida, et al., 2006). Thus, it is not well known whether the benefits associated with religiosity extend to other stressed populations, such as African American and Latino individuals, especially those living with mental illness. Similarly, to the best of our knowledge, no study has examined whether the internalization of mental illness stigma affects the association between religiosity and mental health. There is some evidence to suggest that the internalization of stigma may reduce the effectiveness of religious coping (Corrigan, 1998; Holmes & River, 1998), which may be particularly relevant for African Americans and Latinos who often report greater

religiosity than other ethnic groups (Levin, Taylor, & Chatters, 1994; Rojas, 1996) as well as greater mental illness stigma (Rao, Feinglass, & Corrigan, 2007).

One goal of the present study is to better understand the degree to which African American and Latino individuals with mental illness self-identify and engage in religious activities (e.g., attend church), and how their religiosity might impact their mental health. A second goal of the present study is to determine whether the internalization of stigma reduces the effectiveness of religion as a coping mechanism. Addressing these questions would have important clinical implications for the treatment of ethnic minority groups with mental illness.

A Review of the Research Exploring the Relationship Between Religion and Mental Health

Over the past two decades, both qualitative and quantitative studies have shown that people frequently use religion as a way of coping with stressful situations in their lives (Lindgren & Coursey, 1995; Koenig, McCullough, & Larson, 2001; Kroll & Sheehan, 1989). These stressful situations include experiences, such as the recent loss of a loved one, natural disasters, losing one's job, divorce, or being diagnosed with serious disease (e.g. AIDS) or illness (e.g., cancer). Religion, in general, is believed to offer great help to individuals. The importance of religion is illustrated in a study conducted at Duke University Hospital, where 372 patients were asked what they thought was the most important factor they used to cope with stress (Koenig, 1998). Although no mention of religion was made during the questioning, 42% of the patients spontaneously reported that their religion was most helpful to them. When these patients were asked directly how much they felt their religious beliefs helped them cope with stress, 90% indicated it helped at least to a moderate extent. Surprisingly, even when individuals' religious faith was weak, patients still contended that God had helped them through their difficulties (Koenig, 1998).

Kenneth Pargament, a leading scholar of religious coping, postulated that during stressful situations, religious beliefs are translated into specific styles of coping (Pargament, 1997). Accordingly, these specific styles of coping can be either positive (e.g., seeing God as a partner in the process of coping) or negative (e.g., relinquishing personal responsibility to God), and ultimately affect how people deal with and adjust to a particular stressor (e.g., active versus passive behaviors). Pargament also noted that people are more likely to use their faith as a method for coping when they come across severe, uncontrollable events. Support for this argument can be found in studies documenting an increase in religiosity or faith following a

sudden, tragic or stressful event (Koenig, et al., 2001). Religious coping, then, may serve as a means to achieve a sense of control over a more or less uncontrollable situation. The indirect sense of control, in turn, may help individuals cope better (e.g., reduced helplessness or self-blame).

In addition to control, organizational (e.g., church attendance) and non-organizational (e.g., religious behavior and beliefs) forms of religious coping are believed to offer a number of other important benefits to people under stress. Attending regular religious services, for instance, may help establish social networks, which might be a great source of emotional support when problems arise (Corrigan, Faber, Rashid, & Leary, 1999). Prayer or mediation may offer a sense of connection with God or other religious figures, helping to derive hope and solace from these relationships (Pollner, 1989). In the same vein, religious beliefs may promote views that help individuals feel a sense of purpose and meaning in their lives (Pargament, 1997). Thus, religious coping can encompass a number of different domains or dimensions (e.g., beliefs, attitudes, and behaviors). Consequently, the benefits associated with religion may explain why some people gravitate toward religion in times of crisis.

Although the findings in the literature have not been uniform, the weight of evidence suggests that religion is beneficial to mental health. A 2001 publication by Koenig et al., for example, identified 724 quantitative studies that examined the link between various religious measures and mental health outcomes. The authors found that 476 of these studies reported statistically significant positive associations. Specifically, this extensive review revealed that religious involvement was correlated with lower anxiety and depression, and less drug use. A more recent review of the literature by Koenig (2009) also showed that this salutary relationship is consistently similar across samples from different countries (U.K. Canada, USA), settings

(universities, medical and psychiatric hospitals), ethnic groups (European and African American), and age groups (adolescents, adults, elderly). A number of studies, however, have failed to find a significant relationship between these variable (e.g., Idler, 1994; Frenz & Carey, 1989), and a few have even suggested that religion may actually exacerbate certain mental health symptoms, depending on the type of stressor (e.g., marital problems versus child abuse; Strawbridge, Shema, Cohen, Roberts, & Kaplan, 1998).

To date, the vast majority of studies have been conducted primarily on non-clinical populations (e.g., medical patients, college students) dealing with different types of stressors in their lives, including medical illness, marital problems, and bereavement (Koenig et al., 2001; Moreira-Almeida et al., 2006). In most of these studies, mental health is conceptualized as psychological well-being or a reduction in specific symptomatology (e.g., depression). As a result, little is known about the impact that religion has on individuals coping with more severe and chronic stressors, such as those suffering from or living with mental illness. As demonstrated with other populations, religion may benefit individuals coping with mental illness by providing beliefs and strategies (e.g., hope, perceived control, find meaning, seeking support, forgiveness, etc.) that help them manage their psychological symptoms more effectively (Matthews et al., 1998, Park, 2007).

Of the existing research that has focused on individuals living with mental illness, findings suggest that religious coping is prevalent within this population. For example, a study conducted by Corrigan, McCorkle, Schell, and Kidder (2003) found that among 1,783 psychiatric patients recruited from different sites around the U.S., nearly 90% indicated being religious. Additional studies have demonstrated that a large percentage of these individuals dedicate a significant percentage of their time to religious activities (e.g., praying, reading the

Bible), and use religion to cope with their symptoms and daily difficulties (Lindgren & Coursey, 1995; Kroll & Sheehan, 1989). More recently, studies have moved away from simply documenting the prevalence of religious coping within this population, to examining the actual impact that religion has on the psychiatric symptoms of people with mental illness (Cruz et al., 2009; Tepper, Rogers, Coleman, & Malony, 2001).

Two different arguments can be made about the potential psychological and emotional impact that religion may have on mentally ill persons. One could argue that religion may aggravate symptoms, as sufferers may view their mental illness as a punishment from God, and thus, blame themselves more. Alternatively, one could argue that religion may help reduce symptoms of mental illness through the hope, indirect control, and sense of meaning that it provides. Even though support for both arguments can be found in the literature, the majority of studies seem to support the latter view (Koenig, 2009).

Religion appears to play a beneficial role in preventing, coping with, and facilitating recovery from mental illness (Matthews el al., 1998). With regards to coping, there is evidence that certain forms of religious coping utilized by individuals with mental illness are associated with a greater sense of empowerment (Yangarber-Hicks, 2004), hopefulness (Cruz el al., 2009), psychological well-being (Pieper, 2004), and perceptions of personal growth (Phillips & Stein, 2007). These findings support the position that religion helps people by reinterpreting the cause or meaning of negative events (e.g., appraising the situation as part of God's plan), which can in turn help lessen the negative emotional and psychological impact of a mental illness identity (Pargament, 1997; Park, 2005). Religion as a belief system, therefore, may provide individuals with mental illness with a way to understand the suffering and losses associated with their illness

(Kotarba, 1983). For these reasons, religion may be especially important to individuals with mental illness.

Several studies also suggest that religion may play a beneficial role in the course of a mental illness. Longitudinal studies, for example, have found that greater religiousness at baseline predicted lower depression severity scores at follow up (e.g., Bosworth, Park, McQuoid, Hays, & Staffens, 2003; Cruz el al., 2009). Similarly, in randomized clinical trials, patients receiving religiously-based interventions for their depression and anxiety disorders (e.g., generalized anxiety disorder) showed fewer symptoms associated with their disorders than those who received secular interventions or controls (Koenig et al., 2001). Based on these findings, religion appears to be a potentially effective coping method for individuals suffering from mental illness.

As with some of the studies conducted with the general population, religion in some cases can aggravate symptoms of mental illness (e.g., Phillips & Stein, 2007; Pieper, 2004; Yangarber-Hicks, 2004). A recent study conducted on a sample of young adolescents living with mental illness showed that religious coping was associated with greater self-reported distress and personal loss (Phillips & Stein, 2007). These authors, like others who reported similar findings, attributed these harmful effects to the use of negative forms of religious coping (e.g., reinterpreting mental illness as a punishment from God; Koenig, 2009). As a negative form of coping, individuals with a mental illness may be more likely to experience enhanced feelings of shame and guilt, as well as avoid making proactive changes in their lives (e.g., engage in treatment, medication compliance, abstinence). Therefore, knowing the degree to which a person is religious may not be sufficient to make predictions about his/her mental health. In the present research, we will investigate what particular forms of religiosity are more strongly

associated with better mental health outcomes. Answering this question is important because it is possible that different forms of religion (e.g., beliefs, behaviors, identity) are differentially related to mental health.

Research investigating the relation between different forms or aspects of religiosity and mental health has produced mixed findings. As a result, a lack of consensus exists regarding which aspect of religiosity is most predictive of mental health. For example, research has shown religious attendance, by far the most common measure of religiousness, to generate some of the strongest evidence for an association between religiousness and longer life (Strawbridge et al., 1997), faster recovery from depression (Koenig et al., 1998), and greater life satisfaction (Levin, Chatter, & Taylor, 1995). Other research has suggested that narrower focused measurements of religiosity, such as religious beliefs, exert greater influence on mental health than other forms of religion (e.g., church attendance; Hackney & Sanders, 2003). Less debate, however, exists with regard to measures of self-rated religiosity. This global, single item measure of religiosity has been weakly and inconsistently associated with mental health (Koenig et al., 2001). In order to better understand the relation between different forms of religion and mental health, in the present study, we examined which aspect of religiosity (church attendance, religious beliefs/practices, and self-reported religiosity) is most predictive of psychiatric symptomatology and whether the relationships are positive or negative. Based on the aforementioned research, we expected church attendance and religious beliefs/practices to be more strongly associated with less psychiatric symptoms than self-rated religiosity. By answering this important question, it may also be possible to untangle some of the positive and negative relationships between religion and mental health. Further, findings from this research may help shed some light on

how individuals with mental illness may be using their faith to cope with and manage their symptoms.

Religion-Mental Health Link Among Ethnic Minorities

One notable gap in this literature is the limited inclusion of racial and ethnic minority populations with mental illness. Most studies conducted on clinical populations have relied primarily or exclusively on European Americans, calling into question the extent to which the aforementioned findings could be generalized to other racial and ethnic minority groups with mental illness (Koenig et al., 2001). Although African Americans and Latinos are underrepresented in the clinical literature, they often constitute a significant percentage of the population seeking mental health services, especially public sector services. For example, in Connecticut, African Americans and Latinos comprise 23% of the state population but constitute 44% of the clients using services at the Department Mental Health and Addiction Services (DMHAS, 2006).

In the last few years, the representation of African Americans in psychological research has improved slightly, which has helped further our general understanding of the key role that religion plays in the lives of this ethnic group. Throughout history, religion has been identified as a traditional form of coping for many in the African American community. Compared to European Americans, African Americans have been found to participate in more religious activities (prayer

and church attendance) and profess a higher degree of religiosity (Levin, Taylor, & Chatters, 1994). According to some scholars, this higher degree of religiosity stems from the help that religion provides in understanding and counteracting the negative social and economic

conditions that afflict many African Americans (Nye,1992; Taylor, 1993). On an individual level, the numerous benefits (unity, moral guidance, control, and support) that African Americans report deriving from their faith may also explain their high religious devotion (Taylor, 1993).

Given how important religion is to many African Americans, it is not surprising to find studies documenting the salutary effects of religion on African American mental health (e.g., Frazier, Mintz, & Mobley, 2005; Jang & Johnson, 2004). Jang and Johnson (2004) found that within a large community sample of African American women, those who reported being religious not only had more social support, but also tended to be less distressed than women who were not religious. These results, however, showed that the effects of religion on distress were partially explained by social support. This finding is consistent with other studies that have found similar indirect religious effects (Baetz & Toews, 2009). In addition to social support, health status and self-esteem are also believed to mediate the relationship between religion and mental health (Ellison, Boardman, Willams, & Jackson, 2001; Hill, Angel, Ellison, & Angel, 2005; Krause, 1995). As a result, it is not clear whether the effect that religion has on mental health is direct or indirect. Similarly, it is unknown whether the salutary religious effects described above extend to African Americans who live with mental illness. In order to address these issues, the present research investigated the influence that these variables have on the religion-mental health link. We also examined the influence of religion on African Americans living with mental illness. Answers to these questions could help mental health professionals design and implement better, more effective culturally responsive psychological treatments.

While more work in this area has begun to focus on African Americans, Latinos remain significantly underrepresented. With the exception of a few empirical studies, little is known

about the religion-mental health link as it applies to Latinos, especially for those who have a psychiatric illness (e.g., Ellison, Finch, Ryan, & Salinas, 2009). Understanding this link within Latino populations is important for a number of reasons. As a group, Latinos have become the largest ethnic minority group in the United States. Currently, there are 47.8 million Latinos in the U.S., comprising 15.5% of the total U.S. population. By the year 2050, according to the newest census projections, the number of Latinos is expected to double (U.S. Census Bureau, 2010). Even though exact estimates are lacking, the number of Latinos who are religious is believed to be equal to or higher than the general U.S. adult population (Rojas, 1996). For example, a study using data from three generations of Mexican Americans found that the overwhelming majority (80%) of respondents self-identified as Catholic (Stolley & Koenig, 1997). There is also evidence that Latinos use their religion as a primary means of coping during hardships (Connell & Gibson, 1997; Ell & Haywood, 1985).

Many of the religious studies that have been conducted on Latino mental health are now rather dated (e.g., Levin & Markides, 1985, 1986; Levin, Markides, & Ray, 1996; Markides, Levin, & Ray, 1987). Similarly, these studies focused almost exclusively on Mexican Americans living in the Southwest region of the U.S. Therefore, the extent to which the findings from these studies apply to Latinos today, and can be generalized to other Latino ethnic groups (e.g., Dominicans, Peruvians, and Puerto Ricans) living in other regions of the U.S. (northeast, southeast) remains unknown. The few empirical studies that have been done show salutary effects of religion on Latino physical and mental health. Specifically, positive outcomes have been found between religious involvement and arthritis (Abraido, Vasquez, & Echeverria, 2004), cognitive decline (Hill, Burdette, Angel, & Angel, 2006), mortality risk (Hill et al., 2005), and

depressive symptoms (e.g., Ellison et al., 2009) among older Latinos. To the best of our knowledge, no previous study has examined the religion-mental health link in a group of Latinos living with mental illness. In the present study, we investigated this link in a sample of Latinos residing on the East Coast region of the U.S. who report a history of mental illness, substance abuse, or psychiatric treatment.

Stigma of Mental Illness and Religion-Mental Health Link

Besides the personal challenges (e.g., difficulty managing illness, changes in functioning, distress, etc.) that individuals with mental illness may face, they may also experience numerous social difficulties, such as being devalued and rejected by others due to the stigma of mental illness (Corin, 1998). This stigma may also have profound negative effects on the emotional (e.g., fear) and psychological (e.g., low self-esteem) well-being of these individuals, especially if they internalize the stigma of mental illness (Corrigan, 2007; Quinn & Earnshaw, 2011). Stigma, therefore, could be conceptualized as an additional stressor to individuals who are already struggling with the symptoms of their mental illness. As such, "stigma's impact on a person's life may be as harmful as the direct effects of the disease" (Corrigan & Penn, 1999, p. 765).

A second important way in which the present research hopes to contribute to this area of work is by investigating whether the internalization of a stigmatized identity affects the religion-mental health association. Although no previous studies have directly examined this question, there is some evidence to suggest that internalizing mental illness stigma may reduce, if not eliminate, the salutary effects of religion on mental health (Corrigan, 1998). Being able to answer this question is particularly relevant for African Americans and Latinos, who often report

greater mental illness stigma (Rao, Feinglass, & Corrigan, 2007) as well as greater religiosity than other ethnic groups (Levin, Taylor, & Chatters, 1994; Rojas, 1996).

Definition, Types and Consequences of Mental Health Stigma

Within the stigma literature, there are numerous definitions of stigma. Ervin Goffman (1963), an influential writer on the topic of stigma, defined stigma as an attribute that differentiates the individual from others, discredits the person, and reduces their status. More recently, stigma has been defined as a "devaluation of certain individuals on the basis of some characteristic they possess, related to membership in a group that is disfavored, devalued, or disgraced by the general society" (Hinshaw, 2007, p. 23). When applied to mental illness, stigma refers to the disfavoring, devaluing, or distancing by the general public toward people with mental illnesses.

Researchers within this area of work have identified several dimensions or conditions that contribute to the susceptibility of being stigmatized by a society (Jones et al, 1984; Feldman & Crandall, 2007). Some of these dimensions include: concealability (how detectable the illness is), origin (what caused the illness), peril (how threating the illness is), and rarity (how rare the illness is). In 2007, Feldman and Crandall examined which dimensions were most predictive of stigmatization (operationalized as social distance). Results showed that participants desired more social distance from individuals with mental illness when the disorder was perceived as rare (rarity), dangerous (peril), and the result of the individual's own fault (origin). Together, these three predictor variables accounted for 60% of the variance in stigma.

The stigma of mental illness can be divided into two parts: public stigma and self-stigma (Corrigan, 2004). Public stigma of mental illness refers to the manner in which a society stigmatizes people with mental illness. Self-stigma is the internalization of the stereotypes and

negative attitudes held about individuals with mental illness. Public stigma is comprised of three components: stereotypes, prejudice, and discrimination (Corrigan, Watson, et al., 2005). Corrigan et al. (2003) defined stereotypes as "collectively held beliefs about the members of social groups" (p.163), which aid in generating quick impressions and expectations about people belonging to a particular social group.

Common stereotypes about individuals with mental illness include beliefs that they are unkempt or disheveled (Schumacher, Corrigan, & Dejon, 2003), prone to violence (Crisp, Gelder, Rix, Meltzer, & Rowlands, 2000), and responsible for the onset of their illness (Corrigan, Watson, et al., 2005), and therefore blameworthy. These stereotypes are attributed not only to people with severe forms of mental illness (e.g., schizophrenia, psychosis), but also to "milder" forms (e.g., anxiety and depression; Miles, 1989). Further, researchers have shown that despite the increased public awareness surrounding mental health issues, being perceived or labeled as having a mental illness continues to foster stereotypes and prejudicial attitudes (e.g., Corrigan & Matthews, 2003). While these stereotypes are common among many different ethnic groups, they have been shown to be especially prevalent among African Americans and Latinos (Rao et al., 2007; Whaley, 1997).

Although people might be aware of the stereotypes about people with mental illness, they might not necessarily agree with them (Jussim el al., 1995). For example, a person might know that individuals with mental illness are viewed as dangerous but may not personally endorse the belief. Conversely, when a person agrees with the stereotypes, it may generate prejudiced beliefs and negative emotional reactions, including a lack of sympathy, anger, and fear when encountering someone with a mental illness (Corrigan & Kleinlein, 2005).

Prejudice towards people with mental illness can subsequently turn into discrimination,

which is the behavioral manifestation of prejudice (Crocker, Major, & Steele, 1998). There is evidence that people who are mentally ill often experience discrimination in employment (Farina, 1981) and housing (Page, 1995). Specifically, employers and landlords are less willing to offer jobs, hire, or rent to individuals who are mentally ill. Page (1995), for example, examined the effects of the mental illness label in obtaining community housing in a sample of 160 individuals advertising rooms or flats for rent. The author found that landlords were more likely to make the rental apartments unavailable if the perspective renter disclosed a history of mental illness. These individuals may also experience other forms of discrimination. In a 2000 study, Martin, Pescosolido, and Tuch found that more than half of the 1444 respondents in their study reported that they were unwilling to work next to, spend an evening socializing, or have a family member marry someone who is mentally ill. Thus, discrimination may reduce the economic and interpersonal resources of individuals with mental illness, which is likely to add to the stress that they are already experiencing as a result of their symptoms.

Stigma may also have other adverse consequences. It may prevent individuals with mental illness from seeking and obtaining proper mental health care. According to the National Institute of Mental Health (NIMH, 2011), 20% of adults suffer from a diagnosable psychiatric illness in any given year, yet only 40% within this population are likely to initiate treatment for their illness (Kessler et al., 2001). One major factor believed to deter people from seeking treatment is the stigma associated with mental illness (Komiya, Good, & Sherrod, 2000; Pincay & Guanarccia, 2007). For example, studies conducted on Latinos and African Americans have shown the stigma of mental illness to be one of the most common barriers to using mental health services (Mishra et al., 2009; Pincay & Guanarccia, 2007). Some of the underlying factors found to contribute to stigma in these studies include the stereotype that mental illness is contagious;

that those with mental illness are unpredictable and dangerous; and that mental illness is a sin or personal weakness. Thus, in order to avoid being stereotyped in this manner, these individuals may simply avoid going to treatment. Nevertheless, they may continue living in fear of being socially rejected, judged, ridiculed, or the subject of gossip (Alvidrez et al., 2008).

Self-Stigma and Mental Illness

The impact of stigma may be particularly salient for individuals who internalize a stigmatized identity such as mental illness (Quinn & Chaudoir, 2009). As noted above, individuals with mental illness may be the targets of negative stereotypes. In some cases, these individuals agree with these stereotypes and apply them to themselves, leading to a reduction in self-efficacy/esteem (Corrigan & Watson, 2002, Link et al., 2001). This process is referred to as self-stigma, and can be experienced by many individuals with serious mental illness, including those diagnosed with affective, schizophrenia, and other psychotic disorders (e.g., Brohan et al., 2010a). As an example, Link et al. (2001) examined the effects of stigma on the self-esteem of persons with mental illness. The authors assessed self-esteem and two aspects of stigma (perceptions of devaluation-discrimination and social withdrawal due to perceived rejection) at three different time points: baseline and at 6 and 24 month follow-ups. These two aspects of stigma were found to negatively predict self-esteem at follow-up, even after controlling for depression symptoms, self-esteem, and other demographic variables at baseline. Based on these findings, the authors concluded that the stigma of mental illness may lead individuals to believe they have little to be proud of and are less valuable because of their psychiatric disorder.

Although common, these negative effects (e.g., loss of self-esteem) are not automatic consequences of possessing a stigmatized condition or characteristic (Harvey, 2001). There is a

three-level process that ultimately leads to the internalization of a stigmatized identity (Corrigan et al., 2006). *Stereotype agreement* is the first phase thought to be necessary to generate self-stigma, and it involves agreeing with the perceived negative stereotype towards mental illness. *Stereotype agreement* leads to *self-concurrence* in which the individual believes the stereotypes about mental illness apply to him/her. In the final phase (*self-esteem decrement*), the individual's self-esteem is diminished as a result of agreeing with the negative belief. Apart from diminishing self-esteem, the internalization of these native stereotypes may lead to emotional (e.g., shame) and behavioral responses (e.g., social withdrawal and failing to pursue work or independent living opportunities; Rusch, Angermeyer, & Corrigan, 2005; Rusch et al., 2006).

Fear of stigmatization, rejection, and discrimination may motivate individuals with mental illness to conceal their mental illness to others. In interpersonal situations, such as job interviews or social interactions with coworkers, people with mental illness may choose to hide their stigmatized identity in order to avoid being devalued or rejected. While this strategy may help individuals avoid the harmful consequences of stigma (e.g., not being hired for a job), the act of concealing a stigmatized identity may pose many additional challenges for those who try to pass as "normal" or as non-stigmatized. For example, individuals with a concealable stigma must expend much energy to ensure that stigma related information is not leaked (Goffman, 1963). They must also constantly negotiate when and to whom to disclose their stigmatizing condition. If these individuals misjudge and disclose their concealed identity to the wrong person, they risk the possibility of being stereotyped, rejected, and discriminated against (Crocker, Major, & Steele, 1998). Finally, the possibility of being discovered may lead individuals to become preoccupied, suspicious, and vigilant in various social situations (Frable,

Blackstone, & Scherbaum, 1990; Santuzzi & Ruscher, 2002; Smart & Wegner, 1995).

The cognitive burden of keeping an identity secret can also foster negative affective states (Beals, pelau, & Gable, 2009; Kelly, 2002). Research focusing on secrecy has suggested that individuals who conceal information about their stigma may come to view this information as shameful (Kelly, 2002). This perception may, then, lead individuals to feel ashamed, guilty, and embarrassed in addition to fearful. Further, research focusing on individuals with mental illness has suggested that cognitive efforts aimed at concealing their stigmatized identity (e.g., avoidance of stigma related disclosure) may lead to feelings of helpfulness, hopelessness, and sadness (Link, Mirotznik, & Cullen, 1991). Among this same population, heightened concerns about being discovered and rejected have been associated with increased psychological distress (operationalized as an increase in anxiety and depression symptoms; Quinn & Chaudoir, 2009). Thus, by concealing their stigmatized identity, individuals with mental illness may avoid experiencing the stress of being devalued, but may continue facing other stressors associated with keeping an identity secret.

As with public stigma, self-stigma may serve as a barrier to recovery from mental illness. Self-stigma has been found to be associated with negative attitudes towards treatment (Bathje & Pryor, 2011), delays in treatment seeking (Starr, Campbell, & Herrick, 2002), and problems adhering to treatment strategies that have been shown to be effective (Sirey et al., 2001). Two factors may explain why individuals with mental illness may refrain from seeking treatment, or if they do seek treatment, become noncompliant with their existing treatment regiment: shame and fear of stigmatization.

A study by Interian and colleagues (2007), which examined medication adherence among 30 Latinos, highlights this fear of stigmatization among mental health care users. Although the

investigators did not ask specific questions about stigma, they found that the majority of participants (73%) indicated either experiencing or being concerned about stigmatization in the future, and that stigma was a major reason for not taking their medication as prescribed. Many participants also reported that admitting they had a mental disorder and taking medication ran contrary to their cultural expectations that they should be "tough" and able to deal with their own problems without any professional assistance (Interian et al., 2007). These actions, though, may only be a temporary solution to avoid being stigmatized. By delaying treatment or failing to adhere to ongoing treatment interventions, the symptomatology of these individuals may eventually worsen, resulting in decreased functioning and increased likelihood of further stigmatization.

One important question that has never been addressed in this literature is the impact that internalizing a stigmatized identity such as mental illness may have on the religion-mental health association. Some of the aforementioned research, however, suggests that internalizing the stigma of mental illness may reduce the effectiveness of religion as a coping mechanism. In particular, research has shown that when the stigma of mental illness is internalized, people often experience feelings of shame, guilt, and anger resulting in greater psychological distress (e.g., Corrigan, 1998). Similarly, negative religious beliefs, such as believing that one's mental illness is a punishment from God are also associated with greater psychological distress (Phillips & Stein, 2007). Thus, it is possible that specific religious beliefs or practices may exacerbate psychological symptomatology for individuals with mental illness. Alternatively, the internalization of mental illness as a stigmatized identity may attenuate the positive effects of religion. This argument is consistent with Strawbridge et al.'s (1997) argument that religion may be less helpful with stressors perceived as resulting from personal failures. In the present study,

we plan to answer this question by examining the degree to which people internalize their mental illness as a stigma and the effect of this relationship on the religion-mental health association.

Objectives and Hypotheses

The main purpose of the present study is to extend the research focusing on the religion-mental health association by examining the role that religion plays in the lives of African American and Latino individuals suffering from mental illness. Through this research, we hope to address these important questions:

Q1. To what extent do African Americans and Latinos with mental illness consider themselves to be religious and engage in religious activities (e.g., attend church)?

Q2. Are higher levels of religiosity associated with less psychiatric symptoms among African American and Latino individuals with mental illness? If so, what form of religiosity (church attendance, self-rated religiosity, religious beliefs/practices) best predicts psychiatric symptomatology for both ethnic groups?

Q3. Does internalizing mental illness as a stigma reduce the benefits of the religion-mental health association?

Q4. Does the religion-mental health association account for unique variance above and beyond the contribution of other related factors such as social support and gender?

The study proposed here will address the dearth of research examining the influence of religion on a clinical population composed of African Americans and Latinos. A clinical population is operationalized in the present study as adults reporting mental illness or substance abuse as an identity or someone currently receiving mental health services. Also, in the present

study, we measured the number and severity of psychiatric symptoms by combining widely used scales (*The State-Trait Anxiety Inventory and Center for Epidemiological Studies-Depression Scale)* measuring depressive and anxiety symptoms. Based on the literature summarized above, the following three hypotheses will be tested:

Hypothesis 1: All three religious variables (self-rated religiosity, church attendance, and religious beliefs/practices) will be significantly negatively correlated with mental health outcomes (composite of depression and anxiety), but compared to self-rated religiosity, both church attendance and religious beliefs/practices will be more negatively associated with psychiatric symptomatology for African American and Latino individuals with a history of mental illness. Thus, greater church attendance and religious beliefs/practices will be associated with fewer psychiatric symptoms.

Hypothesis 2: The negative relationship between religion and psychiatric symptomatology will remain significant, even after controlling for possible confounding variables (e.g., social support and income).

Hypothesis 3: The negative relationship between religion and psychiatric symptomatology will be moderated by the internalization of mental illness stigma.

Methods

Participants

The present study is part of a larger research project funded by the National Institutes of Health (NIH) examining the effects of different concealable stigmatized identities (e.g., mental illness, drug use, sexual assault, and child abuse) on various health (physical and mental) outcomes. The larger study, conducted between March 2009 and May 2011, consisted of 751 adults from various sites surrounding Hartford, Connecticut: Capitol Region Community Mental Health Center, Catholic Charities, and Manchester Community College. Of the 751 participants, 104 met criteria for being accepted into the current study. The inclusion criteria included: (1) being at least18 years of age, (2) self-identified as African American or Latino, (3) having a history of mental illness, substance abuse, and/or psychological treatment, and (4) completed all of the measures used in the present study. Because the present study focused on individuals with a history of mental illness, the majority of participants (83%) were drawn primarily from Capitol Region (n = 51) and Catholic Charities (n = 35). Both agencies offer an array of psychological and social services (e.g., vocational training, case management, substance abuse treatment, and mental health treatment) to Connecticut residents.

The final sample consisted of 53 Latino and 51 African American participants. Seventy five were male and 29 were female. The majority were middle-aged (M age in years = 36, SD = 11.5 years), with a range of 18-64 years. The religious affiliation of participants were as follows: 28.8% Protestant, 27.9% Catholic, 1.9% Muslim, 27.9% Other, and 13.5% were not affiliated with any religion. With regards to education, employment, and income, 71.2% of the participants had obtained a high school education or less, 85.6% reported being unemployed at the time of the study, and 55.8% reported a yearly household income of less than $5,000 per

year. Additionally, 49% and 51% of participants endorsed a substance abuse and mental illness identity, respectively. With regards to treatment, the majority of participants (79.8%) indicated receiving mental health services at some point for their stigmatized identity (i.e. mental illness or substance abuse). Table 1 provides additional demographic overview of the participants.

Measures

Center for Epidemiological Studies-Depression Scale: Depressive symptomatology was assessed using the Center for Epidemiological Studies- Depression Scale (CES-D; Radloff, 1977). The CES-D is a 20-item self-report measure that asks questions about depressive feelings and behaivors during the past week. Sample items include "during the past week, I felt depressed" and "during the past week, I did not feel like eating." Each item is scored on a four-point scale: (0) rarely or none of the time (less than 1 day); (1) some or a little of the time (1-2 days); (2) occasionally or a moderate amount of time (3-4 days); (3) most or all of the time (5-7 days). Scores range from 0 to 60, with higher scores indicating increased severity of depression. Radloff (1977) reported Cronbach's alpha coefficients ranging from .85 to .90 across studies. Cronbach alphas for the current study are presented in Table 2.

The State-Trait Anxiety Inventory. Anxiety symptomatology was assessed using the State-Trait Anxiety Inventory (STAI; Spielberger et al., 1983). The STAI is a 40 item self-report measure of state (STAI-S) and trait (STAI-T) anxiety. In the current study, we used only the trait anxiety version, which assessed how participants feel generally. Sample items include "I worry too much" and "I feel difficulties piling up." Particpants rated each item on a 4-point scale, ranging from 1 (almost never) to 4 (almost always). Total scores on the STAI-T can vary from 20 to 80, with higher scores indicating more trait anxiety. The subscale can be used to

identify high levels of neurotic anxiety (Spielberger et al, 1983). Cronbach's alpha coefficients for this scale ranges from .65 to .86.

Religiosity. Three religious variables will be used in the proposed research to investigate the relationships between religion and mental health: (1) church attendance, (2) self-rated religiosity, and (3) religious beliefs/practices. Church attendance was measured by a single item that asked the frequency with which participants attended religious services. The item was rated on scale ranging from 1 (less than once a year) to 8 (once a day). Self-rated religiosity was also measured using a single item that asked participants how religious they considered themselves to be (Fetzer Institute/National Institute on Aging Working Group, 1999). Participants were provided with four possible responses: 1 = *not at all religious*, 2 = *slightly religious,* 3 = *somewhat religious,* 4 = *very religious.* Finally, religious beliefs/practices were measured using the belief dimension of the System of Belief Inventory (SBI-15R-D; Holland, et al., 1998). This scale is made up of 10 items measuring religious practices, rituals, and beliefs related to a supreme being. Sample items include, "I feel certain that God in some form exists" and "I pray for help during bad times." Each item is rated on a 4 point Likert scale ranging from 0 (strongly disagree) to 3 (strongly agree). The total score ranges from 0 to 30, with higher scores indicating greater levels of religiosity. Holland et al. (1998) reported a Cronbach's alpha of 0.92 for these 10 items.

Interpersonal Support Evaluation List. Social support was measured with a modified 6-item version of the Interpersonal Support Evaluation List (ISEL; Cohen, Mermelstein, Kamarck & Hoberman, 1985). This modified version of the ISEL includes equal numbers of questions assessing three subscales: *Appraisal* (e.g., When I need suggestions on how to deal with a personal problem, I know someone I can turn to"), *Belonging* (e.g., "If I wanted to have lunch

with someone, I could easily find someone to join me"), and *Tangible Support* (e.g., "If I needed a place to stay for a week because of an emergency, I could easily find someone who would put me up"). Each item is answered on a 4-point Likert scale ranging from (1) *definitely false* to (4) *definitely true*. Scores range from 6 to 24, with higher values indicating more perceived support. Cohen el al. (1985) has reported the scale to have adequate internal consistency ($\alpha = .90$).

Stigma Internalization. Stigma internalization was assessed using a modified version of the negative self-image subscale from the HIV Stigma Scale (Berger, Ferrans, & Lashley, 2001). Negative self-image refers to feeling bad or not as good as others because of one's stigmatized identity (e.g., HIV positive). Items in the negative self-image subscale were modified to reflect the internalization of a specific concealable stigmatized identity. For the current study, only participants who identified mental illness or substance abuse as their stigmatized identity were included. This scale consists of 13 items answered on a four point scale ranging from 1 (strongly disagree) to 4 (strongly agree). Sample items include: "I feel guilty because of my concealed identity" and "I never feel ashamed because of my concealed identity." Scores can range from 13 to 57, with higher scores indicating greater stigma internalization. Berger, Ferrans, & Lashley (2001) reported a Cronbach's alpha of 0.91 for the original scale using an HIV-positive population.

Procedure

Authorization to collect data was obtained from the Institutional Review Board of the University of Connecticut. Three sites were contacted and agreed to participate. These sites included Capitol Region Community Mental Health Center, Catholic Charities, and Manchester Community College. Recruitment of participants was done on-site by trained research assistants.

Research assistants approached prospective volunteers while they waited for their appointments (Capitol Region and Catholic Charities) or their classes to begin (Manchester Community College). Prospective participants were briefly informed about the nature of the study, confidentiality, length of time to complete the study (30 to 50 minutes), and how much they would be compensated ($20) for their full participation. Participants were also told that they needed be at least 18 years of age to be in the study. Those who agreed to participate were taken to a quiet area where they were given a small and inconspicuous hand held computer (Netbook PC) programmed with the study questionnaire. These devices were used instead of traditional paper and pencil surveys in order to protect participants' privacy and to minimize any stigma or discomfort associated with participating in a research study. A number of the participants in the community settings were unfamiliar with the use of computers and how to complete a research questionnaire (e.g., using a Likert scale). Computer literacy was less likely among participants who were older, less educated, or not born in the U.S. The research assistants were trained to address these limitations and to provide appropriate instruction in a sensitive and culturally appropriate manner.

Latino participants who were not fluent or did not speak English proficiently were given the option of completing the questionnaire in Spanish. All of the study measures were translated into Spanish using a generally accepted protocol for language and cultural equivalency. Two bilingual graduate students provided the Spanish translations. One graduate student translated all of the measures into Spanish. The second graduate student, then back-translated the materials from Spanish to English. Translation discrepancies were resolved by consensus between the two graduate students. After completing the survey, participants were paid $5, $10 or $20 based on much they were able to complete, and given a debriefing form explaining the purpose of the

study. The debriefing form also listed numbers and mental health agencies where they could receive help if they felt they needed it.

Data Analytic Procedures

Prior to the analyses, all variables were examined for accuracy of data entry, missing values, and fit between their distributions and the assumptions of multivariate analyses. Preliminary analyses were conducted to determine adequacy of the data for present analyses. To find outliers in the data, a boxplot graph and range analyses were produced for each variable. Outliers were detected in two of the demographic variables (yearly household income and educations level). Both outliers were changed to the nearest number—the income outlier to 9 ("between 60,000 and 70, 000 dollars per year") and the education level outlier to 10 ("some graduate school"). Most variables met assumptions of linearity, normality, and homogeneity of variances (e.g., kurtosis and skewness).

After these preliminary analyses, demographic data (e.g., age, gender, religious denomination) were analyzed to allow comparison with other studies. Bivariate correlations were also conducted to determine the relationships among predictor and outcome variables. Finally, several multiple hierarchical regressions were conducted to determine the best predictors of psychiatric symptoms, how much of the variance in the outcome variables is explained by the three religious dimensions, and whether the degree of stigma internalization moderates the relationship between religion and mental health.

Results

Descriptive Statistics

Descriptive statistics for all continuous variables in the study are shown in Table 2. Cronbach's alpha coefficients were determined for the scales to measure levels of internal consistency in the current study. As can be seen, means, standard deviations, and the maximum and minimum values for each measure suggest that the present sample produced mid-range mean scores. Several exceptions were noted, however. Responses to the Religious Beliefs and Practices measure were higher than the midpoint, reflecting the expected high endorsement among African American and Latino populations.

Additionally, the following summary statistics were computed. When participants were asked the extent to which they considered themselves to be religious, 63.5% reported being moderately to very religious with 15.4% reporting not being religious at all (see Table 3). Interestingly, although the majority of participants reported strong religious beliefs and considered themselves to be either very or moderately religious, only 27.9% of them attended church more than two times a month, 21% attended church several times a year, and 34.6% never attended church within the last year (see Table 3).

Pearson correlations of all study variables are presented in Table 4 where several significant correlations were found among the main study variables.

Non-Religious Variables

Age: Age was found to be related to both language (Spanish vs. English) and stigma internalization. Older participants were more likely to internalize the stigma of mental illness ($r = .22$, $p<.05$) and were more likely to be Spanish speakers ($r = .25$, $p<.05$).

Education: Education was positively correlated with income such that those who reported having more education also reported having more income ($r = .23$, $p<.05$).

Social Support: Social support was related to age, in that as participants' age increased, their social support decreased ($r = -.23$, $p<.05$).

Psychiatric Symptomatology: Psychiatric symptoms were a composite of depression and anxiety scores. Participants who reported more psychiatric symptoms reported less social support ($r = -.24$, $p<.05$) and income ($r = -.23$, $p<.05$). Also, higher endorsement of psychiatric symptoms was related to a higher likelihood that participants would be Spanish speaking ($r =.32$, $p<.01$).

Stigma Internalization: Concerning stigma internalization, higher levels of stigma internalization was related to higher levels of psychiatric symptomatology ($r = .41$, $p<.001$).

Religious Variables

Religious Beliefs and Practices: Religious beliefs and practices were negatively associated with age ($r = -.20$, $p<.05$). Also, the more religious beliefs and practices participants endorsed, the fewer religious services they attended ($r =-.24$, $p<.05$).

Religious Attendance: Higher religious attendance was associated with a higher likelihood of being female ($r = .24$, $p<.05$), Latino ($r = .24$, $p<.05$), and English speaking ($r = -.31$, $p<.01$).

Self-Rated Religiosity: Self-rated religiosity was related to the two other religious variables: religious attendance and religious beliefs/practices. Participants who rated themselves as more religious reported attending church more often ($r = .33$, $p<.01$). Surprisingly, the extent to which participants self-rated as religious was negatively associated with the extent to which

they engaged in various religious beliefs and practices ($r = -.27$, $p<.01$). Finally, self-rated religiosity and psychiatric symptomatology were negatively correlated at trend levels of significance ($r = -.18$, $p = .05$). Specifically, the more participants self-identified as religious, the less psychiatric symptoms they reported.

Multiple Regression Analyses

A series of multiple regression analyses, with psychiatric symptoms as criterion variables, were performed to test hypotheses 1, 2, and 3. For all of these analyses, the predictor variables of income, sex, language, race/ethnicity, and social support were entered into the first block to control for them. Three of these variables were treated as dichotomous variables: sex (male = 0, female = 1), language (English = 1, Spanish = 2), and race/ethnicity (Black = 0, Latino = 1). All other variables were treated as continuous variables. In order to test hypothesis 1 (whether the three religious variables would be associated with less psychiatric symptoms and whether there would be a stronger effect for church attendance and religion beliefs/practices than self-rated religiosity) and hypothesis 2 (the relationship would remain significant, even after controlling for possible confounding variables), the religious variables (religious beliefs/practices, religious attendance, and self-rated religiosity) were then entered in the second block.

In the first block of the analyses, the demographic and socio-economic variables (income, sex, language, race/ethnicity, and social support) significantly predicted psychiatric symptoms, $R^2 = 0.23$, $F(5, 98) = 5.888$, $p = .001$(Table 5 provides the regression coefficients). As shown in Table 5, most of the variance in psychiatric symptoms appeared to be due to Language

(β = 0.29, p =.003) and social support (β = -0.27, p =.004). These five control variables accounted for 23% of the variance in psychiatric symptomatology scores.

In the second block, the three religious variables did not significantly predict psychiatric symptoms over and above the control variables, Δ R^2 = 0.02, Δ F(3, 95)= 0.92, p =.434. Post-hoc analyses revealed that when stigma internalization was added to in the third block, along with the three religious variables, these four variables (self-rated religiosity, religious attendance, religious beliefs/practices, and stigma internalization) significantly predicted psychiatric symptomatology over and above the control variables, Δ R^2 = 0.14, Δ F(4, 94)= 5.16, p =.001 (See Table 5 for regression coefficients). Contrary to hypotheses, among the three religious variables, self-rated religiosity was the only religious variable found to significantly and negatively predict psychiatric symptoms. The higher participants rated themselves as religious, the less psychiatric symptoms they reported (β -.19, p = .03). As shown in Table 6, a suppressor effect appears to have occurred, as there was no statistically significant correlation between self-rated religiosity and psychiatric symptoms prior to the addition of stigma internalization. However, after it was introduced into the model, self-rated religiosity significantly and negatively predicted psychiatric symptoms. These results, nonetheless, provide partial support for hypothesis 1 and 2. It was also found that the extent to which participants internalize the stigma of mental illness significantly and positively predict psychiatric symptomatology (β = .36, p = .001). The more participants experienced internalized mental illness stigma, the more psychiatric symptoms were reported. Together, these four variables accounted for 14% of the variance in psychiatric symptomatology scores.

Finally, in order to test hypothesis 3 (whether an inverse relationship between religion and psychiatric symptoms would be moderated by the internalization of stigma associated with

mental illness), the products of the centered stigma internalization variable and religious variables (religious beliefs/practices, church attendance, and self-rated religiosity) were placed in third block as the interaction terms (see Table 6 for coefficients). Evidence for the moderating effects of stigma internalization was not found with respect to psychiatric symptomatology scores, $\Delta R^2 = 0.03$, $\Delta F(3, 91) = 1.32$, $p = .27$.

The lack of moderation effects observed might be attributed to our relatively small sample size and the numerous regression terms used to test our hypotheses. To examine this possibility, in a series of post-hoc analyses, each 2-way interaction term was entered individually rather than all two-way interactions at once (see Tables 7-9). Among the three interactions terms, only one term (the stigma internalization by self-rated religiosity) was shown to be statistically significantly (see Table 7). More specifically, the relationship between self-rated religiosity and psychiatric symptomatology was found to be moderated by the degree to which participants internalize the stigma of mental illness, $\Delta R^2 = 0.02$, $\Delta F(1, 93) = 3.75$, $p = .05$. The remaining stigma and religion interactions were non-significant even when entered alone (see Table 8 and 9).

In order to explore this significant 2-way interaction, we used the SPSS macro PROCESS provided by Hayes (2012), which is a versatile computational tool for observed mediation and moderation models. This tool will allow us to examine moderation while controlling for income, sex, language, race/ethnicity, and social support. As shown in Figure 1, at high levels of stigma internalization, religiosity does not predict psychiatric symptomatology. However, at lower levels of stigma internalization, the relationship between religiosity and psychiatric symptomatology becomes significant. Stated differently, the association between self-rated religiosity and psychiatric symptomatology is significant when levels of stigma internalization

are within the 10^{th} ($t = 2.83$, $p = .01$), 25^{th} ($t = 2.84$, $p = .01$), and 50^{th} ($t = 2.15$, $p = .03$) percentile, but stops being significant when the levels of stigma internalization reach the 75^{th} ($t = 0.82$, $p = .41$) percentile. Thus, as we predicted in hypothesis 3, the positive effects of religiosity on mental health vary depending on the degree to which participants internalize the stigma of mental illness. We did not find any other significant 2-way interactions.

Discussion

Despite the burgeoning interest in the religion-mental health link, few studies have explored this issue among individuals with mental illness. Also, even though African Americans and Latinos are more likely to use religion as a coping strategy, both ethnic groups have been traditionally underrepresented in this line of work. Additionally, no previous study, to the best of our knowledge, has examined if the internalization of the stigma of mental illness has an impact of the salutary relationship between religion and mental health. In order to address these gaps in the literature, the present study examined the degree to which African American and Latino individuals with mental illness self-identify and engage in religious activities, and how their religion might influence their mental health. Another aim of the present study was to determine whether the internalization of stigma attenuates the salutary effect that religion has on mental health.

Study results indicated that individuals' level of religiosity significantly predicted their psychiatric symptomatology. Surprisingly, out of the three different forms of religiosity that we examined, self-reported religiosity was the only religious variable that was found to significantly and negatively predict mental health. In other words, the more African American and Latino individuals self-identified as religious, the fewer psychiatric symptoms reported. This association was significant even after social support and other variables (e.g., income, gender) were controlled for in the study. Similarly, stigma internalization was not only found to positively and significantly predict psychiatric symptoms, it was also shown to moderate the religion- mental health association.

Different Forms of Religiosity in the Religion—Mental Health Link

Hypothesis 1 predicted that church attendance and religious beliefs and practices would be more negatively associated with psychiatric symptoms than self-rated religiosity for African American and Latino individuals. This hypothesis was not supported by the data. Church attendance and religious beliefs/practices were unrelated to psychiatric symptomatology. Self-rated religiosity, on the other hand, was found to be negatively correlated with psychiatric symptoms at trend levels of significance. The lack of support for Hypothesis 1 is consistent with some of the past research that has failed to find an association between measures of religion and mental health (Idler, 1994; Koenig et al., 2001). Regression analyses, however, showed that self-rated religiosity, which we predicted would be the least associated with positive mental health outcomes, was the only religious variable to significantly predicted mental health. Specifically, we found that the more individuals with mental illness viewed themselves as religious, the less psychiatric symptoms they were likely to report. These results are in line with other studies that have found religion to be beneficial to both individuals suffering from mental illness and ethnic minority groups (e.g., Ellison et al., 2009; Yangarber-Hicks, 2004).

These significant findings are also analogues to those studies that have found significant links between mental health and global religious measures (e.g., frequency of prayer and self-rated religiosity (Koenig et al., 2001). As in Koenig et al.'s (2001) literature review, results from the present study strongly suggest that even simplistic religious measures can significantly predict mental health outcomes in African American and Latino individuals suffering from mental illness. These findings directly contradict some researchers' contention regarding the extent to which global religious indices influence mental health. According to Pergament (1997), for example, more specific or functional measures of religion (e.g., measure of religious

coping) exert a greater influence on health than general or global religious measures. The present findings, however, suggest that self-rated religiosity, has a more notable influence on mental health than more narrowly focused religious measures of religious beliefs and practices.

There are several possible reasons why church attendance and religious beliefs/practices were unrelated to psychiatric symptomatology. One reason may be the relatively few number of individuals in our sample who reported attending church on a regular basis. Since the majority (two thirds) of individuals in our sample reported attending church only several times a year or less, this most likely reduced some of the variability within the church attendance variable needed in order to find a significant correlation between this variable and our two measures of mental health. What is surprising about this finding, or lack thereof, is the relatively few ethnic minority individuals with mental illness who are regular churchgoers. Most of the religious literature on ethnic minority populations suggests these two groups are not only more religious than their European counterparts, but also attend church on a more regular basis (Levin, Taylor, & Chatters, 1994). We, therefore, expected the number of African Americans and Latinos who reported attending church on a weekly basis to be much higher. There are several factors that could have contributed to the low frequency of church attendance observed in our sample including fear of being stigmatized for one's mental illness by other churchgoers, religious fallout occurring from a lack of symptom improvement, and severe depressive symptoms. Severity of psychiatric symptoms may make it more difficult for individuals to engage in religious practices.

Another reason why religious beliefs/practices may have been unrelated to mental health in the present study could be the measure used to assess religiousity (SBI-15). While SBI-15 has good face validity and reliability (Holland et al. 1998), it has never been validated on African

Americans or Latinos. Thus, it is difficult to determine how generalizable an instrument it is at measuring the religious beliefs and practices of different ethnic groups. Another speculative possibility is that some of the items within the SBI-15 measured multiple religious constructs (e.g., extrinsic religious motivation, religious coping, and religious salience), some of which might have been positively or not at all correlated with psychiatric symptoms. This is a strong possibility since this measure was intended to be a hybrid of theoretical and empirical approaches to religious measurement. Finally, it is possible that measures of religious coping (positive and negative coping), which we did not assess, may have been more strongly correlated with mental health outcomes for this sample than a hybrid type of religious measurement. Future studies should include measures of both positive and negative religious coping to understand how they may influence positive and negative mental health outcomes among ethnic minority individuals with mental illness.

A third reason, and perhaps the most compelling reason for why some forms of religiosity were not related to mental health may be the religiosity construct itself. Hackney and Sanders (2003) posited that religion is a multifaceted construct, and as such, it is possible that different forms of religiosity (e.g., self-rated religiosity and church attendance) are differentially associated with mental health. Other researchers have also made similar arguments (e.g., Gartner, Larson, & Allen (1999). For example, Gartner, Larson, and Allen (1999) reviewed approximately 200 studies and found ambiguous results between religion and several mental health outcomes, including anxiety, psychosis, and self-esteem. Based on these results, they concluded that ambiguous findings within the religious literature may be the result of religion's multifaceted nature.

Hackney and Sanders (2003) further contended that if each form of religiosity represents its own unique, independent construct, then it would be expected that some forms of religiosity would be correlated (positively or negatively) with some mental health variables while others would fail to demonstrate such a correlation. This is precisely what they were able to show in their research. In their 2003 meta-analysis, where they reviewed 34 studies, the authors investigated whether the differences in researchers' conceptualization of religion and mental health could account for the discrepant findings in this area of work. To do so, they coded all of the possible religious forms into three separate, but theoretically similar, variables: institutional religion (e.g., social and behavioral aspects of religion), idealized religion (e.g., belief involved in religious activity), and personal devotion (personal, internalized religious devotion). Similar to what other researchers had found (Koenig & Larson, 2001), the authors were able to show that the nature of the correlations between religion and mental health depended on how religiosity was defined. More specifically, they found that institutional religiosity produced the weakest (and the only negative) correlations, whereas personal devotion produced the strongest correlations with positive psychological functioning. These results, therefore, provide evidence that differences in the conceptualization of religiosity could partially explain the multiplicity of confusing, contradictory findings found within this literature and in the present research.

Interestingly, Hackney and Sanders' (2003) research also showed that the religion-mental health link becomes stronger as religion is operationalized in an internal manner; that is, behavior performed for the sake of personally-relevant values was more strongly linked to positive outcomes. This type of behavior is conceptually similar to intrinsic forms of religiousness. According to reviewers of the overall literature on religion and depression (e.g., Koenig et. al., 2001; McCullough & Larson, 1999), intrinsic religiosity may be the aspect of

religiosity most protective for depressive disorders. It is possible that self-rated religiosity, as the only variable that we found to be associated with mental health, best taps those intrinsic attitudes that reduce the risk of depression and anxiety, while the other religious variables that we examined may not. In this way, self-reported religiosity may be measuring a uniquely important aspect of religion that is strongly associated with mental health for ethnic minorities with mental illness. This possibility warrants further investigation.

Social Support in the Religion—Mental Health Link

Hypothesis 2 proposed that the negative relationship between religion and mental health symptoms would remain significant, even after controlling for the effects of social support and other variables (e.g., income, ethnicity, gender). With regards to social support, previous research has shown that people who are more religious have more supportive social relations than those who are less religious (e.g., Ellison & George, 1994). This differential access to social support is believed to account for the observed effects of religion on mental health (e.g., Williams et al., 1991). The results that we obtained, however, suggest otherwise. Although social support accounted for a large percentage of the variance in psychiatric symptom scores, neither social support nor the other variables (e.g., gender) altered the salutary effects of religion (measured as self-rated religiosity) on mental health. This finding, thus, partially supports hypothesis 2, and suggests that some of the effects that religion has on mental health may be direct, as shown in other studies (e.g., Ellison et al., 2001).

There are several possible reasons why religion may have a direct effect on mental health. For example, through religion, as we pointed out earlier, individuals may gain a sense of empowerment and control at a time when they may feel little control over aspects of their lives,

or in the case of people living with mental illness, over their symptoms. Not surprisingly, this heightened sense of empowerment and control is believed to be an integral part of recovery from mental illness (Yangarber-Hicks, 2004). Further, as demonstrated with non-clinical populations, religion may benefit individuals coping with mental illness by providing beliefs and strategies (e.g., hope, optimism, meaning in life, and release of negative emotions; Paloutzian & Park, 2005) that may help them manage their symptoms more effectively and speed up their recovery. These religious benefits may explain why combining religion (e.g., religious arguments and rationales) with standard psychological treatments (e.g., cognitive-behavioral therapy) leads to superior mental health outcomes compared to the use of standard psychological treatments alone (Propst et al., 1992). Therefore, mental health professionals should consider ways in which they might use religion as a therapeutic tool in order to increase treatment efficacy.

Stigma Internalization in the Religion—Mental Health Link

Hypothesis 3 predicated the negative relationship between religion and mental health symptoms would be moderated by the internalization of the mental illness stigma. In other words, we expected that the internalization of mental illness as a stigmatized identity would attenuate the positive effects of religion on mental health. As we predicted, the negative relationship between religion and mental health was moderated by the internalization of the mental illness stigma. Specifically, at low levels of stigma internalization, self-rated religiosity was shown to have a positive effect on mental health (measured as less psychiatric symptoms). At high levels of stigma internalization, however, these positive salutary effects of religion disappeared. This suggests that depending on the degree to which participants internalize the

stigma of mental illness, sigma internalization can reduce and even eliminate the salutary effects that religion has on mental health.

The extent to which individuals internalized the stigma of mental illness was also found to positively predict psychiatric symptoms. This increased symptomatology reported by individuals with high stigma internalization could be attributed to some of the negative feelings (shame, guilt, and fear of being stereotyped and discriminated against) and behaviors (e.g., delaying or refusing to seek mental health services for their mental illness) that result from having internalized this stigma (Corrigan, 1998; Starr, Campbell, & Herrick, 2002). Based on these findings, the reason why religion losses it salutary effects when stigma internalization is high may be because as stigma internalization increases, so does psychiatric symptomatology. Thus, while religion may have a salutary effect on mental health when psychiatric symptoms are at mild to moderate levels of severity, it may be ineffective when individuals have more severe psychiatric symptoms. These results highlight the importance of properly assessing and designing personalized therapeutic interventions aimed at reducing stigma internalization in order to ensure better treatment outcomes.

In situations when stigma internalization is high, religion may be rendered ineffective due to individuals' own negative perceptions. Strawbridge et al.'s (1997) argued that religion may be less helpful when stressors are perceived as resulting from personal failures. Based on this argument, it is possible that individuals, who internalize the stigma of mental illness to a greater degree, may be more likely to view their mental illness as something that they are personally responsible for or deserve. If so, this may explain why the positive effects of religion disappear when stigma internalization is high. This possibility should be explored further in future research.

Limitations

The findings of the present study must be interpreted with caution because of the limitations of our study. One such limitation is the cross-sectional, correlational nature of the study, which limits the extent to which we can make casual inferences. Based on the design, it is difficult to determine the directionality of the effects. In other words, it is difficult to ascertain whether it is religiosity that has an affect on mental health or whether it is mental health that has an affect on religiosity, or whether some third factor influences both. Longitudinal designs, thus, are needed and would better capture the influence of religiosity on mental health.

A second potential limitation is the researchers' complete reliance on self-report. It is plausible that the low educational attainment of participants in our study, in addition to social desirability may have affected the overall accuracy of participants' responses. Hence, future research in this area should include measures of social desirability, as well as an assessment of basic reading comprehension. A more socioeconomically diverse sample may also produce different results. Although less convenient, face-to-face interviews may also lead to more accurate data gathering.

Further, because participants from our sample were all from one geographical region in the US (Northeast), this may limit the generalizability of the present findings. The religious practices (e.g., attending church), self-reported religiosity, and religious beliefs of participants in our study may all be quite different from those who live in other parts of the country. As such, the religion-mental link may vary according to geographical area. Future research should focus on increasing the generalizability by including participants with mental illness from different geographical regions.

Finally, culturally focused religious practices were not assessed in the present study. Among the Black and Latinos in our sample, there was a strong Caribbean influence which can include Christian and African religious practices such as Santeria, Obeah, and faith healers. It is possible that these culturally focused religious practices might have impacted how African American and Latinos in our sample coped with their mental illness. Thus, future research focusing on Black and Latino individuals should investigate whether these types of religious practices influence mental health.

Despite the limitations of the present study, this study contributes to the literature on religion and mental health by documenting relationships between multiple forms of religiosity and psychiatric symptoms among African Americans and Latinos with mental illness. These data offer needed information on a neglected topic among two of the largest ethnic groups, residing in the Northeast of the United States. Our results also point to the need for greater understanding of the role of religion in the lives of individuals living with mental illness.

APPENDIX 1: MEASURES

APPENDIX A: STIGMA INTERNALIZATION

There are no right or wrong answers to any of these statements; we are interested in your honest reactions and opinions. Please read each statement carefully, and respond by circling a number on the scale.

From: Berger, Ferrans, & Lashley

1. Having my concealed identity makes me feel like a bad person.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

2. I feel I'm not as good as others because of my concealed identity.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

3. I feel guilty because of my concealed identity.

1	2	3	4	5	6	7
Strongly Disagree			Neither Agree nor Disagree			Strongly Agree

APPENDIX B: CESD (Depression)

Below is a list of the ways you might have felt or behaved. Please indicate how often you have felt this way ***during the past week****. Use the scale below and write the corresponding number for how often you felt each item next to the item.*

1 = Rarely or None of the Time (Less than 1 Day)
2 = Some or a Little of the Time (1-2 Days)
3 = Occasionally or a Moderate Amount of Time (3-4 Days)
4 = Most or All of the Time (5-7 Days)

During the past week:

1._____ I was bothered by things that usually don't bother me.
2._____ I did not feel like eating; my appetite was poor.
3._____ I felt that I could not shake off the blues even with help from my family or friends.
4._____ I felt that I was just as good as other people.
5._____ I had trouble keeping my mind on what I was doing.
6._____ I felt depressed.
7._____ I felt that everything I did was an effort.
8._____ I felt hopeful about the future.
9._____ I thought my life had been a failure.
10._____ I felt fearful.
11._____ My sleep was restless.
12._____ I was happy.
13._____ I talked less than usual.
14._____ I felt lonely.
15._____ People were unfriendly.
16._____ I enjoyed life.
17._____ I had crying spells.
18._____ I felt sad.
19._____ I felt that people dislike me.
20._____ I could not get "going."

APPENDIX C: STAI-T (Anxiety)

*Please complete the following mood rating scale according to how you **generally feel**. For each of the items below, please indicate the frequency of your feelings by circling the number that best reflects the way you generally feel.*

1. I feel pleasant.

1	2	3	4
almost never	occasionally	often	all the time

2. I feel nervous and restless.

1	2	3	4
almost never	some of the time	often	all the time

3. I feel satisfied.

1	2	3	4
almost never	some of the time	often	all the time

4. I wish I felt as happy as others.

1	2	3	4
almost never	some of the time	often	all the time

5. I feel like a failure.

1	2	3	4
almost never	some of the time	often	all the time

6. I feel rested.

1	2	3	4
almost never	some of the time	often	all the time

7. I feel calm, cool, and collected.

1	2	3	4
almost never	some of the time	often	all the time

8. I feel that difficulties piling up.

1	2	3	4
almost never	some of the time	often	all the time

9. I worry too much.

1	2	3	4
almost never	some of the time	often	all the time

10. I am happy.

1	2	3	4
almost never	some of the time	often	all the time

11. I have disturbing thoughts.

1	2	3	4
almost never	some of the time	often	all the time

12. I lack self-confidence.

1	2	3	4
almost never	some of the time	often	all the time

13. I feel secure.

1	2	3	4
almost never	some of the time	often	all the time

14. I make decisions easily.

1	2	3	4
almost never	some of the time	often	all the time

15. I feel inadequate.

1	2	3	4
almost never	some of the time	often	all the time

16. I am content.

1	2	3	4
almost never	some of the time	often	all the time

17. Some unimportant thought runs through my mind and bothers me.

1	2	3	4
almost never	some of the time	often	all the time

18. I take disappointments keenly.

1	2	3	4
almost never	some of the time	often	all the time

19. I am a steady person.

1	2	3	4
almost never	some of the time	often	all the time

20. I feel tension or turmoil in my life.

1	2	3	4
almost never	some of the time	often	all the time

APPENDIX D: ISEL (Social Support)

Instructions: This scale is made up of a list of statements each of which may or may not be true about you. For each statement circle "definitely true" if you are sure it is true about you and "probably true" if you think it is true but are not absolutely certain. Similarly, you should circle "definitely false" if you are sure the statement is false and "probably false" if you think it is false but are not absolutely certain.

1). I feel that there is no one I can share my most private worries and fears with.

1. definitely false 2. probably false 3. probably true 4. definitely true

2). If I wanted to have lunch with someone, I could easily find someone to join me.

1. definitely false 2. probably false 3. probably true 4. definitely true

3). If I were sick and needed someone (friend, family member, or acquaintance) to take me to the doctor, I would have trouble finding someone.

1. definitely false 2. probably false 3. probably true 4. definitely true

4). When I need suggestions on how to deal with a personal problem, I know someone I can turn to.

1. definitely false 2. probably false 3. probably true 4. definitely true

5). I feel like I'm not always included by my circle of friends.

1. definitely false 2. probably false 3. probably true 4. definitely true

6). If I needed a place to stay for a week because of an emergency, I could easily find someone who would put me up.

1. definitely false 2. probably false 3. probably true 4. definitely true

APPENDIX E: SBI (Religious Beliefs/Practices)

Please respond to each of the following items using the scale given:

1 = Strongly Agree
2 = Agree
3 = Disagree
4 = Strongly Agree

1. Religion is important to my day-to-day life.
2. Prayer or meditation has helped me cope during times of serious illness.
3. I believe God protects me from harm.
4. I feel certain that God in some form exists.
5. I pray for help during bad times.
6. I believe God will not give me a burden I cannot carry.
7. One's life and death follows a plan from God.
8. During times of illness, my religious or spiritual beliefs have been strengthened.
9. I have experienced peace of mind through my prayers and meditation.
10. I have experienced a sense of hope as a result of my religious or spiritual beliefs.

APPENDIX F: Demographics

SEX: Female _____ Male _____

AGE: _____

Highest Level of Education Completed:

___ Elementary School
___ Midde School
___ Some High School
___ Completed High School Degree
___ Some Vocational or Technical School
___ Completed Vocational or Technical Program
___ Some college
___ Completed Associate Degree
___ Completed Bachelors Degree
___ Some graduate school
___ Completed Masters Degree or other 2-Year Professional Degree
___ Completed Doctoral Degree

RACE/ETHNICITY: (check the one that best describes you)

_____Asian/Pacific Islander
_____Black/African-American
_____Hispanic/Latino
_____Native American
_____White/of European origin
_____ Middle Eastern
_____Other (please specify) _____

Please indicate your employment status:

_____ 1. Not Employed
_____ 2. Employed

Yearly Income:
____ Less than $5,000 per year
____ Between $5,000 and $10,000 per year
____ Between $10,000 and $15,000 per year
____ Between $15,000 and $20,000 per year
____ Between $20,000 and $30,000 per year
____ Between $30,000 and $40,000 per year
____ Between $40,000 and $50,000 per year
____ Between $50,000 and $60,000 per year
____ Between $60,000 and $70,000 per year
____ Between $70,000 and $80,000 per year
____ Between $80,000 and $90,000 per year
____ Between $90,000 and $100,000 per year
____ More than $100,000 per year

How Often Do You Attend Church?

_____ 1. Never
_____ 2. Less Than Once a Year
_____ 3. About Once or Twice a Year
_____ 4. Several Times a Year
_____ 5. About Once a Month
_____ 6. 2 or 3 Times a Month
_____ 7. Nearly Every Week
_____ 8. Every Week
_____ 9. Several Times a Week

How Religious Do You Consider Yourself To Be?

_____ 1. Very Religious
_____ 2. Moderately Religious
_____ 3. A Bit Religious
_____ 4. Not Religious At All

Please Indicate Your Religious Affiliation:
_____ 1. Not Affiliated With Any Religion
_____ 2. Protestant
_____ 3. Catholic
_____ 4. Jewish
_____ 5. Muslim
_____ 6. Other

APPENDIX 2: TABLES

APPENDIX G

Table 1: Sociodemographic Characteristics

Variable	Number	Percentage of Sample
Education		
Elementary School	9	8.7%
Middle School	6	5.8%
Some High School	30	28.8%
Completed High School Degree	29	27.9%
Some Vocational or Tech. School	6	5.8%
Completed Vocational or Tech. School	2	1.9%
Some College	14	13.5%
Completed Associate Degree	6	5.8%
Completed B.A.	1	1.0%
Some Graduate School	1	1.0%
Income		
Less than $5,000 per Year	58	55.8%
Between $5K and $10K per Year	18	17.3%
Between $10K and $15K per Year	12	11.5%
Between $15K and $20K per Year	6	5.8%
More than $20 per year	10	9.6%
Concealed Stigmatized Identities		
Mental Illness	53	51%
Substance Abuse	51	49%

APPENDIX H

Table 2. Descriptive Statistics for Continuous Variables

Variable	Mean	Std. Dev.	Cronbach's α
Psychiatric Symptoms	3.61	1.04	.87
Religious Beliefs/Prac. (SBI)	16.9	7.57	.95
Stigma Internalization	12.1	5.81	.85
Social Support (ISEL)	8.5	2.66	.76

APPENDIX I

Table 3. Descriptive Statistics for Categorical Variables

Variable	Frequency	Percent
Self-Rated Religiosity		
Very Religious	29	27.9
Moderately Religious	37	35.6
Slightly Religious	22	21.2
Not Religious at All	16	15.4
Church Attendance		
Never	25	24
Less than Once a Year	11	10.6
About Once or Twice a Year	10	9.6
Several Times a Year	22	21.2
About Once a Month	7	6.7
2 or 3 Times a Month	11	10.6
Nearly Every Week	7	6.7
Every Week	9	8.7
Several Times a Week	2	1.9

APPENDIX J

Table 4: Correlation Matrix between Study Variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Ethnicity/race	--										
2. Sex	.20	--									
3. Age	10	-.03	--								
4. Income	.03	-.01	-.16	--							
5. Social Support	-.15	-.09	-.23*	.03	--						
6. Language	-.34**	-.07	.25*	-.07	.07	--					
7. Psychiatric Sx..	-.16	.10	.08	-.23*	-.24*	.32**	--				
8. Stigma Internal.	-.19	.04	.22*	-.10	-.09	.09	.41**	--			
9. Self-Rated Relig.	-.14	-.06	-.09	-.02	.03	.10	.18	-.07	--		
10. Relig. Beliefs/Pra.	-.17	-.14	-.20	-.01	.07	-.03	.01	-.01	.27**	--	
11.Religious Atten.	.24*	.24*	-.14	.04	.05	-.31**	-.14	-.06	-.33**	-.24*	--

Significance: *p<.05; **p<.01; ***p<.0010

APPENDIX K

Table 5: Summary of Regression Analyses for Religious Variables and Stigma Internalization Predicting Psychiatric Symptoms

Step	Predictor	*b*	SE *b*	β
1	Income	-.05	.02	-.20*
	Sex	.13	.11	.11
	Language	.50	.16	.29**
	Race/Ethnicity	-.12	.10	-.11
	Social Support	-16	.05	-.27*
2	Income	-.05	.02	-.19*
	Sex	.13	.11	.11
	Language	.50	.17	.29**
	Race/Ethnicity	-.10	.10	-.10
	Social Support	-.16	.05	-.27
	Religious Beliefs/Practices (RBP)	.00	.07	.00
	Self-Rated Religiosity (SR)	-.08	.05	-.16
	Religious Attendance (RA)	.01	.02	.03
3	Income	-.04	.02	-.16
	Sex	.10	.10	.09
	Language	.48	.16	.28**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.23**
	RBP	.00	.06	.00
	SR	-.10	.05	-.19*
	RA	.01	.02	.04
	Stigma	.01	.02	.36***

Note. R^2 = 0.23 for Step 1 (p = .001); R^2 =0.25 for Step 2 (p = .434); R^2 =0.37 for Step 3 (p = .001*).* *p < 05. **p < .01. *** p < .001

APPENDIX L

Table 6: Summary of Regression Analyses for Religious Variables and Stigma Internalization Predicting Psychiatric Symptoms

Step	Predictor	*b*	SE *b*	β
1	Income	-.05	.02	-.20*
	Sex	.13	.11	.11
	Language	.50	.16	.29**
	Race/Ethnicity	-.12	.10	-.11
	Social Support	-16	.05	-.27*
2	Income	-.04	.02	-.16
	Sex	.10	.10	.09
	Language	.48	.16	.28**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.23**
	Religious Beliefs/Practices (RBP)	.00	.06	.00
	Self-Rated Religiosity (SR)	-.01	.05	-.19*
	Religious Attendance (RA)	.01	.02	.04
	Stigma Internalization (Stigma)	.10	.02	.36***
3	Income	-.05	.02	-.17*
	Sex	.11	.10	.09
	Language	.50	.16	.29**
	Race/Ethnicity	-.01	.10	-.01
	Social Support	-.15	.05	-.26**
	RBP	.01	.06	.02
	SR	-.10	.05	-.20*
	RA	.01	.02	.05
	Stigma	.10	.02	.37***
	Stigma X SR	.03	.02	.14
	Stigma X RA	.00	.01	.02
	Stigma X SBP	-.02	.03	-.05

Note. R^2 = 0.23 for Step 1 (p = .001); R^2 =0.37 for Step 2 (p = .001); R^2 =0.40 for Step 3 (p = .27*).* *p < 05. **p < .01. *** p < .001

APPENDIX M

Table 7: Summary of Regression Analyses for Religious Variables and Stigma Internalization Predicting Psychiatric Symptoms

Step	Predictor	*b*	SE *b*	β
1	Income	-.05	.02	-.20*
	Sex	.13	.11	.11
	Language	.50	.16	.29**
	Race/Ethnicity	-.12	.10	-.11
	Social Support	-16	.05	-.27*
2	Income	-.04	.02	-.16
	Sex	.10	.10	.09
	Language	.48	.16	.28**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.23**
	Religious Beliefs/Practices (RBP)	.00	.06	.00
	Self-Rated Religiosity (SR)	-.01	.05	-.19*
	Religious Attendance (RA)	.01	.02	.04
	Stigma Internalization (Stigma)	.10	.02	.36***
3	Income	-.05	.02	-.17*
	Sex	.11	.10	.09
	Language	.50	.16	.29**
	Race/Ethnicity	-.01	.10	-.01
	Social Support	-.15	.05	-.26**
	RBP	.01	.06	.02
	SR	-.10	.05	-.20*
	RA	.01	.02	.05
	Stigma	.10	.02	.37***
	Stigma X SR	-.04	.03	.16*

Note. R^2 = 0.23 for Step 1 (p = .001); R^2 =0.37 for Step 2 (p = .001); R^2 =0.39 for Step 3 (p = .05*).* *p < 05. **p < .01. *** p < .001

APPENDIX N

Table 8: Summary of Regression Analyses for Religious Variables, Stigma Internalization, and the Products of Stigma Internalization and Religious Beliefs/Practices Predicting Psychiatric Symptoms

Step	Predictor	*b*	SE *b*	β
1	Income	-.05	.02	-.20*
	Sex	.13	.11	.11
	Language	.50	.16	.29**
	Race/Ethnicity	-.12	.10	-.11
	Social Support	-16	.05	-.27*
2	Income	-.04	.02	-.16
	Sex	.10	.10	.09
	Language	.48	.16	.28**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.23**
	Religious Beliefs/Practices (RBP)	.00	.06	.00
	Self-Rated Religiosity (SR)	-.01	.05	-.19*
	Religious Attendance (RA)	.01	.02	.04
	Stigma Internalization (Stigma)	.10	.02	.36***
3	Income	-.04	.02	-.16
	Sex	.10	.10	.08
	Language	.50	.16	.29**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.23**
	RBP	.00	.06	.00
	SR	-.10	.05	-.20*
	RA	.01	.02	.05
	Stigma	.10	.02	.36***
	Stigma X RBP	-.04	.03	-.09

Note. R^2 = 0.23 for Step 1 (p = .001); R^2 =0.37 for Step 2 (p = .001); R^2 =0.38 for Step 3 (p = .05*).* *p < 05. **p < .01. *** p < .001

APPENDIX O

Table 9: Summary of Regression Analyses for Religious Variables, Stigma Internalization, and the Products of Stigma Internalization and Religious Attendance Predicting Psychiatric Symptoms

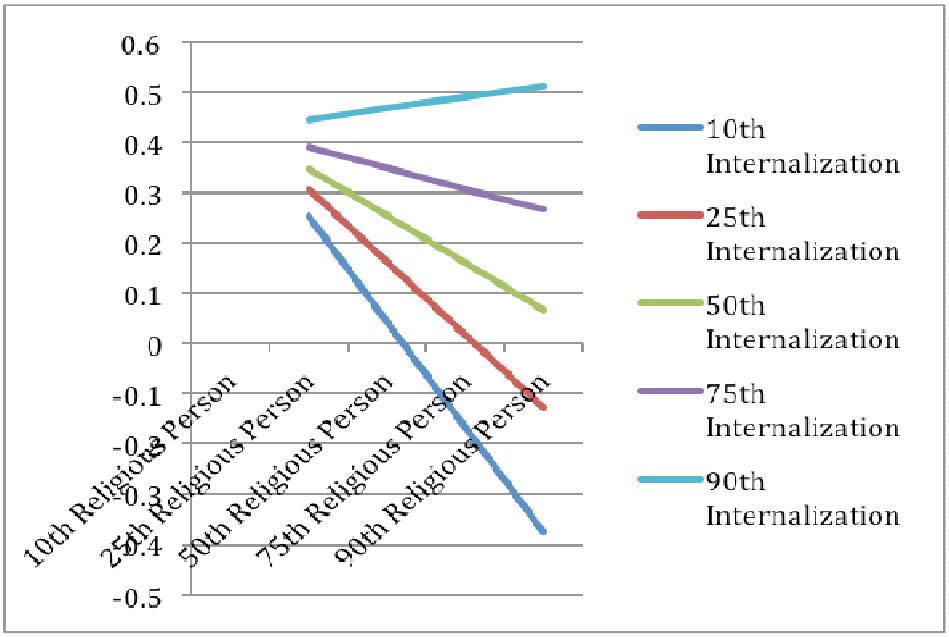
Step	Predictor	*b*	SE *b*	β
1	Income	-.05	.02	-.20*
	Sex	.13	.11	.11
	Language	.50	.16	.29**
	Race/Ethnicity	-.12	.10	-.11
	Social Support	-16	.05	-.27*
2	Income	-.04	.02	-.16
	Sex	.10	.10	.09
	Language	.48	.16	.28**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.23**
	Religious Beliefs/Practices (RBP)	.00	.06	.00
	Self-Rated Religiosity (SR)	-.01	.05	-.19*
	Religious Attendance (RA)	.01	.02	.04
	Stigma Internalization (Stigma)	.10	.02	.36***
3	Income	-.04	.02	-.16
	Sex	.10	.10	.09
	Language	.49	.16	.29**
	Race/Ethnicity	-.02	.10	-.02
	Social Support	-.14	.05	-.24**
	RBP	.00	.06	.00
	SR	-.10	.05	-.19*
	RA	.01	.02	.04
	Stigma	.10	.02	.37***
	Stigma X RA	.01	.01	.07

Note. R^2 = 0.23 for Step 1 (p = .001); R^2 =0.37 for Step 2 (p = .001); R^2 =0.37 for Step 3 (p = .05*).* *p < 05. **p < .01. *** p < .001

APPENDIX 3: FIGURES

APPENDIX P

Figure 1: 2-Way Interaction between Stigma Internalization and Self-Rated Religiosity Predicting Psychiatric Symptoms



References

Abraido-Lanza, A. G., Vasquez, E., & Echevarria, S. E. (2004). En las manos de Dios [in God's hands]: religious and other forms of coping among Latinos with arthritis. *Journal of Counseling and Clinical Psychology, 72*(1), 91-102.

Alvidrez, J., Snowden, L. R., & Kaiser, D. M. (2008). The experience of stigma among Black mental health consumers. *Journal of Health Care for the Poor and Underserved, 19*, 874–893.

American Psychological Association. (2003). Guidelines on multicultural education, training, research, practice, and organizational change for psychologists. *American Psychologist, 58,* 377–402.

Baetz, M., & Toews, J. (2009). Clinical implications of research on religion, spirituality, and mental health. *La Revue Canadienne de Psychiatrie, 54*(5), 292-301.

Bathje, J.G., & Pryor, B.J. (2011). The Relationships of Public and Self-Stigma to Seeking Mental Health Services. *Journal of Mental Health Counseling, 33*(2), 161-176.

Beals, K. P., Peplau, L. A, & Gable, S. L. (2009). Stigma management and well-being: The role of perceived social support, emotional processing, and suppression. *Personality and Social Psychology Bulletin,* 35(7), 867-879.

Berger, B. E., Ferrans, C. E., & Lashley, F. R. (2001). Measuring stigma in people with HIV: Psychometric assessment of the HIV Stigma Scale. *Research in Nursing & Health, 24*(6), 518-529.

Bosworth, H. B., Park, K. S., McQuoid, D. R., Hays, J. C., & Staffens, D. C. (2003). The impact of religious practice and religious coping on geriatric depression. *Int J Geriatr Psychiatry, 18*, 905-9-14.

Brohan, E., Elgie, R., Sartorius, N., Thornicroft, G., 2010a. Self-stigma, empowerment and perceived discrimination among people with schizophrenia in 14 European countries: the GAMIAN–Europe study. Schizophrenia Research 122, 232–238.

Connell, C., & Gibson, G. (1997). Racial, ethnic, and cultural differences in dementia caregiving: review and analysis. *Gerontologist, 37,* 355–364.

Cooper-Patrick, L., Powe, N. R., Jenckes, M. W., et al. (1997). Identification of patient attitudes and preferences regarding treatment of depression. Journal of General Internal Medicine, 12, 431–438.

Corin, E. (1998). The thickness of being: intentional worlds, strategies of identity, and experience among schizophrenics. *Psychiatry, 61*(2), 133-146.

Corrigan, P. W. (1998). The impact of stigma on severe mental illness. *Cognitive and Behavioral Practice, 5,* 201–222.

Corrigan, P. W. (2004). How stigma interferes with mental health care. *American Psychologist, 59,* 614–625.

Corrigan, P. W. (2007). How clinical diagnosis might exacerbate the stigma of mental illness. Social Work, 52(1), 31–39.

Corrigan, P. W., Faber, D., Rashid, F., & Leary, M. (1999). The construct validity of empowerment among consumers of mental health services. *Schizophrenia Research, 38*, 77- 84.

Corrigan, P. W., & Kleinlein, P. (2005). The impact of mental illness stigma. In P. W. Corrigan (Ed.), On the stigma of mental illness: Practical strategies for research and social change. Washington, DC: American Psychological Association.

Corrigan, P. W., Markowitz, F.E., Watson, A.C., Rowan, D., & Kubiak, M.A. (2003). An

attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior, 44,* 162–179.

Corrigan, P., & Matthews, A. (2003). Stigma and disclosure: Implication for coming out of the closet. *Journal of mental Health, 12*, 235-248.

Corrigan, P., McCorkle, B., Schell, B., & Kidder, K. (2003). Religion and spirituality in the lives of people with serious mental illness. *Community Mental Health Journal, 39*(6), 487-499.

Corrigan, P. W., & Penn, D. L. (Eds.). (1999). *Social cognition and schizophrenia.* Washington, DC: American Psychological Association Press.

Corrigan, P. W., & Watson, A.C. (2002). The paradox of self-stigma and mental illness. *Clinical Psychology: Science and Practice, 9* (1) (2002), pp. 35–53

Corrigan, P. W., Watson, A. C., & Barr, L. (2006). The self-stigma of mental illness: Implications for self-esteem and self-efficacy. *Journal of Social & Clinical Psychology, 25,* 875–884.

Corrigan, P. W., Watson, A. C., Gracia, G., Slopen, N., Rasinski, K., & Hall, L. L. (2005). Newspaper Stories as Measures of Structural Stigma. *Psychiatric Services, 56,* 551–556.

Crisp, A., Gelder, M., Rix, S., Melzer, H., & Rowlands, O. (2000). Stigmatization of people with mental illness. *British Journal of Psychiatric, 177*, 4-7.

Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (Vol. 2, 4th ed., pp. 504–553). New York: McGraw–Hill.

Cruz, M., Schulz, R., Pincus, A. H., Houck, R. P, Bensasi, S., & Reynolds, F. C. (2009). The Association of Public and Private Religious Involvement With Severity of Depression

and Hopelessness in Older Adults Treated for Major Depression. *Am J Geriatr Psychiatry, 17*(6), 503-507.

DMHAS (2006). Staffing Patterns & Diversity/Cultural Competency Demographics. A Benchmark Assessment Report. CT Department of Mental Health and Addiction Services.

Dessio, W., Wade, C., Chao, M., Kronenberg, F., Cushman, L.E., & Kalmuss, D. (2004). Religion, spirituality, and healthcare choices of African-American women: Results of a national survey. *Ethnicity and Disease, 14*(2), 189–197.

Ell, K. O., & Haywood, L. J. (1985). Sociocultural factors in MI recovery: an exploratory study. *International Journal of Psychiatry in Medicine,15,* 157–175.

Ellison, C. G., Boardman, J. D., Williams, D. R., & Jackson, J. S. (2001). Religious involvement, stress, and mental health: findings from the 1995 Detroit area study. *Social forces, 80*(1), 215-249.

Ellison, C. G., Finch, K. B., Ryan, N. D., & Salinas, J. J. (2009). Religious involvment and depressive symptoms among Mexican-oring adults in California. *Journal of Cummunity Psychology, 37*(2), 171-193.

Ellison, C.G., & George, L.K. (1994). Religious involvement, social ties, and social support in a southeastern community. Journal for the Scientific Study of Religion, 33, 46–61.

Farina, A. (1981). Are women nicer people than men? Sex and the stigma of mental illness. *Clinical Psychology Review, 1, ITb-T.A'h.*

Feldman, D. B., & Crandall, C. S. (2007). Dimensions of mental illness stigma: What about mental illness stigma causes social rejection? *Journal of Social and Clinical Psychology,*

26(2), 137–154.

Fetzer Institute/National Institute on Aging Working Group. Multidimensional measurement of Religiousness/spirituality for use in health research (pp. 88). Kalamazoo: John E. Fetzer Institute.

Finch, B.K., Kolody, B., & Vega, W.A. (2000). Perceived discrimination and depression among Mexican-origin adults in California. *Journal of Health and Social Behavior, 40*, 295–313.

Frable, D. E. S., Blackstone, T., & Scherbaum, C. (1990). Marginal andmindful: Deviants in social interactions. *Journal of Personality and Social Psychology, 59,* 140–149.

Frenz, A. W., & Carey, M. P. (1989). Relationship between religiousness and trait anxiety: Fact or artifact? *Psychological Reports, 65*, 827–834.

Freud, S. (1959). Civilization and its discontents. In J. Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud.* London: Hogarth.

Frazier, C., Mintz, B. L., & Mobley, M. (2005). A multidimensional look at religious involvement and psychological well-being among urban elderly African Americans. *Journal of Counseling Psychology, 52* (4), 583-590.

Gartner, J. Larson, D.B., & Allen, G. (1991). Religious commitment and mental health: A review of the empirical literature. *Journal of Psychological Theology, 19,* 6-25.

Goffman, E. (1963) *Stigma: Notes on the management of spoiled identity.* Englewood Cliffs, NJ: Prentice-Hall.

Hackney, C. H., & Sanders, G. S. (2003). Religiosity and mental health: A meta-analysis of recent studies. *Journal of the Scientif- ic Study of Religion, 42(1),* 43-55.

Harvey, R.D. (2001). Individual differences in the phenomenological impact of social stigma.

Journal of Social Psychology, 141, 174–189.

Hayes, A. F. (2012). PROCESS: a versatile computational tool for observed variable mediation, moderation, and conditional process modeling [White Paper]. Retrieved from http://www.afhayes.com/public/process2012.pdf

Hill, T. D., Angel, J. L., Ellison, C. G., & Angel, R. J. (2005). Religious attendance and mortality: An 8-year follow-up study of older Mexican Americans. *Journal of Gerontology: Social Sciences, 60*, 102–109.

Hill T. D, Burdette A. M., Ellison C.G., et al. (2006). Religious attendance and the health behaviors of Texas adults. *Prev Med, 42,* 309–312.

Hinshaw, S. P. (2007). The mark of shame: Stigma of mental illness and an agenda for change. New York: Oxford University Press.

Holland, J. C., Kash, K. M., Passik, S., Gronert, M. K., Sison, A., Lederberg, M., Russak, S. M., Baider, L., & Fox, B. (1998). A brief spiritual beliefs inventory for use in quality of life research in life-threatening illness. *Psycho-Oncology, 7,* 460–469.

Holmes, P., & River, L. P. P. (1998). Individual strategies for coping with the stigma of severe mental illness. *Cognitive & Behavioral Practice, 5,* 231–239.

Idler, E. L. (1994). Cohesiveness and coherence: *Religion and the health of the elderly.* New York: Garland.

Interian, A., Martinez, I. E., Guarnaccia, P. J., Vega, W. A., & Escobar, J. I. (2007). A qualitative analysis of the perception of stigma among Latinos receiving antidepressants. Psychiatric Services, 58(12), 1591–1594.

Jang, S. J., & Johnson, B. R. (2004). Explaining religious effects on distress among African Americans. *Journal of the Scientific study of Religion, 43*(2), 239-260.

Jones, E., Farina, A., Hastorf, A., Markus, H., Miller, D. T., & Scott, R. (1984). Social stigma: The psychology of marked relationships. New York: Freeman.

Jussim, L., Nelson, T.E., Manis, M. et al. (1995). Prejudice, stereotypes, and labeling effects: sources of bias in person percep- tion. *J Pers Soc Psychol, 68,* 228-46.

Kelly, A. E. (2002). *The psychology of secrets.* New York: Kluwer Academic/Plenum.

Kessler, R. C., Berglund, P. A., Bruce, M. L., et al. (2001). The prevalence and correlates of untreated serious mental illness. *Health Services Research, 36,* 987–1007.

Kotarba, J. A. (1983). Perceptions of death, belief systems and the process of coping with chronic pain. *Social Science and Medicine, 17*, 681–689.

Koenig, H. G. (2009). Research on religion, spirituality and mental health: A review. *Can J Psychiatry, 54*(5), 283-291.

Koenig, H. G. and Larson, D. B. (2001). Religion and mental health: Evidence for an association. *International Review of Psychiatry, 13,* 67-78,

Koenig H. G., McCullough, M. E., Larson, D. B. (2001). *Handbook of Religion and Health*. New York: Oxford University Press.

Koenig, H. G., George, L. K, & Peterson, B. L. (1998). Religiosity and remission of depression in medically ill older patients. *Am J Psychiatry, 155*(4), 536-42.

Komiya, N., Good, G. E., & Sherrod, N. B. (2000). Emotional openness as a predictor of college students' attitudes toward seeking psychological help. *Journal of Counseling Psychology, 47* (1), 138-143.

Krause, N. (1995). Religiosity and self-esteem among older adults. *Journal of Gerontology: Psychological Sciences, 50*, 236-246.

Kroll, J., & Sheehan, W. (1989). Religious beliefs and practices among 52 psychiatric inpatients in Minnesota. *American Journal of Psychiatry, 146*, 67–72.

Leaf, P.J., Bruce, M.L., Tischler, G.L., & Holzer, C.E. (1987). The relationship between demographic factors and attitudes toward mental health services. *Journal of Community Psychology, 15,* 275-284.

Levin, J. S., & Markides, K. S. (1985). Religion and health in Mexican Americans. *Journal of Religion & Health, 24,* 60–69.

Levin, J. S., & Markides, K. S. (1986). Religious attendance and subjective health. *Journal for the Scientific Study of Religion, 25,* 31–40.

Levin, J. S., Markides, K. S., & Ray, L. A. (1996). Religious attendance and psychological well-being in Mexican Americans: A panel analysis of three-generations data. *Gerontologist, 36,* 454–463.

Levin, J. S., Taylor, R. J., & Chatters, L. M. (1994). Race and gender differences in religiosity among older adults: Findings from four national surveys. *Journals of Gerontology Series B: Psychological Sciences and Social Sciences, 49,* 137–145.

Link, B. G., Mirotznik, J., & Cullen, F. T. (1991). The effectiveness of stigma coping orientations: Can negative consequences of mental illness labeling be avoided? *Journal of Health and Social Behavior, 32,* 302– 320.

Link, B. G., Struening, E. L., Neese-Todd, S., Asmussen, S., & Phelan, J. C. (2001). The consequences of stigma for the self-esteem of people with mental illnesses. Psychiatric Services, 52(12), 1621–1626.

Loewenthal, K. M., & Cinnirella, M. (1999). Beliefs about the efficacy of religious, medical and psychotherapeutic interventions for depression and schizophrenia among women from different cutlural-religious groups in Great Britain. *Transcultural Psychiatry, 36,* 491 – 504.

Lindgren, K. N., & Coursey, R. D. (1995). Spirituality and serious mental illness: A two-part study.*Psychosocial Rehabilitation Journal, 18,* 93–111.

Markides, K. S., Levin, J. S., & Ray, L. A. (1987). Religion, aging, and life satisfaction: An eight-year, three-wave longitudinal study. *Gerontologist,27,* 660–665.

Martin, J., Pescosolido, B., & Tuch, S. (2000). Of fear and loathing: The role of "disturbing behavior," labels, and causal attributions in shaping public attitudes toward peo- ple with mental illness. *Journal of Health and Social Behavior,* 41, 208-223.

Mathews, D. A., McCullough, M. E., Larson, D. B. Koenig, H. G., Swyers, J.P., & Greenwold Milano, M. (1998). Religious commitment and health status. A review of the research and implications for family medicine. *Archive for Family and Medicine, 7,* 118–124.

Miles, A. (1989). *Women and Mental illness: the social context of female neurosis.* Chichester: Wheatsheaf books.

Mishra, S. I., Lucksted, A., Giogia, D., Barnet, B., & Baquet, C. R. (2007). Needs and Preferences for Receiving Mental Health Information in an African American Focus Group Sample. Community Mental Health Journal, 45 (2), 117-126.

Mindgarden Inc. (2011). *State-Trait Anxiety Inventory for Adults.* Retrieved 05/14/11 from http://www.mindgarden.com/products/staisad.htm

Moreira-Almeida, A., Neto, F.N., & Koenig, H.G. (2006). Religiousness and mental health: a reveiw. *Rev Bras Psiquiatr, 28*(3), 242-250.

National Institute of Mental Health. (2011). *The numbers count: Mental disorders in America.* Retrieved September 17, 2011, from www.nimh.nih.gov/publicat/numbers.cfm

Nye, W.P. (1992). Amazing grace: Religious and identity among elderly black individuals. *Int J Aging hum Dev, 36,* 103-114.

Page, S. (1995). Effects of the mental illness label in 1993: Acceptance and rejection in the community. *Journal of Health and Social Policy, 7,* 61–68.

Paloutzian, R.F., & Park, C.L. (Eds.). (2005). The handbook of the psychology of religion and spirituality. New York: The Guilford Press.

Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice.* New York: Guilford Press. Phillips, R. E, & Stein, C. H. (2007). God's will, God's punishment, or God's limitations? Religious coping strategies reported by young adults living with serious mental illness. *Journal of Clinical Psychology, 63*(6), 529-540.

Park, C. L. (2005). Religion as a meaning-making framework in coping with life stress. *Journal of Social Issues, 61*, 707–729.

Pennebaker, J. W. (1992). The psychology of physical symptoms. New York: Springer-Verlag.

Phillips, R.E., & Stein, C.H. (2007). God's Will, God's Punishment, or God's Limitations? Religious Coping Strategies Reported by Young Adults Living With Serious Mental Illness. Journal of Clinical Psychology, 63(6), 529–540.

Pieper, Z. T. J. (2004). Religious coping in highly religious psychiatric inpatients. *Mental Health, Religion & Culture, 7,* 349-363.

Pincay, I., & Guanarccia, P. (2007). "It's like going through an earthquake": Anthropo- logical perspectives on depression among Latino immigrants. *Journal of Immigrant Minority Health, 9,* 17–28.

Pollner, M. (1989). Divine relations, social relations, and well-being. *Journal of Health and Social Behavior, 30,* 92-104.

Quinn, D. M., & Chaudoir, S. (2009). Living with a concealable stigmatized identity: The impact of anticipated stigma, centrality, salience, and cultural stigma on psychological distress and health. *Journal of Personality and Social Psychology, 97,* 634-651.

Quinn, D. M., & Earnshaw, V. A. (2011)**.** Understanding Concealable Stigmatized Identities: The Role of Identity in Psychological, Physical, and Behavioral Outcomes. *Social Issues and Policy Review, 5*(1), 160-190.

Rao, D., Feinglass, J., Corrigan, P. (2007). Racial and ethnic disparities in mental illness stigma. *Journal of Nervous and Mental Disease, 195,* 1020-1023.

Rojas, D. Z. (1996). Spiritual well-being and its influence on the holistic health of Hispanic women. In S. Torres (Ed.), *Hispanic voices: Hispanic health educators speak out* (pp. 213–229). New York: NLM Press.

Rüsch, N., Angermeyer, M.C., & Corrigan, P.W. (2005). The stigma of mental illness: concepts, forms, and consequences. Psychiatrische Praxis, 32(5), 221-232.

Rüsch, N., Hölzer, A., Hermann, C., Schramm, E., Jacob, G., Bohus, M., Lieb, K., Corrigan, P.W., 2006. Self-stigma in women with borderline personality disorder and women with social phobia. Journal of Nervous and Mental Disease 194, 766–773.

Santuzzi, A. M., & Ruscher, J. B. (2002). Stigma salience and paranoid social cognition: Understanding variability in metaperceptions among individuals with recently-acquired stigma. *Social Cognition, 20,* 171– 197.

Smart, L., & Wegner, D. M. (1999). Covering up what can't be seen: Concealable stigma and mental control. *Journal of Personality and Social Psychology, 77,* 474–486.

Schumacher, M., Corrigan, P. W., & Dejong, T. (2003). Examining cues that signal mental illness stigma. *Journal of Social & Clinical Psychology, 22,* 467–476.

Sirey, J., Bruce, M. L., Alexopoulos, G. S., Perlick, D. A., Friedman, S. J., & Meyers, B. S. (2001). Perceived stigma and patient-rated severity of illness as predictors of antidepressant drug adherence. Psychiatric Services, 52(12), 1615–1620.

Spielberger, C. D., Gorsuch, R. L., Lushene, R., Vagg, P. R., & Jacobs, G. A. (1983). *Manual for the State-Trait Anxiety Inventory (Form Y).* Palo Alto, CA: Mind Garden.

Starr, S., Campbell, L.R., & Herrick, C.A. (2002). Factors affecting use of the Mental Health System by Rural Children. Issues in Mental Health Nursing, 23(3), 291-304.

Strawbridge, W. J., Shema, S. J., Cohen, R. D., Roberts, R. E., & Kaplan, G. A. (1998). Religiosity buffers effects of some stressors on depression but exacerbates other. *Journal of Gerontology, 53*(3), 118-126.

Taylor, R. J. (1993). Religion and religious observances. In J. Jackson, L. Chatters, & Taylor R (Eds.), *Aging in Black America* (pp. 101-123). Newbury Park, CA: Sage.

Tepper, L., Rogers, S.A., Coleman, E. M., & Malony, H. N. (2001). The prevalence of religious coping among persons with persistent mental illness. *Psychiatr Serv, 52*(5), 660-665.

U.S. Census Bureau. (2010). 210 Census Data. Retrieved May 01, 2011, from http://2010.census.gov/2010census/data.htm

Whaley, A. L. (1997). Ethnic and racial differences in perceptions of dangerousness of persons with mental illness. Psychiatric Services, 48(10), 1328–1330.

Yangarber-Hicks, N. (2004). Religious coping styles and recovery from serious mental illness. *Journal of Psychology and Theology, 32,* 305–317.

Williams, D. R., Larson, D. B., Buckler, R. E., Heckmann, R. C., & Pyle, C. M. (1991). Religion and psychological distress in a community sample. *Social Science Medicine, 32,* 1257–1262.