Pray Harder: Stigma and Support-Seeking

Among Religious Persons With Mental Illness

by

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ABSTRACT

An expanse of research has demonstrated that persons with mental illness (PWMI) tend to avoid formal psychological treatment. One possible explanation for this failure to pursue formal treatment is the tendency of religious individuals to construe mental illness as spiritual in nature, leading religious communities to actively discourage emotional and psychological help-seeking through non-spiritual means. The present study examined help-seeking behaviors among religious PWMI by examining the impact of religiosity and gender on the relationship between mental illness stigma and help-seeking behaviors. Results indicate that higher levels of perceived stigma and religious salience relate to higher reported indirect support-seeking (ISS). Moreover, only religious salience appears to significantly relate to ISS among men, whereas perceived mental illness stigma significantly predicts direct and indirect support-seeking behaviors among women.

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For Godly grief and the pain God is permitted to direct, produce a repentance that leads to and contributes to salvation and deliverance from evil, and it never brings regret; but worldly grief, the hopeless sorrow that is characteristic of the pagan world, is deadly— breeding and ending in death.

— II Corinthians 7: 10

Introduction

From the Biblical expulsion from Eden to Odysseus' 10-year exile from Ithaca, scholars and theologians have long presumed malaise and misfortune to be the gifts of vengeful gods. During the Elizabethan era, Shakespeare used stigma as shorthand to indicate the presence of villainy, debauchery, or madness in his characters. Theologians still discuss the time when Jesus' twelve disciples ask whether or not a blind man was to blame for his own condition (John 9:1-2, Holman Christian Standard Bible). More recently, psychological and sociological research has begun to establish strong correlations between religious beliefs and attitudes towards persons with mental illness (PWMI), though the complex relationship between mental health stigma and religiosity has yet to be fully understood (c.f., Dijker & Koomen, 2007; Leavey, Loewenthal, & King, 2016). Although research has extensively examined the help-seeking preferences of religious individuals (i.e., Sood, Mendez, & Kendall, 2012; Wesselmann, Day, Graziano, & Doherty, 2015), recent evidence indicates that religious PWMI are not successfully eliciting support from friends, family, and their faith communities (LifeWay Research, 2014; Smietana, 2017). More studies are needed to understand mental illness stigma and its impact on help-seeking behaviors among religious individuals (Koenig, King, & Carson, 2012; Wesselmann & Graziano, 2010). The proposed thesis seeks to address this gap by examining whether religiosity and gender affect the strength and valence of the relationship between stigma and support-seeking. More specifically, I will examine

whether religious salience mediates the relationship between perceived stigma and support-seeking behaviors, and whether this mediational relationship is further moderated by gender (Baron & Kenny, 1986; Hayes, 2017).

Stigma Defined

In his seminal work on stigma, Goffman (1963) delineated three primary types of stigma: "abominations of the body," "blemishes of the character," and "tribal stigma." Whereas the first two refer to individual "failings"—such as physical marks and deformities or personal circumstances and personality traits—the latter refers to social devaluation as a byproduct of group membership. The result is what Goffman describes as the "spoiled identity," or an identity defined by being appraised and treated as inferior and unworthy by the rest of society. While Goffman's description of stigma evokes vivid and dramatic images (i.e., the scarlet letter affixed to Hester Prynne), present research has come to understand that stigma is far more than a society's relationship to an individual or group—stigma can also encompass stigmatized individuals' relationship to their status and self-concept.

Since Goffman, research has further delineated stigma into two broad categories: social and perceived. Whereas *social stigma* refers to the possession of a trait or feature that causes individuals and groups to be deemed less than whole by society (Goffman, 1963), *perceived stigma* pertains to the understanding and awareness of stigmatized individuals, encompassing the appraisal of personal experiences and societal attitudes (*experienced stigma*), as well as the impact of these appraisals on an individual's self-concept and beliefs about their group membership (*internalized stigma*) (Link, 1987;

Mickelson & Williams, 2008). Stated otherwise, members of marginalized groups become acutely aware of their "offending" traits/features, which, in turn, influences their own self-concept, leading to feelings of shame, embarrassment, and/or low-self-esteem (Corrigan & Rao, 2012).

One of the most frequently studied stigmas is mental illness. Persons with mental illness (PWMI) have experienced a litany of stereotypes, ranging from the superficial to the spiritual. Labeled lazy, unpredictable, unreliable, incompetent, and dangerous (Hallowell & Ratey, 2005; Parcesepe & Cabassa, 2013; Wesselmann & Graziano, 2010), PWMI often face ostracism, lower wages, denial of housing, employment discrimination, relationship loss, hostility, and even violence (Corrigan, 1998; Dijker & Koomen, 2007; Goodman, 2008). Consequently, many who experience the symptoms of mental illness choose to conceal their condition in an attempt to avoid stigma, resulting in higher reported levels of anxiety and persistent fear of discovery (Meyer, 2007). Tragically, one of the primary means of concealing mental illness is avoiding psychological treatment.

Mental Illness and Help-Seeking

Any discussion of help-seeking behaviors begins with defining the methods of support-activation. Generally speaking, help-seeking can be divided into two broad categories, formal and informal. *Formal* help-seeking is defined as attempting to elicit help and support from formal institutions (i.e., hospitals and crisis centers) or individuals within the helping professions, such as doctors, therapists, or social workers (Mosley-Howard, 2006). *Informal* help-seeking, on the other hand, involves utilizing one's community or social network to resolve problems (Blight, Jagiello, & Ruppel, 2015). For

the purposes of this paper, informal help-seeking will be further delineated into two types, social and religious. Whereas *social support-seeking* refers to attempts to elicit emotional and tangible support from one's social network outside of one's religious congregation (family, friends, close others, coworkers, etc.), *religious support-seeking* refers to seeking the guidance or assistance of clergy, spiritual counselors/mentors, fellow congregants, or religious institutions.

The literature on mental illness stigma and help-seeking is expansive, and consistently demonstrates that stigma directed towards both mental illness and psychological treatment serve as barriers to formal help-seeking and treatment compliance (i.e., Corrigan, 2004; Fung, Tsang, & Chan, 2010). Nevertheless, the literature on mental illness stigma, religion, help-seeking, and health outcomes seem somewhat bifurcated, with one group examining the impact of religiosity on treatment preferences (e.g., to seek psychological vs. religious counseling; Yorgason, Whelan, & Meyers, 2012), and the other primarily focusing on help-seeking in the form of formal psychological treatment and adherence (Corrigan, 2004). With the majority of research focusing on formal treatment modalities, it remains unclear whether informal attempts for support activation are effective in the treatment of psychological illness; past and present studies on mental illness stigma have often overlooked the role of informal help—both social and religious—in alleviating psychological distress and improving long-term health outcomes.

Benefits of Social Support-Seeking. There is strong evidence to suggest that social support-seeking, specifically direct disclosure, has a powerful positive impact on health outcomes for PWMI. Broadly, self-disclosure of a stigmatized condition often alleviates the cognitive, affective, and physical symptoms associated with stigmatization. Self-disclosure significantly reduces the guilt associated with concealing intimate knowledge from friends and family (Dijker & Koomen, 2007), as well as the distress and anxiety caused by the fear of discovery (Corrigan & Rao, 2012; Meyer, 2007). For example, women who freely disclosed having an abortion were far less likely to experience distress, negative emotions, and intrusive thoughts compared to women who concealed their abortions (Dijker & Koomen, 2007). Children of lesbian mothers who are open about their parents' sexual orientation report higher self-esteem than their concealing counterparts (Gershon, Tschann, & Jemeri, 1999). More dramatically, self-disclosure of personal sexual orientation correlated with lower suicide rates among LGBTQ adolescents and college students (Schneider, Farberow, & Kruks, 1989). Yet, perhaps most striking was the impact of self-disclosure on immunological function: children and adults who self-disclosed a stigmatizing condition experienced slower rates of disease progression. Among children with HIV, those who disclosed their HIV status experienced this buffering effect (Sherman, Bonanno, Wiener, & Battles, 2000). Among HIV-seronegative gay men, those who disclosed their sexual orientation experienced the same buffering effect (Cole, Kemeny, Taylor, Visscher, & Krantz, 1996a); moreover, those who disclosed their sexual orientation experienced significantly lower rates of cancer and infectious diseases when compared to those who concealed (Cole, Kemeny,

Taylor, Visscher, & Krantz, 1996b). Given the strong positive correlation between self-disclosure and outcomes for various stigmatized groups, there is mounting evidence to suggest that PWMI may benefit from informal help-seeking, particularly in the context of close relationship ties.

Though direct disclosure holds the promise of improved self-concept for stigmatized individuals, it also carries significant social risk. As indicated previously, the possible consequences of disclosing one's stigmatized condition are enough to evoke anxiety and depression in individuals who consider disclosing (Corrigan & Rao, 2012; Dijker & Koomen, 2007). Whereas a supportive response would not lower an individual's social standing, negative reactions to stigma disclosure may sully future interactions or lead to rejection due to the introduction of anxiety, fear, and/or uncertainty into the relationship (Goodman, 2008). More alarming, stigma disclosure carries the risk of evoking prejudice, discrimination, and even physical violence (Dijker & Koomen, 2007). Consequently, individuals may attempt to evade the negative outcomes associated with revealing their stigmatized status by employing indirect means of support-seeking.

Indirect Support-Seeking. Stigmatized populations face two profound barriers to help-seeking: negative perceptions of support availability and the possibility of rejection. Persons with high levels of internalized stigma are less likely to perceive their social networks as available, or even capable, of providing support, thereby reducing the likelihood of support-seeking behavior (Mickelson, 2016). Yet, perceptions of support availability are not the only challenge stigmatized individuals face; when social networks are perceived as viable support resources, the possibility of rejection casts a shadow over

the potential for a supportive response. In an attempt to minimize the risk of rejection, many individuals resort to *indirect support-seeking* (ISS), an ambiguous and oblique help-seeking strategy characterized by broadly complaining or hinting at the existence of an unstated problem, without directly disclosing the nature of said problem (Barbee, Rowatt, & Cunningham, 1998). Yet, research suggests that ISS has the opposite of its intended effect: rather than eliciting support, ISS increases the likelihood that friends and family respond with avoidance behaviors (Mickelson & Williams, 2008). Interpreting the interaction at face value, friends and family fail to recognize indirect help requests, and dismiss cries for help as whining, complaining, or a sour mood; tragically, individuals utilizing ISS all but guarantee negative responses from their social networks.

Despite the expanse of research on the impact of mental health stigma on treatment seeking, very little is understood about what motivates individuals to seek help. Corrigan (2004) attributes this lack of understanding, at least partially, to a failure to incorporate person-level variables (e.g., religiosity) into theoretical models of stigma and help-seeking. Religiosity is a particularly promising variable of interest, having been consistently linked to mental health outcomes and health-related behaviors (Golub, Walker, Longmarie-Avital, Bimbi, & Parsons, 2010; Idler & George, 1998; Levin & Chatters, 1998; McCullough & Willoughby, 2009). More recently, research has begun to establish strong correlations between religious beliefs and attitudes towards mental illness.

Religiosity, Stigma, and the Ultimate Attribution Error

The relationship between religiosity and prejudice has been long and labyrinthine. As far back as the 1940's and 50's, psychological research noted a disparity between religious and nonreligious individuals. Not only were those who espoused religion less humanitarian and more punitive towards value-violating others (Kirkpatrick, 1949), they also scored higher on racism and ethnocentrism (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). These findings, which blatantly contradict the religious refrain to "love thy neighbor," have been the focus of much debate and inquiry.

One theoretical framework that might explain the relationship between religiosity, stigma, and prejudice is attribution theory. First proposed by Fritz Heider in the early 20th century, attribution theory originally posited that humans attribute behaviors to either internal or external causes in an attempt to predict and control the actions of those around them (Baumeister & Finkel, 2010). Later, Heider's theory was extended to include whether or not individuals could control their own behaviors (Weiner, 1979). Observing the tendency of participants to attribute internal traits to authors after reading randomly assigned position essays, Jones and Harris (1967) noted that individuals tend to place more weight on internal factors, such as character or intention, when evaluating the actions of another. Conversely, participants' self-attributions of behaviors frequently incorporated situational factors. Ross (1977) dubbed this phenomenon the *fundamental attribution error* (FAE). When entire groups engage in this form of social devaluation, or attributing traits and character flaws on the group level, this is referred to as the *ultimate attribution error* (Pettigrew, 1979). As Arbóleda-Florez and Stuart (2012) succinctly

stated, stigma is rooted in "cognitive attributional processes [that]…lead to the development and maintenance of negative and erroneous stereotypes" (p. 458). Stated otherwise, may be nothing more than a heuristic for committing prejudice and, therein, the FAE.

In an attempt to discern the relationship between religiosity and prejudice, Allport and Ross (1967) hypothesized that individuals espousing more utilitarian values (i.e., extrinsic religiosity) would prove more discriminatory and prejudicial than those who attempted to incorporate the values of their faith into their self-concept (i.e., intrinsic religiosity). Rather than finding a parsimonious explanation for both prosocial and harmful behaviors associated with religious practice, Allport and Ross found that intrinsic and extrinsic religious motivations merely correlated with different types of prejudice. Whereas extrinsic religiosity correlated with higher levels of racism, intrinsic religiosity resulted in higher levels of prejudice against perceived value-violators (i.e., sexual minorities, opposing political opinions, etc.). Not only did the intrinsic/extrinsic aspects of religiosity fail to account for the presence of prejudice as expected, but Allport and Ross themselves acknowledged that the two constructs were orthogonal, suggesting that inflexible cognitive styles, rather than specific styles of religiosity, may account for the variation in prejudice. Consequently, recent literature has attempted to discern the impact of religious fundamentalism, religious orthodoxy, and cognitive style.

Marked by highly rigid thinking, a sense of divine appointment, and belief in the inerrancy of one's own views, religious fundamentalism has been strongly positively correlated with prejudicial attitudes against out-groups, specifically those presumed to

diverge from the group's values (Pancer et al., 1995; Ramsay, Pang, Shen, & Rowatt, 2014). Yet, rather than being a parsimonious explanation for the pro-and-anti-social behavior observed within religious communities, religious fundamentalism has revealed itself to overlap considerably with a similar ideological construct: right-wing authoritarianism (RWA). Coined by Altemeyer (1981), the right-wing authoritarian personality is marked by three characteristics: authoritarian submission (a willingness to/preference for compliance with "legitimate" and "established" authorities), conventionalism (a strong preference for and adherence with social norms and values), and authoritarian aggression (hostile and highly punitive attitudes towards individuals who transgress social norms/values). Altemeyer (2003) first noted the similarities between fundamentalism and RWA, in that each were marked by cognitive rigidity and hostility towards value-violating out-groups. However, the two systems diverge in RWA's willingness to submit to authorities perceived as legitimate. Yet, after controlling for RWA, religious fundamentalism was still highly correlated with hostility towards sexual minorities, and slightly—but significantly—with ethnocentrism (c.f. Johnson, Rowatt, & LaBouff, 2012). Specifically, religious individuals were willing to endorse statements about the "violent and primitive" nature of African Americans, the "lazy, dishonest, and lawless" nature of Native Americans, and fears that "Asians will control our economy" [*sic*.] (Altemeyer, 1996; 2003). Conversely, *orthodoxy*—the extent to which an individual's personal beliefs align with church doctrine—is seldom correlated with significant increases in prejudice, though it is consistently correlated with slightly higher levels of bigotry (Altemeyer & Hunsberger, 1992).

Believing the distinction between orthodox and fundamentalist Christians may be the consequence of differing thinking styles, Blanchard-Fields, Hertzog, and Horhota (2012) attempted to measure cognitive resources and the need for closure in a sample of both young and elderly participants. Their results were surprising—the need for closure (i.e., a measure of an individual's need for cognitive consistency and clear explanations and expectations about the world around them) did not provide potent explanations for the differences in FAE. Rather, the relationship between these cognitive styles and blame attribution for various stigmatized conditions was fully mediated by whether or not the participants assessed the other as violating the participants' values. Thus, the content of an individual's beliefs and their cognitive style may not translate to prejudicial behavior. Rather, the extent to which an individual believes their doctrine is the infallible, inerrant word of God and, therefore, the ultimate basis for social behavior, may determine whether or not a believer engages in prejudicial behavior.

Illustrating this point, Altemeyer (1996) found that individuals espousing the same beliefs, varying only in their level of fundamentalism, had markedly different behaviors towards out-group members. Highly fundamentalist Christians who endorsed the "hate the sin; love the sinner" as a means of interacting with value-violators were significantly more likely to endorse the notion that homosexuals should be actively discriminated against, even jailed for their sexual orientation. As counterintuitive as this finding may seem, they become more striking when compared to fundamentalists who eschewed the "love the sinner" mentality—these individuals were *less* punitive and judgmental towards sexual minorities. Similarly, despite the positive outcomes

commonly associated with religious communities (e.g., buffering against stress and increased longevity), Pereira, Pereira, and Monteiro (2016) found that strongly held religious beliefs negated social influences against prejudice towards sexual minorities; devout individuals were more willing to eschew cultural niceties when interacting with perceived value-violators. Nevertheless, this pattern of out-group hostility holds consistent with the literature: though most highly religious individuals extol the virtues of altruism and "loving thy neighbor," research has found that altruism is seldom practiced outside of one's group (see Hall, Matz, & Wood, 2010).

Religiosity and Social Stigma

What is intriguing, if perplexing, is the fact that this lack of tolerance also extends to in-group members—any stigmatizing trait or feature, however uncontrollable, can elicit the scorn of the devout. That is, there is no lack of documentation indicating that religiosity may predispose the devout towards engaging in social stigma. Group members merely *perceived* to violate group values risk both blame and ostracism (Sood et al., 2012). Individuals who score highly in religious orthodoxy and religious salience are more likely to engage in victim derogation (Lea & Hunsberger, 1990). Religiosity is a significant predictor of religious attributions for HIV/AIDS, with religious individuals attributing illness to divine retribution (Muturi & An, 2010; Olaore & Olaore, 2014; UNAIDS, 2006). Perhaps most alarming are the pseudo-psychological explanations for the etiology of depression present in some theological circles. For example, Armentrout (2004) developed a theoretical model based entirely on the presumption that depression is a divine intervention to correct sin. There is some preliminary evidence, however, that

different denominations may have varying tendencies toward the FAE. Wesselmann and Graziano (2010) found that non-denominational Christians were more likely to attribute spiritual causes for mental illnesses than Roman Catholic or orthodox Christians. One possible reason for this difference is the Protestant ethic.

In a series of essays penned in the early 1900's, sociologist Max Weber theorized that the rise of capitalism and individualism was firmly rooted in the beliefs of early Protestant Christians. Specifically, because God values obedience, self-mastery, and hard work, diligence and self-sufficiency will bring about God's blessings, material and otherwise (Jones, 1997). Building upon this notion, Li et al. (2012) posited that the Protestant emphasis on self-sufficiency and personal responsibility for one's soul is the primary driver leading religious individuals to engage in dispositionism. Contrary to the catechism of the Catholic Church, which emphasizes communal sacraments (i.e., confession), Protestantism's primary emphasis is with *sola scriptura* ("scripture alone") and personal responsibility for salvation. This emphasis on personal responsibility for the state of one's own eternal soul, Li and colleagues argue, has contributed to a sense of radical individualism in Protestant Christianity - as well as the Western hemisphere more broadly. In testing their theories, Li and colleagues did find that priming Protestant—but not Catholic—participants with the concept of an individual soul correlated with higher levels of dispositionism, indicating that Protestant individuals are more likely to discount the influence of non-spiritual factors.

Religiosity and Resistance to Attribution Effects

Perhaps the most fascinating aspect of religious dispositionism is the tendency for religious individuals to resist attribution effects (i.e., to commit the FAE despite being provided evidence that a behavior or trait was not the result of disposition). Weiner (1979) proposed that moral acceptability of a behavior was directly influenced by whether or not the behavior was controllable; as people become aware of the situational and biological causes of behavior, they are less likely to attribute moral failing to the actor. In an attempt to explain religious inclinations toward dispositionism (and, consequently, stigmatization of perceived others), Li et al. (2012) argued that Protestant individuals view the mind and body in a dualistic manner, giving more weight to spiritual matters. Yet, past and present literature regarding the religious views on the nature and etiology of homosexuality indicate another possible method that religious individuals may employ when assigning blame or causal attributions.

Rather than elevating spirit and soul above the physical, many religious individuals believe that mind, body, and spirit are inextricably linked—any physical, behavioral, or emotional problem, then, would be indicative of a spiritual cause. This belief, often found in evangelical Christian circles, frequently finds voice in the form of warnings and exhortations to avoid seeking relief from physical and psychological stress through non-Christian health practices. As one author wrote, even vaguely spiritual practices, such as yoga, may result in a bodily and mental bondage to demonic or occult forces (Huska, 2014). It is therefore imperative not only to examine religious teaching

about personal salvation, but religious teachings about a variety of stigmatized traits and conditions that have been scientifically linked to biology.

To explore whether or not religious individuals are discounting physiological and environmental factors when considering "spiritual" conditions, Thomas and Whitehead (2015) performed an archival-analysis of articles addressing homosexuality in a popular evangelical magazine. Their findings were riveting; even though evangelicals were recognizing the physiological origins of homosexuality, (e.g., genetic influences), this acknowledgement had no impact on moral narratives. Three different types of explanations were provided for homosexuality: volitional, environmental, and biological. Each, however, unfailingly decried same-sex attraction as unnatural, abnormal, immoral, sinful, wicked, or abominable (Thomas & Whitehead, 2015). The volitional and environmental explanations were consistent with traditional narratives on same-sex attraction. The volitional argument acknowledged that individuals cannot control which impulses and urges they receive, but *can* control whether or not to act upon them. Environmental arguments, though acknowledging external causes, frequently attributed same-sex attraction to the moral failings of an individual's parents; lesbians are thought to have been sexually abused by their fathers, whereas gay men are supposed to have suffered under domineering mothers and absent fathers. Each of these narratives reinforce the notion that homosexuality can—and should—be avoided, ultimately acknowledging an individual's personal responsibility in either causing their condition (volitional) or correcting it (environmental). Where teachings began to diverge from attribution theory was in the explanations of homosexuality's biological basis. Though the authors of these

religious articles were sensitive to the fact that people do not choose their sexual orientation, their biological tendencies were nonetheless stigmatized, both being likened to alcohol, gambling, birth defects, and developmental disabilities.

Evangelical teachings diagnosed LGBTQ individuals with an incurable disorder and placed the burden of treatment management on the individual. As one author stated, “What, then, do we say about genetic deformities or birth defects? Are they, too, ‘normal’ because a significant number of people were born with them?” (Thomas & Whitehead, 2015). Rather than outright denying any possible biological factors contributing to this value-violating trait, religious teachings attempted to discredit the normalizing *implications* of these findings. It was *God’s perspective* in how to deal with these physical conditions that mattered, not the perspectives of secular humans. In this way, the moral narratives of evangelicalism served to inoculate rank-and-file believers against the attribution effects of growing scientific knowledge (Thomas & Whitehead, 2015). Similarly, moral narratives may bolster defenses against attribution effects with respect to other stigmatized conditions, including mental illness.

Religious Attributions for Mental Illness

Conceptions of illness as an indicator of sin and degeneracy are present in society today, as indicated by the stigmatizing doctrine of various religious organizations and cultural stereotypes of those with mental illness. From a secular perspective, PWMI are likely to be assessed as blameworthy, incompetent, violent, unpredictable, and tainted (Arbóleda-Florez & Stuart, 2012). In studying rural communities, Gsell (2010) found that religious commitment was significantly and positively related to greater perceptions of

mental illness stigma, as well as a belief that mental illness was both intangible and incurable. Not only did religious commitment relate to higher perceptions of stigma, Wesselmann and Graziano (2010) found that religious individuals who agreed with secular stereotypes of mental illness were more likely to attribute mental health conditions to moral failure. Specific causal attributions for mental illness among religious individuals include not only sin and failure, but lack of sufficient faith, divine retribution, restorative discipline, or demonic possession.

Numerous religious sects attribute mental illness to spiritual causes. Christian Science teaches that physical and psychological malaise are the consequence of cognitive errors, rather than the result of biology, and should be treated solely through prayer (Wilson, 1961; Prinz-Wondollek, 2011). Though Christian Science does not prohibit medical treatment, the Church states that prayer is most effective in the absence of modern medicine (Fair, 1985; Schoepflin, 2003; Trammel, 2010). This exhortation to utilize prayer in lieu of formal help-seeking has resulted in multiple child deaths, often from treatable conditions (Commonwealth v. Twitchell, 1993). The Church of Scientology takes an even more antagonistic stance, denying the existence of mental illness and referring to those with mental illness as "insane," all while decrying psychiatric treatment as both negligent and "brutal in the extreme" (Church of Scientology International, 2018). According to a study performed by Leavey, Lowenthal, and King (2016), Christian, Jewish, and Muslim clergy often acknowledge the role of biology in the etiology of mental illness, yet still place strong emphasis on moral and social factors. Social factors, such as a "spiritual inheritance" of sin/illness (i.e., Exodus

20:5) or an abandonment of religious belief, are still thought to play a significant causal role in the development of psychological malaise. Unsurprisingly, similar emphases on social factors, personal decisions, and spirituality have been identified amongst churchgoers (LifeWay Research, 2014). These findings are consistent with that of Thomas and Whitehead (2015), who suggested that attribution effects would be resisted not through a denial of biomedical knowledge, but through its deemphasis.

In recent years, various Protestant Christian denominations have come under scrutiny for their construal of disabilities and illness as the result of spiritual malaise, specifically in the context of child rearing. Because many Protestants believe that physical punishment plays a pivotal role in moral development (Ellison, Musick, & Holden, 2011; Pearl & Pearl, 1994), children of Christian parents are at an elevated risk of abuse. Children who receive physical punishment are seven times more likely to experience abuse, over twice as likely to sustain injuries requiring hospitalization, and may even die as a result of corporal punishment (Bugental, Martorell, & Barraza, 2003; Gershoff, 2008; Gershoff & Bitensky, 2007; Hodson, 2011; James, 2011; Jurgens, 2016; Zolotor, Theodore, Chang, Berkoff, & Runyan, 2008). Stobart (2006) found that the majority of caregivers who engaged in religiously-motivated child abuse identified as Christian and were attempting to purge their child of an evil or demonic presence. Between 2016 and 2017, the Department for Education (DfE) found that approximately 1,500 child abuse cases were similarly linked to religious beliefs in London alone (2017).

Religiosity and Help-Seeking

The tendency of religious individuals to assess psychological malaise as a spiritual matter appears to be a double-edged sword: though seventy-five percent of Protestant Christians believe that an individual with a mental illness can thrive spiritually regardless of whether or not their mental illness has been stabilized (LifeWay Research, 2014), this mindset may indicate a lack of understanding—and a failure to properly emphasize—formal help-seeking. Noticeably, clergy are often unequipped to deal with mental health problems (Leavey et al., 2016; Wang, Berglund, & Kessler, 2003; Weaver, 1995). In a recent study, LifeWay Research (2014) found that one in five pastors report reluctance to engage with congregants experiencing a mental illness because they believe it would be too emotionally taxing and time-consuming. This finding is particularly unsettling; the same study revealed most churchgoers (half of pastors and 40% of congregants) believe psychological treatment should be pursued only after spiritual interventions have failed. Though the majority of respondents—clergy and parishioners alike—agreed that medication and psychological treatment had their place, this attitude does not translate to actual help-seeking. Unger (2011) found that Baptist clergy are just as likely as the lay population to seek formal help, despite experiencing a higher rate of acute depression compared to the average population. Amongst the lay population, increased religiosity has been consistently associated with preferences towards religious help-seeking (Chalfant et al., 1990; Gsell, 2010; Mitchell & Baker, 2000; Sood et al., 2012) and an aversion to formal psychological treatment (Crosby & Bossley, 2012). Though spirituality and religion are important coping strategies amongst PWMI (Dillon

& Wink, 2007; Pargament, 1997), the tendency of the devout to construe illness as divine intervention requiring expiation often results in a failure to consider formal help a viable or valid option (Meyer, 2001; Sheikh & Furnham, 2000; Ying, 1990). Convictions in the spiritual etiology of mental illness are so strong that many Christians believe traditional treatments (i.e., psychological therapy or psychotropic medications) have no merit in addressing psychological illness (Armentrout, 2004; Gaines, 1998; Johnson, 1997; Wesselmann et al., 2015). Consequently, religious PWMI are forced to reckon with the possible interpersonal costs of disclosing a mental health condition, as religious coping is often social in nature (Krause, Ellison, Shaw, Marcum, & Boardman, 2001).

In fact, nearly one quarter of religious PWMI who disclosed their mental illness reported the response of their faith community prompted them to leave their church; over half the individuals who broke ties with their congregation did not go on to join another faith community (LifeWay Research, 2014). Of congregants who died by suicide, one third were attending church in the months leading up to their death but only 4% of clergy were aware of their mental state; almost half of churchgoers who were close to the victim stated they saw no signs of suicide risk (LifeWay Research, 2017). Though eighty percent of congregants agreed their church would be a safe and supportive environment for individuals contemplating suicide (LifeWay Research, 2017), religious groups may make support difficult for those who deviate from expected values and norms (Payne, Bergin, Bielema, & Jenkins, 1991). In the same study on the ecclesial response to individuals touched by suicide, LifeWay Research (2017) reported that half of respondents agreed that gossip—rather than support—was the most likely response to

learning a fellow congregant was in need. Indeed, Protestants are less tolerant of value violations committed by fellow Christians compared to non-believers (Mullen, Williams, & Hunt, 1996). Thus, not only do these perceived value-violators experience increased rates of depression and anxiety (Shafranske & Malony, 1996), they also risk criticism, embarrassment, damaged reputation, censure, and exclusion from within their own faith community (Ellison, 1991; Ellison, 1993; Gsell, 2010). Further, the outcomes associated with internalized stigma (interpersonal anxiety, relationship disruption) were associated positively with spiritual—but not social—support-seeking (Gsell, 2010). Experienced stigma, then, seems to be the defining factor in the decision to seek help. There is some evidence to support the notion; Yorgason and colleagues (2012) found that, although Protestant participants held more negative views of gambling than Catholic participants, Protestants were significantly more willing to disclose their addiction than were Catholics. Anticipated levels of religious support—rather than doctrine—appeared to determine the informal help-seeking behaviors among believers (Yorgason et al., 2012). Similarly, anticipated levels of religious support may play a pivotal role in indirect-support seeking behaviors among religious PWMI.

Gender, Mental Illness, and Stigma

Another important factor in the relationship between religiosity and mental illness stigma is gender. It is important to note that, historically speaking, psychological literature has not always properly delineated between sex and gender, using the terms interchangeably. In attempt to correct this improper usage, the American Psychological Association (2012) released a set of guidelines to establish proper terminology when

discussing sex and gender. Where the term *sex* refers to an individual's biological status (i.e., genitalia, gonads, internal organs, etc.), *gender* refers to the cultural attitudes and behaviors typically associated with biological sex. Hence, gender—but not sex—is a social construct and identity; as such, this paper will use the term gender when referring to men and women as social groups. In the event that cited literature conflates gender with sex, the term "gender" will be used.

Social science and public health researchers have long supposed that gender role expectations have strong and countervailing effects on men and women, specifically with respect to health outcomes. From an early age, men are socialized to downplay weakness to deadly results; on average, men live shorter lifespans, no doubt a consequence of more reluctance to acknowledge illness, longer waiting periods before seeking illness treatment, and higher levels of treatment noncompliance (Harrison, 1978). The gender differences in mental health outcomes are stark; though men are significantly less likely to be diagnosed with depression compared to women (Real, 1997), they are two-to-four times more likely to die by suicide (Stone et al., 2018). Despite the higher rate of suicides among men, women are more likely to be diagnosed with internalized disorders commonly associated with suicide, whereas men are more likely to be diagnosed with externalizing disorders (Nolen-Hoeksema, 1994; Needham & Hill, 2010; Rosenfield, 1999; 2000). Though some theorize the difference in the manifestation of mental illness is due to biological differences between the sexes, there is strong evidence to support that socialization, rather than biology, account for the difference in mental illness expressions (Harrison, 1978; Wong, Ho, Wang, & Miller, 2016); or, as Real (1997) states, individuals

are "taught that depression was predominantly a woman's disease" (p.22). Boys, taught to divorce their feelings, are discouraged from emotional expression and forced to externalize mental health problems; girls, on the other hand, are encouraged to foster emotional expression and interdependence (Bem, 1974), predisposing them towards internalization of mental health problems and, consequently, predominantly affective symptomatology (Rosenfield, Vertefuille, & McAlpine, 2000). This bears forth in the epidemiology of mental illnesses: while women have a significantly higher lifetime prevalence of mood disorders, men have a higher lifetime prevalence of mood-numbing disorders, such as impulse-control and substance use disorders (Kessler et al., 2005; Real, 1997).

In a meta-analysis of the literature on conformity to masculine norms and mental health-related outcomes, Wong and colleagues (2017) found that adherence to masculine norms (i.e., emotional control, self-reliance, competition) was strongly and negatively associated with social competence, physical health, and psychological well-being. Further complicating matters is the impact of gender role expectations on friends, family, and professionals. Rather than perceiving men struggling with mood disorders as in need of medical help, other members of society, including medical professionals, are likely to view symptoms as a sign of personal weakness (Brody, 1992; Real, 1997). Sood and colleagues (2012) found that, among religious mothers, parents of girls were more likely to attribute their child's separation anxiety disorder to medical causes, whereas mothers of boys were not. Rather than asking for help, men with mental illness are expected to "suck it up" and "take it like a man" (Joiner, Alfano, & Metalsky, 1992). Hence, the

bleak outcomes associated with adherence to masculine ideals are likely the natural consequence of a society that particularly devalues and discourages help-seeking among men.

Gender and Help-Seeking

Knowing that emotional control, self-sufficiency, and self-reliance are conceptualized as "masculine" traits (Bem, 1974), it comes as no surprise that men are more likely to have negative attitudes towards help-seeking, and are therefore less likely to seek treatment for emotional problems and psychological illness (Butcher et al., 1998; Leaf & Bruce, 1987; Moller-Leimkuhler 2000; Nam et al., 2010). Outside the realm of formal help-seeking, men are less likely to utilize self-disclosure compared to women (Galdas, Cheater, & Marshall, 2005; Lane, Addis, & Cochran, 2005; Loewenthal, Macleod, Lee, Cook, & Goldblatt, 2002). In their meta-analysis on the role of "sex" in self-disclosure, Dindia and Allen (1992) found that the overall likelihood of self-disclosure was partially moderated by the gender of the potential support source and the nature of the relationship between the support-seeker and prospective supporter. Overall, women were slightly more likely to employ self-disclosure, participants of all genders were more likely to disclose to women, and women were more likely to disclose to a support source when the two shared a personal relationship. Interestingly, when the prospective supporter was a stranger, men and women were equally likely to self-disclose, lending credence to the interpretation that men forgo self-disclosure as a means of saving face in front of their social networks.

With respect to disclosing a mental health problem, men are judged more harshly than their feminine counterparts. When men remain silent about a mental illness (and, thereby, adhere to gender role expectations), they are deemed psychologically healthier than their disclosing counterparts; conversely, women who conceal their mental health condition are deemed *less* healthy than those who disclose (Derlega & Chaikin, 1976). This reluctance to disclose a mental illness has a strong practical basis: evidence suggests that men are less accepting of and more likely to endorse various stereotypical beliefs about persons with mental illness than women (Addis & Hoffman, 2017; Farina, 1981; Penn & Link, 2002). In fact, men who reach out for social support during bouts of depression are likely to be met with rejection or blatant hostility, whereas women are likely to find nurturance and comfort (Joiner et al., 1992). Yet, far more may factor into the attributions of blame than merely gender expectations; Vogel, Heimerdinger-Edwards, Hammer, and Hubbard (2011) found that, despite strong associations between adherence to masculine norms and help-seeking aversion, a significant amount of the variance in help-seeking attitudes remains unaccounted for. There is evidence to indicate this variance may be, at least in part, related to religiosity.

Gender and Religiosity

An abundance of literature indicates that religiosity affects men and women differently. Broadly speaking, women report higher levels of religiosity than men (Ellis, Hoskin, & Ratnasingam, 2016; Miller & Hoffman, 1995; Nguyen & Zuckerman, 2016; Schnabel, 2016). Nevertheless, among religious individuals, Wesselmann and Graziano (2010) found that men were more likely to endorse religious causal beliefs about mental

illness compared to women. Helm, Berecz, and Nelson (2001) found that religious fundamentalism in particular had counterbalancing effects based on gender. Among women, higher levels of fundamentalism were positively associated with externalized beliefs and inversely correlated with self-pride; among men, however, high levels of fundamentalism were positively associated with improved self-worth and an increased ability to detach from one's own feelings. Overall, Helm and colleagues found that religious and gendered socialization differentially predicts whether or not men and women internalize/externalize feelings of guilt and shame.

It is important to note that more recent literature indicates that gender differences in religiosity appear to be a predominantly Christian phenomenon (Schnabel, 2015). Notably, this gender difference fluctuates across cultures and Christian denominations, with differences at times disappearing on certain measures. Further, though the majority of world religions show no difference in religiosity between genders, some religions (i.e., Judaism and Islam) have been known to show gender differences in the opposite direction, with men exhibiting more religiosity than women (Schnabel, 2015; Sullins, 2006). As the overwhelming majority of the United States population identifies as Christian, it is reasonable to assume religiosity impacts the help-seeking behaviors of more American women compared to American men.

The Present Study

In the context of religiosity, PWMI have been consistently demonized by the religious communities upon whom they rely. Despite this ill-preparedness to assist PWMI, clergy and other religious resources are still the primary and preferred help-

source amongst the devout. As such, it is imperative to examine whether or not PWMI within religious communities are attempting—albeit ineffectively—to access support using indirect methods. If this is indeed the case, researchers and public health officials can begin developing targeted educational interventions for faith-based communities (Friedli, 1999; Koenig et al., 2012, Wesselmann & Graziano, 2010).

The aims of this study are fourfold: 1) determine whether higher perceptions of mental illness stigma correlate with greater frequency of ISS across all support sources; 2) determine whether greater religiosity correlates with greater frequency of ISS across all support sources; 3) examine whether religiosity mediates the relationship between perceived mental health stigma and support-seeking behaviors; and, 4) establish whether the aforementioned mediational relationship is moderated by gender.

Based on the prior literature, I hypothesized that greater perceived stigma of mental illness would be related to a greater frequency of ISS across all support sources (*Hypothesis 1*). I predict that, overall, individuals who report higher levels of religiosity will report higher levels of indirect support-seeking compared to low or non-religious individuals (*Hypothesis 2*). Similar to Malouf and Mickelson (2018), I predict that religiosity will mediate the relationship between perceived mental illness stigma and support-seeking behaviors, such that greater levels of religious salience would be associated with higher levels of ISS (*Hypothesis 3*); moreover, I predict that this mediational model will be further moderated by gender, such that the mediation pathway to ISS through religious salience will be significantly stronger among women compared to men (*Hypothesis 4*).

Methods

Participants

Participants were 701 individuals (269 men, 432 women) who completed a one-time, anonymous survey through Qualtrics Survey Software. Recruitment was conducted through the Arizona State University online subject pool, SONA (44.8%) and Amazon's Mechanical Turk, or "MTurk" (55.2%). The median age of participants was 28 years old, with MTurk participants being older than SONA participants (MTurk: *Mdn* = 36, Range: 19-84; SONA: *Mdn* = 20, Range: 18-59). The sample was largely homogenous in terms of demographic characteristics: participants were mostly White/European (60.1%), heterosexual (86%), college educated (94.5%), and lower-to-middle income (72.2% of participants earned less than $80,000 annually). Responses represented a variety of different religious and/or spiritual beliefs, over half (51.6%) of participants identified as Christian, one-quarter as atheist/agnostic (24.4%), and 15.7% as spiritual but not religious.

In order to qualify for enrollment, participants had to be at least 18 years of age, fluent in English, and either be enrolled as an undergraduate student at ASU (SONA) or reside in the United States (MTurk).

Sample size was calculated using G*Power (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2007) and was calibrated to detect an effect size (f^2) of .10. Effect size was chosen based on meta-analyses which consistently demonstrated that religiosity tends to have effect sizes of approximately .10 (for review,

see Hackney & Sanders, 2003). Power was set to .95, with $\alpha = .05$, CI = 95%, and accounted for three tested predictors.

Procedures

Study procedures were approved by an institutional review board. Participants were provided a brief explanation of study procedures, possible risks and benefits, and provided informed consent prior to participating in the study. After obtaining consent, participants completed a one-time anonymous survey consisting of two vignettes and several questionnaires (see Appendix B). Vignettes and questionnaires were counterbalanced in order to minimize possible order-effects. SONA participants were given the opportunity to receive 1.5 research credits for their participation in this study; MTurk participants were compensated $1.25 upon completion of the survey.

As the purpose of this study was to examine help-seeking behaviors among PWMI, participants were assessed for depression, anxiety, and worry. The majority of participants (83.5%) scored above the established cutoffs for possible clinical levels of at least one disorder (one disorder: 41.1%; two disorders: 41.4%; three disorders: 1.0%). The established cutoffs are as follows: ≥ 16 on the CES-D (Radloff, 1977), ≥ 10 on the BAI (Julian, 2011), and ≥ 40 on the PSWQ (Meyer et al., 1990). Participants who failed to meet a minimum percentage of attention checks were excluded from analyses (SONA: 80% passed; MTurk: 100% passed). Similarly, persons unwilling to disclose their gender identity were excluded from analysis, as the role of gender in mental illness stigma one of the main focuses of this study.

Sociodemographics

Demographic characteristics believed to be associated with one or more of the study variables were assessed, including gender, age, education, marital status, socioeconomic status, frequency of contact with support sources, race/ethnicity, sexual orientation, religious affiliation, and frequency of religious service attendance. For each of the following measures, *other* was an open-ended text response option. *Gender* consisted of four categories: man, woman, other, and prefer not to answer. *Education* consisted of four categories for the college sample, each defined by credit hours earned (freshman [< 25 credits], sophomore [25 to 55 credits], junior [56 to 86 credits], or senior [87+ credits]) and five categories for the community sample: less than high school, high school diploma/GED or equivalent (i.e., HiSet, TASC), some college/associate's degree, college degree (i.e., B.A., B.S.), and post-graduate degree (M.S., Ph.D., M.D., J.D., etc.). *Relationship status* consisted of six categories: single (never married), in a relationship (never married), married/domestic partnership, separated, divorced, and widowed. *Socioeconomic status* was defined as total family income at the time of the survey and was categorized as: less than $20,000, $20,001 - $40,000, $40,001 - $60,000, $60,001 - $80,000, $80,001 - $100,000, $100,001 - $120,000, or more than $120,000. *Frequency of contact with support sources* was assessed via self-report on how often respondents have had contact with a variety of support sources (parent(s), other family member(s), significant other, friends, clergy/spiritual mentor, members of faith community) over the past six months. Responses consisted of a five-point Likert scale ranging from 1 (*never*) to 5 (*more than once a week*). *Ethnicity* was a self-report item consisting of white

(Hispanic), white (Middle-Eastern), white (Not Hispanic or Middle-Eastern), black (African American), Native American or Alaska Native, Asian or Pacific Islander, other, and prefer not to answer. Respondents who specified ethnicities encompassed by the aforementioned categories were recoded as such (e.g., *Irish* or *Scottish* were coded as *White, not Hispanic or Middle-Eastern*). *Sexual orientation* consisted of five categories: heterosexual (straight), homosexual (gay or lesbian), bisexual, other, and prefer not to answer. *Religious affiliation* was a self-report measure consisting of Atheist/Agnostic, Christian (Catholic), Christian (Evangelical), Christian (Mainline Protestant), Jewish, Muslim, spiritual but not religious, other, and prefer not to answer. *Religious service attendance* was assessed via self-report over the prior six months and consisted of a five-point Likert scale ranging from 1 (*never*) to 5 (*more than once a week*).

Mental Health Measures

Depression was assessed using the Center for Epidemiological Studies–Depression scale (CES-D; Radloff, 1977). The CES-D consists of 20 self-report items which measure symptoms associated with depression over the past seven days. Example items include: "*during the past week, I had crying spells*"; "*during the past week, I felt like I could not shake off the blues even with help from my family and friends*". Each item is measured on a 4-point Likert scale, ranging from 0 = *never/rarely (<1 day)* to 3 = *most/all the time (5-7 days).* A total depression score was calculated by summing the individual items, with higher scores indicating more depressive symptoms. Reliability analyses of depressive symptoms demonstrated good reliability (men: $\alpha = .94$; women: $\alpha = .94$).

Anxiety was assessed using the Beck Anxiety Inventory (BAI; Beck, Epstein, Brow, Steer, 1988) and a modified version of the Penn State Worry Questionnaire (PSWQ; Meyer, Miller, & Borkovec, 1990). The BAI consists of 21 items that assess how often respondents experienced anxiety related symptomology over the previous week. Example items include: "*during the past week, I have felt fear of the worst happening*"; "*I have been bothered by fear of losing control over the past seven days.*" Responses are recorded on a 4-point Likert scale ranging from 0 = *not at all* to 3 = *most/all the time*. A total anxiety score was calculated by summing the individual items, with higher scores indicating the presence of more anxiety symptoms. Reliability analyses of anxiety symptoms demonstrated good reliability (men: $\alpha = .94$; women: $\alpha = .95$). The PSWQ consists of 16 items highly consistent with the cognitive symptoms of Generalized Anxiety Disorder (GAD). The scale has been rephrased to reflect the past week; one item ("I have been a worrier all my life") was removed to remain consistent with the temporal focus of this measure. Example measures include: "*I knew I should not worry about things, but I just couldn't help it*"; "*I worried about projects until they were all done*". Responses were rated on a 5-point Likert scale, ranging from 1 = *not at all typical of me* to 5 = *very typical of me*. A total worry score was calculated by summing the individual items, with higher scores indicating a higher frequency of worry. Reliability analyses of worry measures demonstrated good reliability (men: $\alpha = .95$; women: $\alpha = .95$).

Perceived Stigma of Mental Illness Measures

Depression Stigma was assessed using a modified version of the Depression Stigma Scale (DSS; Griffiths, Christensen, Jorm, Evans, & Groves, 2004). The scale consists of a short vignette and two brief response scales. The vignette described an individual, Sam, who exhibited symptoms associated with depression. In order to control for possible gender effects, Sam's gender was randomly presented to participants as either masculine or feminine. After each vignette, participants responded to 21 items about Sam's "problem": 10 items examine internalized depression stigma (e.g., "*a problem like Sam's is a sign of personal weakness*"; "*I would not vote for a politician if I knew they had suffered a problem like Sam's*"), 11 examine experienced depression stigma (e.g., "*most people believe that people with a problem like Sam's could snap out of it if they wanted*"; "*most people believe that Sam's problem is not a real medical illness*"). Two additional items pertaining to religiosity were included in each subscale ("*a problem like Sam's is a sign of spiritual weakness*"; "*most people believe that a problem like Sam's is a sign of spiritual weakness*"; "*people with a problem like Sam's don't consistently engage in spiritual practices (prayer, studying scriptures, etc.)*"; "*most people believe that people with a problem like Sam's don't consistently engage in spiritual practices (prayer, studying scriptures, etc.)*"). All items were rated on a 5-point Likert scale ranging from 0 = *strongly disagree* to 4 = *strongly agree.* A total score for depression stigma was calculated by summing the individual items, with higher scores indicating greater perceived depression stigma. Reliability analyses of perceived depression stigma demonstrated good reliability (men: $\alpha = .85$; women: $\alpha = .85$).

Anxiety Stigma was assessed using a modified version of the Generalised Anxiety Stigma Scale (GASS; Griffiths, Batterham, Barney, & Parsons, 2011). The scale consists of a short vignette and two brief response scales. The vignette describes Jamie, an individual exhibiting symptoms associated with generalized anxiety disorder (GAD). In order to control for possible gender effects, Jamie's gender was randomly presented to participants as either masculine or feminine. After the vignette, participants responded to 24 items about Jamie's "problem": 12 items examine internalized anxiety stigma (e.g., "*people with a problem like Jamie's should be ashamed of themselves*"; "*people like Jamie are to blame for their problem*"), 12 items examine experienced anxiety stigma (e.g., "*most people think that people with a problem like Jamie's are just lazy*"; "*most people think that people with a problem like Jamie's are unstable*"). Two items pertaining to spirituality were added to each scale ("*a problem like Jamie's is a sign of spiritual immaturity"; "most people think that a problem like Jamie's is a sign of spiritual immaturity"; "people with a problem like Jamie's don't have enough faith in God's plan*"; "*most people think that people with a problem like Jamie's don't have enough faith in God's plan*"). All items were rated on a 5-point Likert scale ranging from 0 = *strongly disagree* to 4 = *strongly agree.* A total score for anxiety stigma was calculated by summing the individual items, with higher scores indicating greater perceived anxiety stigma. Reliability analyses of perceived anxiety stigma demonstrated adequate reliability (men: $\alpha = .89$; women: $\alpha = .89$).

Religiosity Measures

Salience of Belief was assessed using the Religiosity Salience-Cognition Scale—Short Form (Blaine & Crocker, 1995), a 5-item scale that measures the prominence of religion in everyday experiences. Example items include: "*being a religious person is important to me*"; "*I am frequently aware of God in a personal way.*" Items are rated on a 7-point Likert scale ranging from 0 = *strongly disagree* to 6 = *strongly agree*. A total religious salience score was calculated by summing individual responses, with higher values reflecting increased salience. The scale demonstrated good reliability (men: α = .94; women: α = .95).

An additional item (*N/A—I don't believe in God*) was added in the branch logic for respondents who reported being atheist or agnostic; N/A responses were coded as 0, as the absence of a belief in God would suggest the lack of religious salience. Note: responses from atheists and agnostics were imputed to 0, as strong belief in a deity is antithetical to atheism/agnosticism.

Help-Seeking Measures

Indirect support-seeking (ISS) was assessed using an adapted version of Williams and Mickelson's (2008) measure of ISS, which was developed in collaboration with the authors responsible for developing the construct itself (Barbee & Cunningham, 1995). The measure includes 13 items asking participants how often they behaved in a certain way towards various support sources over the course of the last month (e.g., "*complained about your problems in a general way, without telling details or asking for help*"; "*felt like you wanted comfort from them but didn't tell them why*"). Two items were added to

address indirect support-seeking in a religious context ("*asked for prayer but didn't provide details*"; "*asked for Scripture specific to a topic (e.g., encouragement, anxiety, etc.) but didn't explain why*"). Items are rated on a 5-point Likert scale ranging from 0 = *not at all* to 4 = *very often*. A mean score was calculated for the items across each source and then a mean was calculated for all sources combined, such that higher scores indicates a higher frequency of ISS. The scale demonstrated good reliability (men: α = .95; women: α = .95).

Disclosure was assessed using the Strategies for Revealing Secrets Scale (Afifi & Steuber, 2009). Participants were asked to imagine disclosure of a series of targeted others (one friend, one family member, and one clergy member/spiritual mentor). With the target individual in mind, participants responded to a 25-item measure indicating their likelihood of using various disclosure tactics (e.g., "*I would leave evidence or information about the secret for the person to discover*"; "*if this person asked me about the secret, I would admit it*"; "*I would see how this person would respond to the secret by revealing smaller parts of it first*"). One item was added ("*I would tell this person the secret via text or instant messenger*") and two items were combined ("*I would reveal the secret to this person in a letter or email*") in order to account for modern communication habits. Items are rated on a 7-point Likert scale ranging from 0 = *very unlikely* to 6 = *very likely*. A total disclosure likelihood scale was calculated by summing the individual items, with higher values indicating a higher likelihood of disclosure. The scale demonstrated good reliability (men: α = .94; women: α = .93).

Potential Covariates

<u>*Religious Fundamentalism*</u> was assessed using Altemeyer and Hunsberger's (2004) Revised Religious Fundamentalism Scale, a 12-item scale designed to measure the extent to which respondents' believe their creed to be uniquely inspired and inerrant. Example items include: "*God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed*"; "*when you get right down to it, there are basically only two kinds of people in the world: the Righteous, who will be rewarded by God; and the rest, who will not.*" For the purposes of this study, the scoring metric was reduced from a 9-point to a 7-point Likert scale, as internal consistency of Likert scales tend to diminish with response scales higher than seven (Preston & Colman, 1999). Responses ranged from -3 = *strongly disagree* to +3 = *strongly agree;* a total fundamentalism score was calculated by summing the individual items, with higher values indicating increased fundamentalism. The scale demonstrated good reliability (men: $\alpha = .94$; women: $\alpha = .94$).

This scale was not administered to respondents who reported being atheist or agnostic; scores for these participants were imputed to -3, as a lack of belief in God suggests a lack of fundamentalism pertaining to said nonexistent beliefs. Similarly, an additional item (*N/A—I don't believe in God*) was added in the branch logic for respondents who reported being spiritual but not religious; N/A responses were also coded as -3, as the absence of a formal religious belief would suggest a lack of religious fundamentalism.

Religious Orthodoxy was assessed separately for Christianity, Judaism, and Islam using Fullerton and Hunsberger's (1982) Christian Orthodoxy Scale and two adaptations thereof. Each scale consists of a 24-item questionnaire designed to measure respondents' adherence the core tenants of their faith. Christian items include: "*God exists as Father, Son, and Holy Spirit*"; "*Jesus was born of a virgin.*" Items pertaining to Judaism were adapted from Maimonedes' Thirteen Principles of the Faith (Maimonides, 1178/2016); example items include: "*The Lord is our God; the Lord is one*"; "*the Torah was given by Moshe by God at Sinai.*" Muslim items were incorporated from Albelaikhi's (1997) Muslim Religiosity Scale; example items include: "*Muhammad is the true messenger of God and Muhammad's Message came for all people*"; "*believing that Muhammad is a prophet is necessary for salvation from Hell.*" Items are scored on a 7-point Likert scale ranging from -3 = *strongly disagree* to +3 = *strongly agree*; a total orthodoxy score was calculated by summing the individual items, with higher values indicating increased orthodoxy. As per Fullerton and Hunsberger's scoring recommendations, participants who responded "neither agree nor disagree" to 10 or more items had their orthodoxy scores excluded from analysis. The scale demonstrated good reliability (men: $\alpha = .97$; women: $\alpha = .95$).

Orthodoxy measures were only administered to Abrahamic monotheists (i.e., respondents who indicated belief in Christianity, Judaism, or Islam); participants were administered the Orthodoxy measure that corresponded with their religious affiliation. Scores for all other participants were imputed to -3, as disbelief in a religion precludes the existence of Orthodox beliefs.

Authoritarianism was assessed using an abridged version Altemeyer's (1998) RWA scale. The Right-Wing Authoritarianism—Revised Scale (RWA–RS; Manganelli Rattazzi, Bobbio, & Canova, 2007) consists of 14 items assessing authoritarian submission/aggression (e.g., "*our country desperately needs a mighty leader who will do what has to be done to destroy the sins and radical new ways that are ruining us*"; "*what our country really needs instead of more 'civil rights' is a good stiff dose of law and order*") and conventionalism (e.g., "*gays and lesbians are just as healthy and moral as anybody else*"; "*there is absolutely nothing wrong with nudist camps*"). Two items were slightly reworded in order to avoid language specific to Christianity ("*the Church and the Pope*" and "*church*" were changed to "*religious leaders*" and "*religious services*"). Items are rated on a 7-point Likert scale ranging from 0 = *totally disagree* to 6 = *totally agree.* A total score of authoritarianism was computed by summing individual responses, with higher values indicating increased authoritarianism. Reliability analyses of authoritarianism demonstrated good reliability (men: α =.92; women: α =.92).

Overview of Analyses

Multiple linear regression analyses were performed to examine the relation of perceived stigma, religiosity, ISS, and likelihood of disclosure. To test the proposed moderated mediation, I utilized structural equation modeling (SEM) (EQS 6.4, Bentler, 2006). Robust to correlations between predictors, capable of accounting for error within individual items, and even able to incorporate correlated error terms between items, SEM is able to account for all pathways, preventing the artificial inflation of any individual path's significance.

Preliminary analyses were performed using multiple linear regression, simultaneously regressing all major study variables (DSS, GASS, RSCS, ISS, and disclosure likelihood) over potential covariates (religious orientation, frequency of religious service attendance, religious fundamentalism, Christian orthodoxy, right-wing authoritarianism, BAI, CES-D, and PSWQ scores) and sociodemographic variables (recruitment source, gender). Religious orientation was dummy coded into three dichotomous variables (Abrahamic monotheism, religious other, and spiritual but not religious) using atheism/agnosticism as the control. Two variables, ISS and *direct support* sought from social support sources, were created by computing the sum of familial and amical support for both ISS and disclosure.

For hypothesis one, gender, recruitment pool, religious affiliation, and religious attendance were entered into the model as covariates. For hypothesis two, participant gender, recruitment pool, religious affiliation, BAI, CES-D, and PSWQ scores were entered into the model as covariates. For hypotheses three and four, recruitment pool, right-wing authoritarianism, religious service attendance, and religious orientation were entered into the model as covariates; religious orientation was dummy-coded into a dichotomous variable (1 = monotheists; 0 = atheist, agnostic, and nonreligious). With respect to indicator variables, married respondent's significant others were coded as *familial* support-sources for both ISS and disclosure likelihood; likewise, significant others of unmarried respondents were coded as *amical* support-sources. Latent variables were assessed for measurement invariance and exhibited no significant change in factor loadings between men and women.

To ensure the proposed mediational model was properly identified, both measurement and structural model identification rules were observed. Measurement model identification rules dictate that 1) each latent factor must have an indicator fixed to 1.0 in order to anchor the construct, 2) latent factors must possess at least two indicator variables, 3) latent constructs must remain uncorrelated, 4) the errors of indicator variables must remain uncorrelated, and 5) indicator variables must not be cross-loaded (i.e., indicators should not be related to more than one latent construct). Satisfying rules 1 and 2, latent constructs (ISS and disclosure) each consisted of three indicators: support sought from family, support sought from friends, and support sought from religious sources; as spouses and parental figures are highly salient social relationships, familial support was fixed to 1.0 for both constructs. In accordance with rules 3-5, each construct and their errors remained uncorrelated and all indicators were free of cross-loading. As the present model utilizes both observed and latent variables, I utilized the standard model specification formula ($q = k(k+1)/2$; where q denotes the number of known parameters) in order to ensure the partial structural model was properly over-identified, containing 105 known to 28 unknown parameters.

Based on the sample size recommendations by Bentler (2006), the present sample size ($N_{women} = 432$; $N_{men} = 269$) was sufficient to test the proposed mediational model with an *N:q* ratio slightly under a 10:1 (269:28) for men and a 15:1 (432:28) *N:q* ratio for women (where q represents the number of free parameter estimates). The recommended ratio is between 5:1 and 10:1 (in this instance, between 140 and 280 cases).

Preliminary examination of the data revealed that all of the assumptions of linear regression and SEM (e.g., linearity, multivariate normality, random residuals) had been met in the current dataset, with several minor exceptions: heteroscedasticity among religious ISS, significant amounts of shared variance among indicator variables, moderate correlation between exogenous variables (see Table 2), and slight violation of multivariate normality. A plot of standardized residuals vs standardized predicted values showed signs of funneling among religious ISS measures, suggesting the assumption of homoscedasticity had been violated. Similarly, P-P plots for regression models suggested that the assumption of normality of residuals may have been violated. As regression is robust to minor violations of homoscedasticity and normality, no corrective measures were taken. No multicollinearity was found among the predictors and no influential cases were biasing the model.

With respect to indicator variables, shared variance merely suggests that the latent constructs, ISS and disclosure, were properly specified. The strong correlation between exogenous variables ($b_{\text{women}} = .71$, $p < .01$; men: $b_{\text{men}} = 0.74$, $p < .01$) was likely due to the high comorbidity of depression and anxiety (cf. Rogers, Wieman, & Baker, 2020; Vittengl, Clark, Smits, Thase, & Robin, 2019). Perceived stigma of depression and anxiety were examined separately, as gender-specific stereotypes of mental illness may differ between affective disorders (cf. Addis & Hoffman, 2017; Real, 1997; Sood et al., 2012). Although Mardia's coefficient of multivariate kurtosis was slightly elevated (Mardia's = 10.68), SEM is highly robust to violations of normality. As such, all multivariate analyses utilized the maximum likelihood (ML) estimation method.

Analysis of collinearity statistics revealed a lack of multicollinearity, as VIF scores were well below 10, and tolerance scores above 0.2. The Durbin-Watson statistic showed that the assumption of independent residuals had been met, as the obtained values were close to 2. Cook's Distance values were all under 1, suggesting individual cases were not unduly influencing the model.

Results

Descriptive Statistics

Descriptive statistics for all major study variables are provided in Table 1. As the purpose of this study was to examine help-seeking behaviors among PWMI, participants were assessed for depression, anxiety, and worry. Of the 701 participants included in the final sample, 83.5% scored above the established cutoffs for possible clinical levels of at least one disorder (one disorder: 41.1%; two disorders: 41.4%; three disorders: 1.0%). Bivariate correlations between all major study variables were conducted and are summarized in Table 2.

Contrary to prior research, I observed no significant difference in religiosity salience-cognition between men and women (see Table 2 for descriptive statistics of major study variable). Men did, however, report significantly higher levels of avoidant religious attachment compared to women. Consistent with prior literature, I observed significant differences between men and women with respect to perceived mental illness stigma, ISS, and disclosure likelihood. Compared to men, women reported higher levels of *experienced* stigma for both depression and anxiety. Interestingly, however, men reported significantly higher levels of *internalized* stigma for both affective disorders,

and significantly higher overall perceived stigma for anxiety specifically. Finally, men reported significantly lower levels of support-seeking behavior, indirect or otherwise, compared to women.

Mental Illness Stigma as a Predictor of Indirect Support-Seeking

To test the prediction that greater perceptions of mental illness stigma will be related with greater ISS (*Hypothesis 1)*, perceived stigma scores were entered simultaneously a linear regression predicting ISS, with religious ISS and social ISS in separate models as outcomes. Consistent with Hypothesis 1, both perceived anxiety stigma and perceived depression stigma were found to be unique and significant predictors of ISS in social relationships, with higher levels of reported perceived stigma being positively related to frequency of reported ISS among social sources ($b_{ANX} = 0.01$, $SE = 0.003$, $t = 2.07$, $p = .04$; $b_{DEP} = 0.01$, $SE = 0.003$, $t = 3.27$, $p = .001$). Jointly, perceived stigma of depression and anxiety accounted for 6% of the variance in social ISS ($R^2 = .06$, $F(2, 693) = 25.60$, $p <.001$).

Likewise, perceived depression and anxiety stigma were found to be unique predictors of ISS toward religious support sources, such that higher levels of perceived stigma were positively related to greater frequency of ISS among religious sources ($b_{ANX} = 0.01$, $SE = 0.002$, $t = 4.40$, $p < .001$; $b_{DEP} = 0.01$, $SE = 0.003$, $t = 2.08$, $p =.04$; see Table 3). Perceived depression and anxiety stigma jointly accounted for 7% of the variance in religious ISS ($R^2 = .07$, $F(2, 692) = 37.98$, $p < .001$).

Religiosity Salience-Cognition as a Predictor of Indirect Support-Seeking

To test the prediction that greater levels of religiosity salience-cognition will correlate with greater ISS across all support sources (*Hypothesis 2)*, social and religious ISS were examined in separate models and regressed on RSCS. Consistent with Hypothesis 2, religious salience was a significant unique predictor of ISS, with higher levels of religious salience being positively related to frequency of ISS among both social and religious support sources (b_{REL} = 0.01, *SE* = 0.003, t = 2.18, p = .03; b_{SOC} = 0.01, *SE* = 0.004, t = 2.75, p = .01). Analyses revealed that religious salience uniquely accounted for a significant proportion of variance in social ISS (R^2 = .008, $F(1, 690)$ = 7.57, p = .01) and religious ISS (R^2 = .004, $F(1, 690)$ = 4.76, p = .03).

Mediational Model

In order to test the mediational model proposed in Figure 1 (*Hypothesis 3*), the data were analyzed using a partial structural model in EQS. In order to establish the presence of mediation, the following requirements must be satisfied: 1) at least one of the two exogenous variables must account for a significant portion of variance in RSCS (significant path(s) a_1 and/or a_2), 2) RSCS must be significantly correlated with one of the criterion variables, indirect support-seeking or overall likelihood of support-seeking (significant path(s) b_1 and/or b_2), establishing that RSCS is capable of functioning as a causal link, and 4) the effect of the exogenous variable(s) on criterion variable(s), controlling for the indirect pathway through RSCS, is significantly attenuated (nonsignificant paths $c`_1$ and/or $c`_2$). It is important to note that data were cross-sectional and, therefore, unable to establish temporal precedence.

Goodness-of-fit was assessed by examining the null model, or the chi-square (χ^2) value when the number of parameters equals zero), model chi-square, comparative fit index (CFI), root mean-square error of approximation (RMSEA), and RMSEA confidence intervals. In order to determine whether changes in fit were statistically significant, I utilized the change chi-square formula ($\Delta\chi^2 = \chi^2_{\text{initial}} - \chi^2_{\text{modified}}$; $\Delta df = df_{\text{initial}} - df_{\text{modified}}$) and entered the values into an online chi-square significance calculator (Sopper, 2018). CFI values from .90 to .94 were assessed as indicating adequate fit; values .95 and above (but no higher than 1) were interpreted as indicating good fit. RMSEA was considered to indicate good fit when values fell below .05, with confidence intervals ideally falling between 0 and .10.

Using EQS, the initial mediational path was examined; 5 cases were excluded due to missing data. Concerning kurtosis, the data was slightly leptokurtic (several variables were slightly higher than 1.0 and one indicator above 5). With respect to skewness, the multivariate distribution was slightly positively skewed: Mardia's coefficient was 17.85, above the ideal range of 3 to 5 but not excessively high as SEM is robust to violations of normality. Though the model chi-square was lower than that of the null model, the overall fit was poor, $\chi^2(48, N = 696) = 934.55$, $p < .001$, $CFI = .79$; $RMSEA = .16$ (C.I. = .15, .17). The iterative summary indicated the presence of step-halving, which resolved by the twenty-third iteration. Upon inspection, path estimates a_1, a_2, and b_2 were revealed to be nonsignificant; however, all indicators allowed to freely estimate their variance loaded onto the latent constructs at $p < .001$ ($\text{ISS}_{\text{FAITH}}$: $t(48) = 14.00$, $\text{ISS}_{\text{FRIENDS}}$: $t(48) = 18.59$, $\text{DIS}_{\text{FAITH}}$: $t(48) = 23.46$, $\text{DIS}_{\text{FRIENDS}}$: $t(48) = 32.07$). The path from RSCS to ISS,

as well as all direct paths between exogenous and criterion variables, were statistically significant (see Figure 2; path b_1: $t(48) = 2.55$; path c_1: $t(48) = 3.24$; path c_2: $t(48) = 4.02$; path c_3: $t(48) = 2.40$; path c_4: $t(48) = 2.10$). The Wald test indicated removing arrows and correlations between significant covariates and major study variables (DSS and GASS to RSCS; religious service attendance to GASS and disclosure; Abrahamic monotheism to GASS, ISS, and disclosure; RWA to ISS) would improve fit. The LaGrange Multiplier (LM) test indicated that adding correlations and unidirectional arrows between significant covariates and major study variables (RWA to DSS; recruitment pool to RSCS; religious service attendance to DSS) would likewise improve fit.

A modified model, which added and removed these respective paths, did not fit the data better than the original model, $\chi^2(53, N = 696) = 1011.98$, $p < .001$, $CFI = .77$; $RMSEA = .16$ (C.I. = .15, .17). In fact, the change in chi-square from the initial model to the trimmed model indicated a significantly worse fit ($\Delta\chi^2 = 77.43$, $p < .001$). Hence, no evidence was found to support Hypothesis 3.

Moderation by Gender

To assess whether or not gender significantly moderates the proposed mediational relationship (*Hypothesis 4*), a multi-sample analysis was performed in EQS. First, the datasets for men and women were subjected to the identical models (same latent constructs, observed variables, correlations, paths, etc.), and constraining factor loadings, correlations, and unidirectional arrows between study variables to be equal between groups. This analysis served as the “null” model, having forced the absence of group differences. The analysis was then performed a second time, having released all

constraints for factor loadings/indicators. By maintaining constraints on the factor loadings and indicators, I was able to ensure that the same measurement scales were applied to both men and women. Hence, any differences in path estimates between variables/constructs can be reasonably attributed to gender differences, as opposed to divergences in factor loadings, measurement scales, or model specification. Finally, the overall chi-square for the unconstrained multi-sample analysis was compared to that of the constrained model. After analyzing the initial models separately by gender, a modified model was examined in an attempt to improve model fit.

The initial analysis constrained the factor loadings, observed variables, and unidirectional arrows between the datasets for men and women; four cases were excluded due to missing data. This constrained model demonstrated a poor fit, $\chi^2(54, N = 697) = 729.36, p < .001$, $CFI = .76$; $RMSEA = .19$ (C.I. = 0.18, .20). The same analysis was repeated, with identical model specification, this time releasing all constraints aside from factor loadings. The fit dramatically improved, $\chi^2(44, N = 697) = 193.98$, $p < .001$, $CFI = .95$; $RMSEA = .10$ (C.I. = 0.09, .11), with a significant difference in chi-square $\Delta\chi^2$ (10, $p < .001$) = 535.37. Hence, there was partial support for Hypothesis 4; though there is no mediation present to be moderated, the proposed model did appear to be moderated by gender.

Mediational Model among Men. Using EQS, the initial mediational path was examined among men; 2 cases were excluded due to missing data. The data was slightly leptokurtic (several variables were slightly higher than 1.0 and one variable approaching 5.0), and the multivariate distribution was slightly positively skewed; Mardia's

coefficient was 23.67. Though the model chi-square was lower than that of the null model, the overall fit was poor, $\chi^2(51, N = 267) = 362.16$, $p < .001$, $CFI = .82$; $RMSEA = .15$ (C.I. = .14, .17). The iterative summary indicated the presence of step-halving, which resolved by the twenty-seventh iteration. Upon inspection, path estimates a_1, a_2, b_2, c_1, c_2, c_3, and c_4 were revealed to be nonsignificant (see Figure 3). One Heywood case was present between GASS and religious service attendance. The Wald test indicated that dropping parameters (recruitment to disclosure; GASS to RSCS and disclosure; DSS to disclosure; RWA to ISS and disclosure; Abrahamic monotheism to GASS, ISS, and disclosure; religious service attendance to GASS and disclosure) would improve fit. Added parameters recommended by the LaGrange Multiplier (LM) test recommended were redundant and, therefore, disregarded.

A modified model, which removed the suggested parameters, did not fit the data better than the original model, $\chi^2(62, N = 267) = 367.62$, $p < .001$, $CFI = .82$; $RMSEA = .14$ (C.I. = .12, .15). The change in chi-square from the initial model to the modified model was not significant ($\Delta\chi^2 = 5.36$, $p =.91$); ergo, the less parsimonious model (the initial model) was rejected; paths a_1, a_2, b_2, c_1, c_2, c_3, and c_4 remained nonsignificant (see Figure 4). Hence, no evidence was found to support the presence of a mediational relationship among men.

Mediational Model among Women. Using EQS, the initial mediational path was examined among women; 3 cases were excluded due to missing data. Mardia's coefficient was slightly above the ideal range, but nonetheless satisfactory (Mardia's = 12.87). The initial fit among women was poor $\chi^2(51, N = 429) = 646.93$, $p < .001$, $CFI =$

.77; *RMSEA* = .17 (C.I. = .15, .18). Once again, the iterative summary indicated the presence of step-having, which resolved by the twenty-fourth iteration; no Heywood cases were present.

As was the case among men, analysis of the individual pathways suggested the absence of a mediational pathway between perceived stigma and support-seeking behaviors through religiosity salience-cognition. However, in contrast to men, analyses revealed a significant direct relationship between perceived stigma of depression and anxiety and both criterion variables (see Figure 5; path c_1: $t(51) = 2.62$, path c_2: $t(51) = 4.68$, c_3: $t(51) = 4.13$, path c_4: $t(51) = 3.01$). A modified model, which dropped several parameters based on Wald test recommendations (RWA to ISS; DSS and GASS to RSCS; attendance to GASS and disclosure; recruitment to disclosure; Abrahamic monotheism to GASS, ISS, and disclosure), fit the data significantly better than the original model $\chi^2(60, N = 429) = 653.46$, $p < .001$, $CFI = 0.77$; $RMSEA = .15$ (C.I. = 0.14, .16), $\Delta\chi^2 = 6.39$, $p = .01$.

Effect decomposition revealed that, though the overall fit of the model had improved, mediational pathways from perceived mental illness stigma to support-seeking behavior by religiosity salience-cognition remained nonsignificant (see Figure 6). Thus, no evidence was found to support the presence of mediation among women. Nevertheless, data suggests partial support for hypothesis four: though there is no significant *mediational* relationship to be moderated, the *direct* relationship between perceived stigma of mental illness and support-seeking behaviors appear to be significantly moderated by gender.

Post-Hoc Analyses

To further explore the moderating effect of gender on the relationship between perceived stigma and support-seeking behavior across all support-sources, I performed post-hoc analyses using Model 1 in the PROCESS Macro for SPSS (Hayes, 2017). Analyses examined the moderating effect of gender on the relationship between overall perceived stigma (computed by summing DSS and GASS scores), disclosure likelihood, and ISS across all support sources. As with hypotheses three and four, religious service attendance, recruitment pool, RWA, and religious orientation were included in the following models as covariates.

Impact of Gender on Indirect Support-Seeking. The interaction between gender, perceived mental illness stigma, and ISS was statistically significant ($\Delta R^2 = .01$, $F(7, 692) = 6.77$, $b = 0.01$, $SE = .002$, $t(692) = 2.60$, $p = .01$). Simple slope decomposition analyses revealed significant positive associations between perceived stigma and social ISS among men and women (Women: $b = 0.01$, $SE = .002$, $t(692) = 7.06$, $p < .001$; Men: $b = 0.004$, $SE = .002$, $t(692) = 2.49$, $p = .01$). As shown in Figure 7, the strength of the association between perceived mental illness stigma and social ISS was significantly stronger for women compared to men.

Likewise, the interaction between gender, perceived stigma, and religious ISS was statistically significant ($\Delta R^2 = .001$, $F(7, 692) = 6.18$, $b = 0.005$, $SE = .002$, $t(692) = 2.60$, $p = .01$). Simple slope decomposition revealed significant positive associations between perceived stigma and religious ISS among men and women (see Figure 8; Women: $b = 0.0095$, $SE = .001$, $t(692) = 8.11$, $p < .001$; Men: $b = 0.005$, $SE = .001$, $t(692) = 3.51$, $p =$

.01); as before, the strength of the association between perceived stigma of mental illness and ISS sought from religious sources was significantly stronger in women compared to men.

Impact of Gender on Disclosure Likelihood. Correspondingly, the interaction between gender, perceived mental illness stigma, and likelihood of social disclosure was statistically significant ($\Delta R^2 = .02$, $F(7, 692) = 19.21$, $b = 0.34$, $SE = .08$, $t(692) = 4.38$, $p < .001$). However, in contrast with the findings for ISS, simple slope decomposition revealed significant positive associations between perceived stigma and social disclosure only among women (see Figure 9; $b = 0.46$, $SE = .05$, $t(692) = 9.11$, $p < .001$). Among men, the strength of the association did not differ significantly from the conditional main effect of perceived stigma on disclosure likelihood.

Similarly, the interaction between gender, perceived mental illness stigma, and likelihood of religious disclosure was statistically significant (see Figure 10; $\Delta R^2 = .01$, $F(7, 692) = 5.49$, $b = 0.23$, $SE = .10$, $t(692) = 2.34$, $p = .02$). Once more, simple slope decomposition revealed significant positive associations between perceived stigma and likelihood of disclosure among women ($b = 0.35$, $SE = .06$, $t(692) = 5.67$, $p < .001$) but not men.

Discussion

The present study examined the impact of perceived mental-illness stigma and religiosity on help-seeking behaviors among PWMI. Four specific aims were examined: the first two aims were to determine whether the frequency of ISS varies as a function of a) perceived mental illness stigma and b) religiosity; the third aim examined whether the

relationship between perceived stigma and support-seeking behaviors was mediated by religiosity; and, finally, the fourth aim sought to determine whether the proposed mediational relationship was moderated by gender. The study found support for the first two hypotheses and partial support for gender as a moderator; the main findings and implications will be discussed in this section.

ISS as a function of Perceived Mental Illness Stigma. Regarding Aim 1, my findings supported my first hypothesis that perceived stigma of mental illness would be related to a greater frequency of ISS across all support sources. Perceived stigma of depression and anxiety were each uniquely associated with greater levels of self-reported ISS in social and religious relationships. With respect to ISS, these findings are consistent with prior literature examining the adverse impact of perceived mental illness stigma on social support-seeking behavior (Barbee, Rowatt, & Cunningham, 1998; Mickelson & Williams, 2008; Mickelson, 2016). Additionally, these findings lend credence to the notion that help-seeking avoidance should be more broadly conceptualized by the medical and psychological communities, both of which have primarily focused on formal treatment modalities (cf. Corrigan 2004; Fung, Tsang, & Chan, 2010). Future research should, therefore, attempt to incorporate conceptualization of informal help-seeking in mental illness stigma literature.

ISS as a function of Religiosity Salience-Cognition. Concerning Aim 2, my findings supported my second hypothesis that individuals reporting higher levels of religiosity would likewise report higher levels of ISS compared to low or non-religious individuals. Overall, there is strong evidence to suggest that religious salience is a unique

predictor of this maladaptive support-seeking behavior across social and religious support sources. Moreover, these findings may provide insight into the alarming incidence of mental illness stigmatization and suicide in the modern Evangelical Church (Donlon, 2016; LifeWay, 2014; 2017; Morrison, 2020); having accurately assessed the prevailing negative attitudes about mental illnesses within their faith communities, religious PWMI may be resorting to maladaptive and self-sabotaging strategies in their attempt to elicit support. Consistent with research performed by Gsell (2010) and Wesselman and Graziano (2010), there is strong evidence to suggest that internalized religious attributions of mental illness may likewise inhibit efficacious help-seeking among broader social relationships. Additional research is required in order to assess the role ISS plays in reinforcing—or even eliciting—these negative reactions among social and religious support sources.

Religiosity as a Mediator of Perceived Stigma and Support-Seeking. With respect to Aim 3, I had hypothesized that religiosity would mediate the relationship between perceived mental illness stigma and support-seeking behaviors. There was no evidence of this mediation effect in the present dataset. These findings are important because, to the best of my knowledge, no studies have previously examined religious salience as a predictor of support-seeking across social and religious sources. Though the mediational model was a poor overall fit, several observations in the data are still of note.

First, consistent with the findings of Hypothesis 1 and 2, all direct paths between perceived stigma of mental illness and support-seeking behaviors were statistically significant. Regardless of the form of support-seeking behavior, path estimates from

perceived stigma to support-seeking behaviors were comparable to one another (DSS_{ISS}: $b = 0.19$, DSS_{DIS}: $b = 0.22$; $GASS_{ISS}$: $b = 0.16$, $GASS_{DIS}$: $b = 0.11$). Consistent with the theoretical framework developed by Barbee, Rowatt, and Cunningham (1998), these findings indicate that ISS is a sincere attempt at activating, as opposed to avoiding or eschewing, support resources. This information highlights the need to educate PWMI on the importance of direct support-seeking behaviors—and perhaps the need for medical interventions and public health initiatives to educate PWMI on how to efficaciously seek assistance and support.

Second, the pathway from RSCS to ISS—but not disclosure—was statistically significant, indicating that higher levels of religious salience may spur religious PWMI to seek help for their mental illness, albeit in a maladaptive manner. This theoretical interpretation would meld well with the current literature on the relationship between religiosity and resistance to attribution effects. While religious communities are largely coming to accept biomedical information on the etiology of stigmatized conditions, they are simultaneously just as likely to attribute physiological and social factors to moral or spiritual choices (cf. Armentrout, 2004; Leavey, Lowenthal, & King, 2016; Thomas and Whitehead, 2015). It is imperative that future research further explores the complex and seemingly contradictory relationship between religiosity, casual acknowledgment of scientific literature, and subsequent spiritual/moral attributions of mental illness.

Gender as a Moderator of Perceived Stigma and Support-Seeking. The fourth and final aim of this study was to assess whether gender moderated the proposed mediational relationship between mental illness stigma and support-seeking behaviors.

Although there was no evidence of a mediational relationship to be moderated, I did find partial support for my hypothesis in that the relationship between perceived stigma and support-seeking behaviors did differ significantly between men and women. Consistent with the literature on gender differences in help-seeking, my findings indicated that, compared to women, men are significantly less likely to seek any form of social support, indirect or otherwise (cf. Addis & Hoffman, 2017; Cole, 2013; Galdas, Cheater, & Marshall, 2005; Strokoff, Halford, & Owen, 2016); post-hoc analyses indicated that, when men do attempt support activation, they are more likely to utilize indirect support-seeking. In contrast, results indicated women are more likely to engage in both indirect and direct means of support activation. These findings are also consistent with gendered conceptualizations of mental illness; overall, mental illnesses are thought to disproportionately affect women compared to men (Real, 1997; Sood et al., 2012).

Interestingly, however, one pathway was significantly related to support-seeking among men: religiosity salience-cognition was positively and significantly related to ISS. This finding dovetails with prior literature extolling the supportive nature of religious communities: religious communities are viewed as a reliable source of social support and engagement in religious communities has been tied to positive health outcomes (Krause & Hayward, 2012; VanderWeele, 2017). It stands to reason that religiosity serves as a unique motivator for men to attempt to access support resources; additional research is needed to establish the unique ways in which religiosity may destigmatize support-seeking among men, regardless of spiritual attributions for mental illness.

Limitations

Though the present study possessed various strengths, there are several limitations that must be addressed. First, it is important to note that the data utilized in this study were cross-sectional, meaning that all relationships discussed in this study are correlational in nature. Longitudinal studies would need to be performed in order to establish causal relationships between perceived stigma, religiosity, and support activation. Second, the present sample was largely White/European and of higher socioeconomic status; limiting the generalizability of these results. Future studies should explore this model in a broader and more diverse sample to ensure that findings are representative of the broader population.

An additional limitation of this study is the measure of religiosity employed. Current assessments of religiosity do not account for the presence of atheist, agnostic, and non-religious spiritual individuals. For the present analyses, I chose to impute religiosity scores for these two populations. As nonreligious and nontheistic individuals are a rapidly growing population within the United States and the world at large, more comprehensive assessments of religiosity must be developed in order to 1) truly parse out the unique influences of religiosity and spirituality and 2) utilize the most face-valid control groups for religious affiliation: atheism and agnosticism.

One final limitation of this study pertains to the theoretical representation of religiosity. For the purposes of this thesis, I examined religious salience and cognition as a mediator of the relationship between perceived stigmatization of mental illness and support-seeking behavior; however, there is potential to conceptualize religiosity as either

a mediator or moderator. As religiosity seems to influence the strength and valence of the relationship between perceived stigma and help-seeking behavior, future research may find it more appropriate to present religiosity as a moderator and may wish to conceptualize it thusly.

Conclusion

Throughout psychological literature, the impact of religiosity on mental well-being has been both exalted and demonized. The present study assessed the relations among stigma, religiosity, and help-seeking behaviors among PWMI.

First, this study's findings demonstrated that perceived stigmatization of mental illness has a significant detrimental impact on the ability of PWMI to effectively access support from their social and religious support networks. As suicide remains a leading cause of death in the United States (NIMH, 2015), these findings highlight the importance of public health efforts to destigmatize mental illness.

Second, religiosity is a significant and positive predictor of maladaptive support-seeking behavior in the form of ISS. This finding underscores the importance of community-level assessments and interventions targeted specifically at religious institutions, as religious PWMI face unique challenges and additional stereotypes that serve as barriers to effective help-seeking.

Third, the present study has provided evidence to suggest that men and women are impacted very differently by both perceived stigma and religiosity. This finding draws attention to the negative impact of gendered stereotypes on health outcomes for men, who are both less likely to be diagnosed with affective disorders and four times

more likely to die by suicide (WHO, 2019). Jointly, the current findings have important implications for future research that examines the complex interplay of gender, stigma, and religiosity, as they pertain to maladaptive help-seeking behavior among individuals coping with mental illness.

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APPENDIX A

TABLES

Table 1.

Descriptive Statistics of Major Study Variables

Measure	Men			Women		
	M	*SD*	*n*	*M*	*SD*	*n*
Perceived Anxiety Stigma						
Experienced	26.25_b	9.45	269	28.12_a	9.88	432
Internalized	14.30_a	8.96	269	10.25_b	8.45	432
Overall	40.55_a	13.9	269	38.36_b	13.3	432
Perceived Depression Stigma						
Experienced	25.71_b	7.99	269	28.05_a	8.16	432
Internalized	13.07_a	7.14	269	10.36_b	7.14	432
Overall	38.78	11.3	269	38.41	11.2	432
Religiosity Salience-Cognition	18.24	8.74	187	18.47	8.95	343
Disclosure Likelihood						
Faith Community	45.93_b	29.5	269	51.94_a	30.0	432
Social Relationships	55.44_b	24.7	269	61.29_a	24.3	432
Indirect Support-Seeking						
Faith Community	0.38	0.68	269	0.34	0.68	432
Social Relationships	1.06_b	0.70	269	1.37_a	0.74	432

Note: Subscripts “a” and “b” in rows indicate that means significantly differ at $p < .05$, with “a” indicating the highest mean. Religiosity Salience-Cognition values were imputed to 0 for atheists/agnostics, as higher values would lack theoretical justification.

Table 2.

Bivariate Correlations between Major Study Variables

		1	2	3	4	5	6	7	8	9	10	11
1.	DSS (Total)	—	.71**	.06	.29**	.39**	.37**	.38**	.31**	.30**	.27**	.27**
2.	GASS (Total)	.74**	—	.14**	.23**	.36**	.33**	.36**	.38**	.31**	.31**	.26**
3.	RSCS	.06	.12	—	.15**	.03	.03	.03	.36**	.13**	.18**	.06
4.	Disclosure (Relig)	.11	.13*	.24**	—	.67**	.64**	.63**	.30**	.32**	.31**	.27**
5.	Disclosure (Social)	.09	.08	.04	.74**	—	.96**	.95**	.29**	.43**	.39**	.40**
6.	Disclosure (Family)	.10	.08	.003	.69**	.96**	—	.82**	.26**	.40**	.36**	.37**
7.	Disclosure (Friends)	.08	.07	.07	.72**	.95**	.83**	—	.28**	.42**	.38**	.38**
8.	ISS (Relig)	.22**	.25**	.44**	.31**	.26**	.25**	.24**	—	.45**	.44**	.38**
9.	ISS (Social)	.18**	.13*	.24**	.39**	.45**	.44**	.43**	.55**	—	.90**	.92**
10.	ISS (Family)	.17**	.14*	.31**	.45**	.46**	.44**	.43**	.57**	.92**	—	.65**
11.	ISS (Friends)	.17**	.10	.14*	.28**	.38**	.37**	.36**	.43**	.92**	.69**	—

Note: *$p < .05$; **$p < .01$; Correlations among men are presented below the diagonal; correlations among women are presented above the diagonal.

Table 3.

Relationship between Perceived Stigma of Mental Illness and Indirect Support-Seeking among Social and Religious Support Sources

Variable	Religious ISS			Social ISS		
	B	*SE*	*β*	*B*	*SE*	*β*
Participant Gender	0.03	.04	0.02	0.26***	.06	0.17
Recruitment Pool	–0.13***	.03	–0.12	0.20***	.04	0.17
Relig. Attendance	0.25***	.02	0.46	–	–	–
Relig. Abrahamic	0.09	.06	0.06	0.24***	.06	0.16
Relig. Other	–0.18	.12	–0.05	0.12	.15	0.03
Spiritual, Not Relig	0.11	.06	0.06	0.08	.08	0.04
Anxiety Stigma	0.01***	.002	0.19	0.01*	.003	0.11
Depression Stigma	0.01*	.002	0.09	0.01**	.003	0.16

Note: *p $\leq$ .05; ***p* $\leq$ .01; ****p* < .001; *n* = 701.

Table 4.

Relationship between Religiosity Salience-Cognition and Indirect Support-Seeking among Social and Religious Support Sources

Variable	Religious ISS			Social ISS		
	B	*SE*	*β*	*B*	*SE*	*β*
Anxiety	0.02***	.00	0.36	0.02***	.00	0.35
Depression	0.00	.00	0.00	0.01*	.00	0.11
Worry	–0.01***	.00	–0.16	0.00	.00	–0.03
Participant Gender	–0.03	.04	–0.02	0.11*	.05	0.07
Recruitment Pool	–0.12***	.03	–0.11	0.20***	.04	0.17
Relig. Attendance	0.23***	.02	0.44	0.06*	.03	0.10
Relig. Other	–0.27*	.13	–0.07	–0.18	.16	–0.04
Religiosity Salience	0.01*	.00	0.11	0.01**	.00	0.15

Note: *p $\leq$ .05; ***p* $\leq$ .01; ****p* $\leq$ .001; *n* = 701.

APPENDIX B

FIGURES

Figure 1. Proposed Mediational Model.

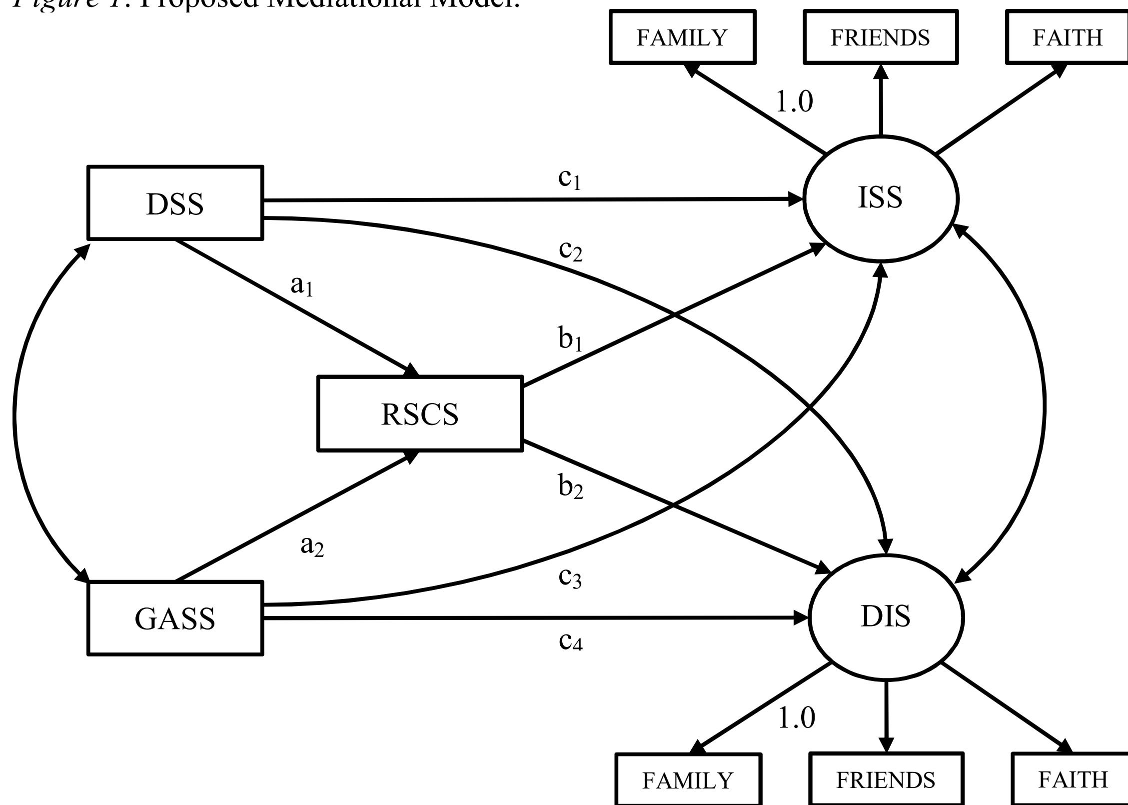
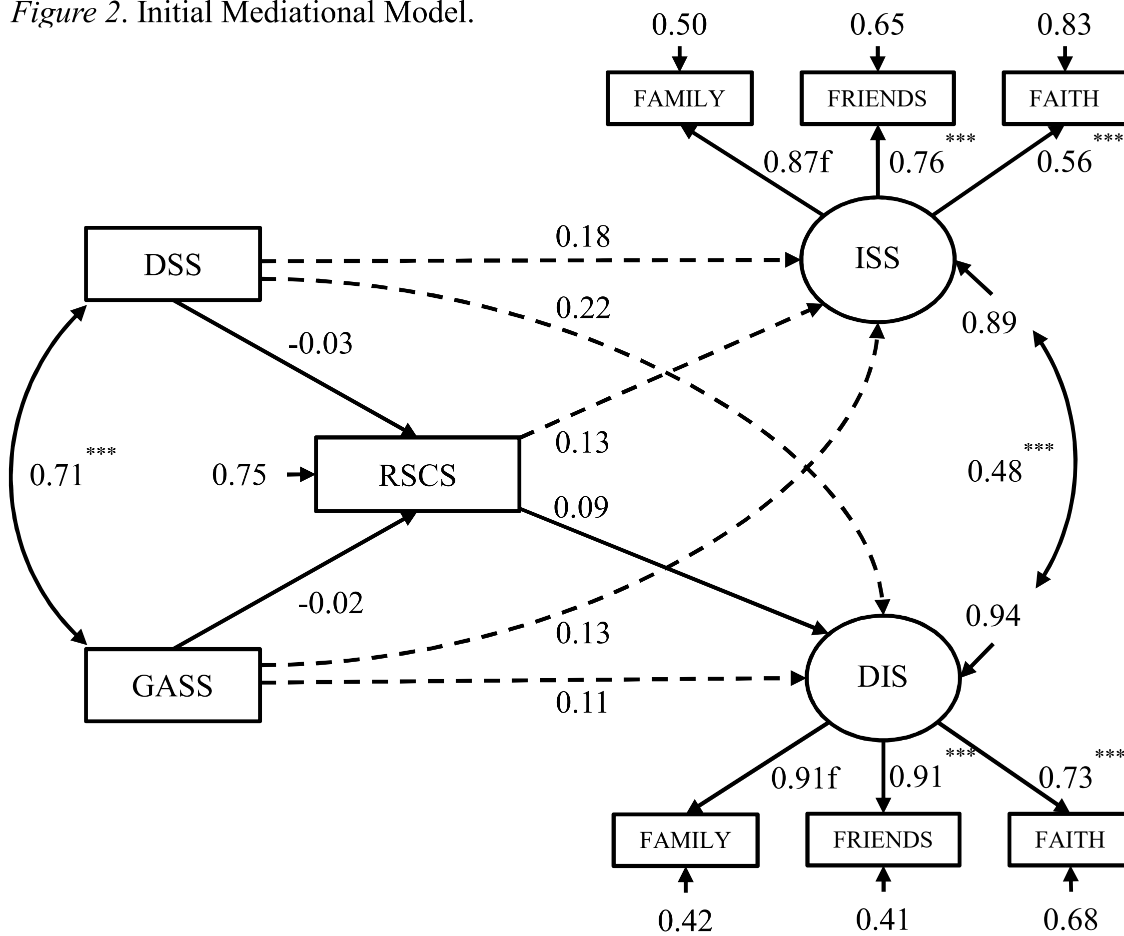


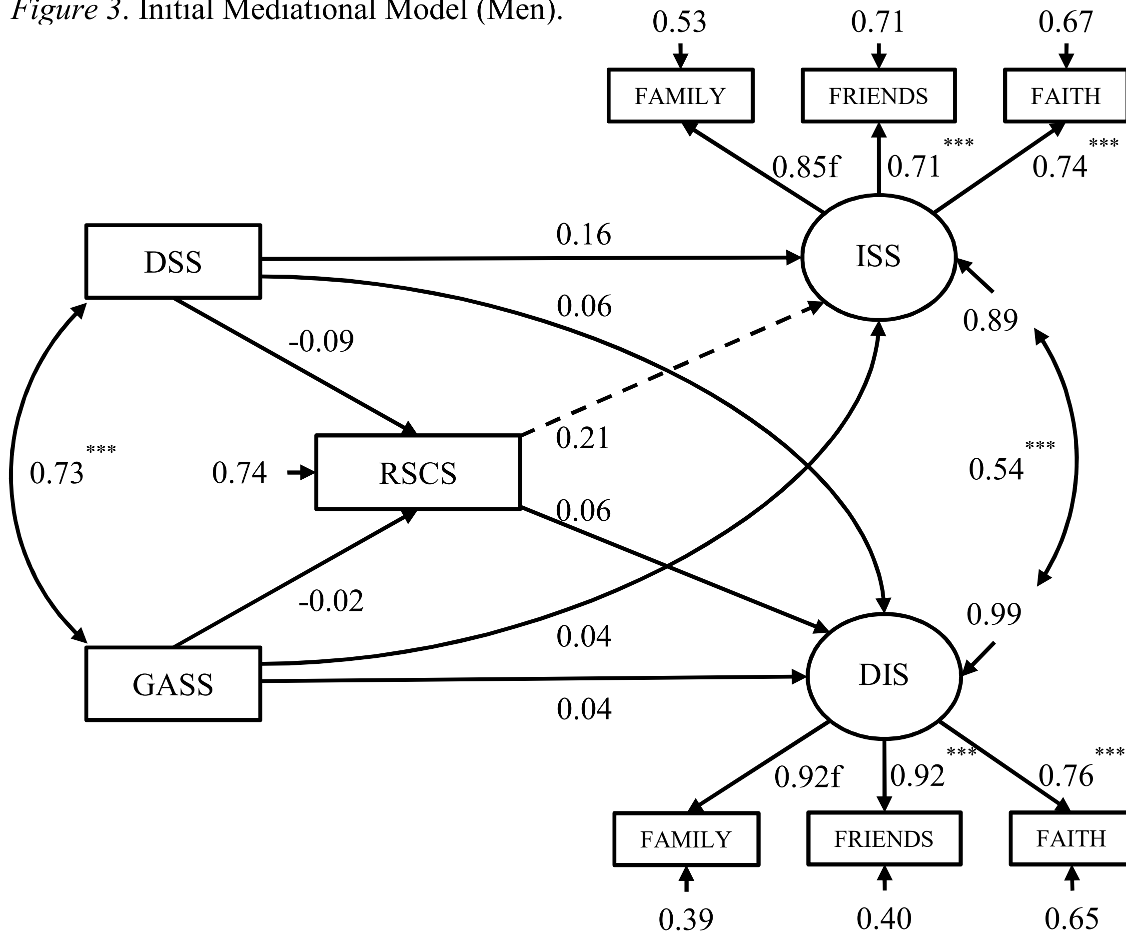
Figure 2. Initial Mediational Model.



Notes. In accordance with identification procedures, the pathways between *Indirect Support-Seeking* and *Disclosure* to *family* were fixed at 1.0 for this and all subsequent models. Familial support was selected because this item provided the most face-valid anchor for the construct. The exogenous variables *Depression Stigma* and *Generalised Anxiety Stigma* were allowed to correlate; the disturbances of both criterion variables (*ISS* and *Disclosure*) were likewise permitted to correlate. The error term arrows pointing to criterion variables represent the disturbance terms for their respective latent factors. Standardized parameters estimates are presented in the model; significance levels for these paths are based on the unstandardized estimates as EQS does not provide standard errors to conduct significance tests for standardized estimates. Path estimates with a significance of $p > .05$ are represented with a dotted line.

*** $p < .001$

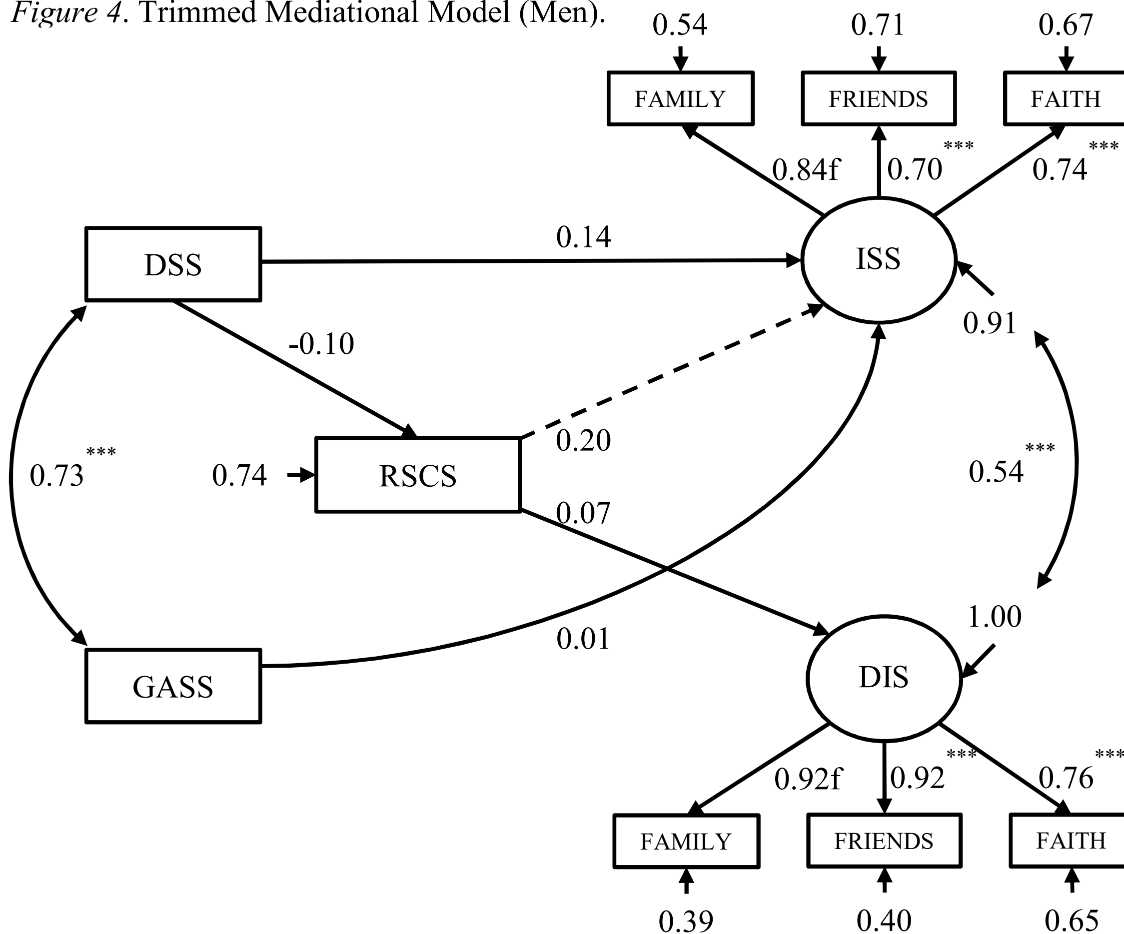
Figure 3. Initial Mediational Model (Men).



Notes. In accordance with identification procedures, the pathways between *Indirect Support-Seeking* and *Disclosure* to *family* were fixed at 1.0 for this and all subsequent models. Familial support was selected because this item provided the most face-valid anchor for the construct. The exogenous variables *Depression Stigma* and *Generalised Anxiety Stigma* were allowed to correlate; the disturbances of both criterion variables (*ISS* and *Disclosure*) were likewise permitted to correlate. The error term arrows pointing to criterion variables represent the disturbance terms for their respective latent factors. Standardized parameters estimates are presented in the model; significance levels for these paths are based on the unstandardized estimates as EQS does not provide standard errors to conduct significance tests for standardized estimates. Path estimates with a significance of $p > .05$ are represented with a dotted line.

$^{***}p < .001$

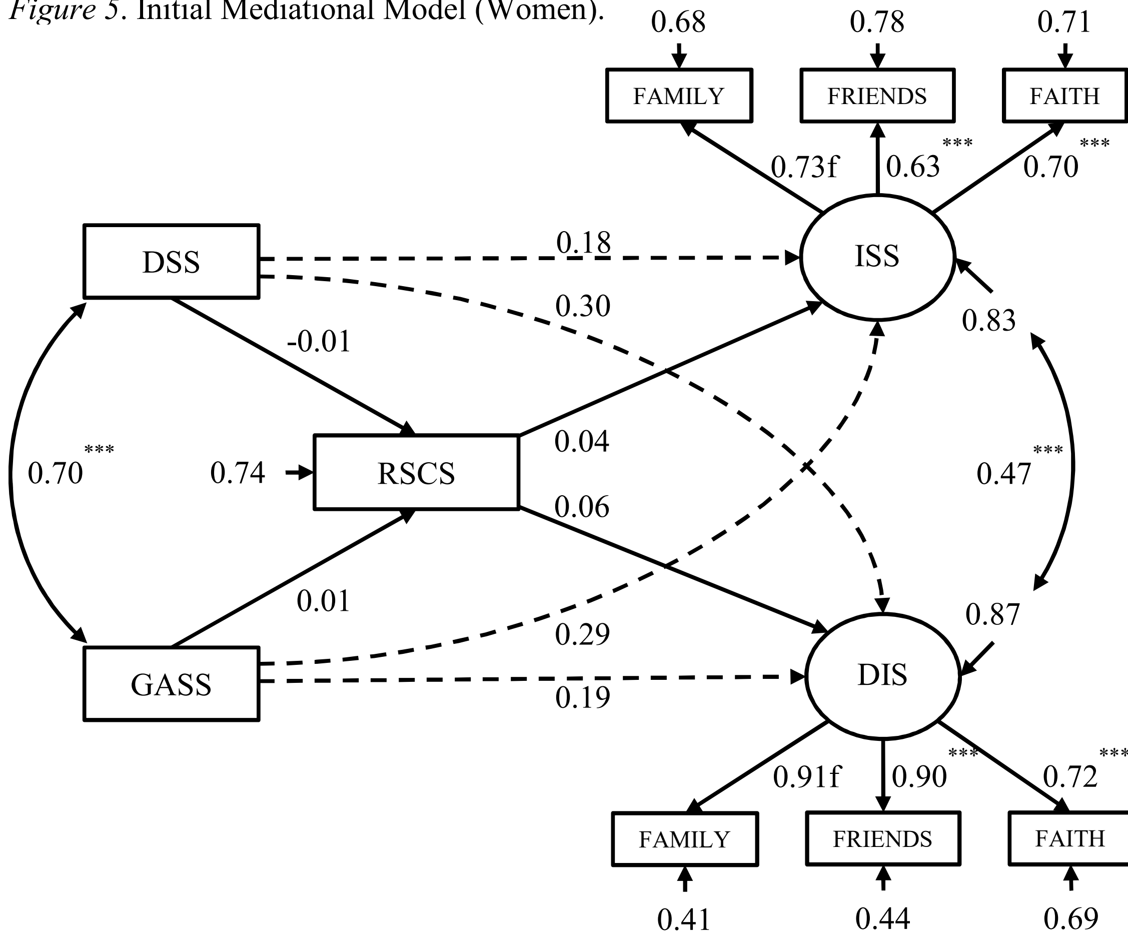
Figure 4. Trimmed Mediational Model (Men).



Notes. In accordance with identification procedures, the pathways between *Indirect Support-Seeking* and *Disclosure* to *family* were fixed at 1.0 for this and all subsequent models. Familial support was selected because this item provided the most face-valid anchor for the construct. The exogenous variables *Depression Stigma* and *Generalised Anxiety Stigma* were allowed to correlate; the disturbances of both criterion variables (*ISS* and *Disclosure*) were likewise permitted to correlate. The error term arrows pointing to criterion variables represent the disturbance terms for their respective latent factors. Standardized parameters estimates are presented in the model; significance levels for these paths are based on the unstandardized estimates as EQS does not provide standard errors to conduct significance tests for standardized estimates. Path estimates with a significance of $p > .05$ are represented with a dotted line.

*** $p < .001$

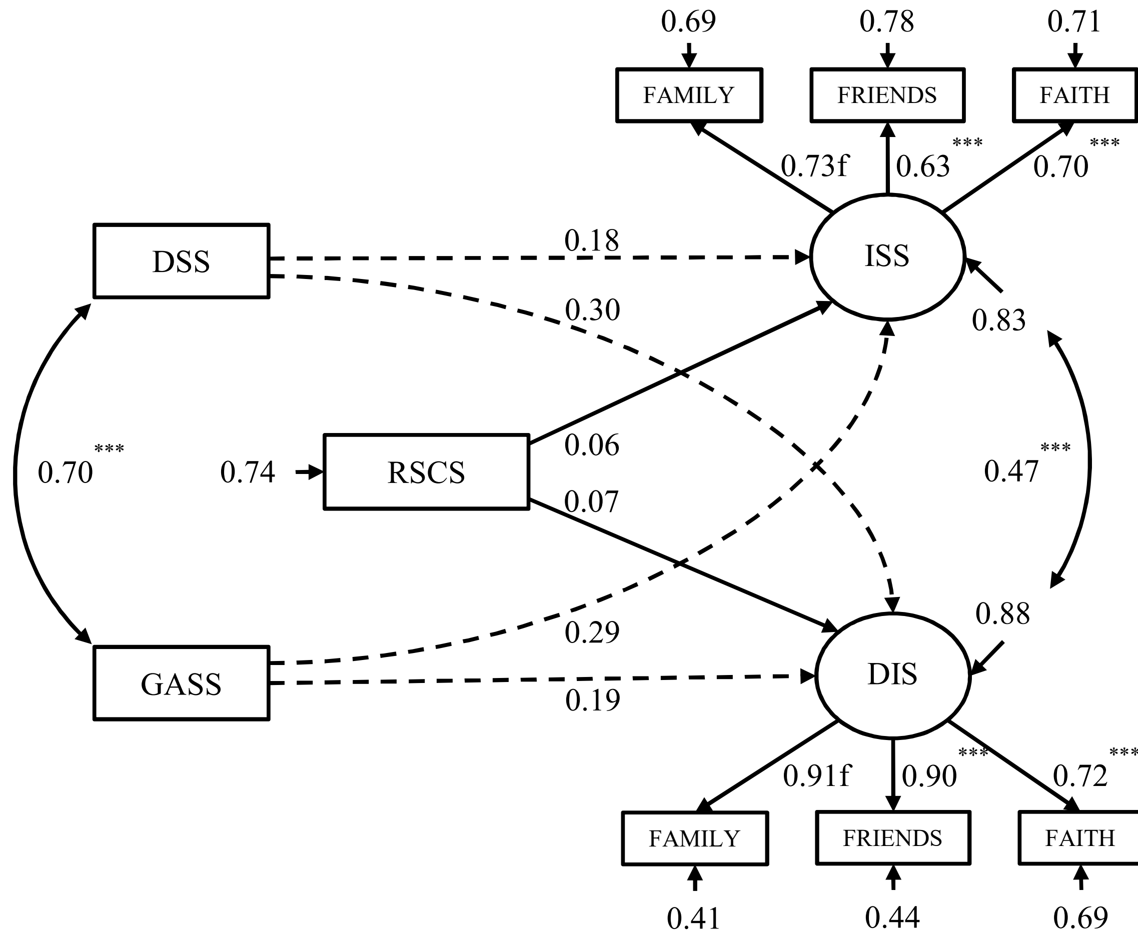
Figure 5. Initial Mediational Model (Women).



Notes. In accordance with identification procedures, the pathways between *Indirect Support-Seeking* and *Disclosure* to *family* were fixed at 1.0 for this and all subsequent models. Familial support was selected because this item provided the most face-valid anchor for the construct. The exogenous variables *Depression Stigma* and *Generalised Anxiety Stigma* were allowed to correlate; the disturbances of both criterion variables (*ISS* and *Disclosure*) were likewise permitted to correlate. The error term arrows pointing to criterion variables represent the disturbance terms for their respective latent factors. Standardized parameters estimates are presented in the model; significance levels for these paths are based on the unstandardized estimates as EQS does not provide standard errors to conduct significance tests for standardized estimates. Path estimates with a significance of $p > .05$ are represented with a dotted line.

$^{***}p < .001$

Figure 6. Trimmed Mediational Model (Women).



Notes. In accordance with identification procedures, the pathways between *Indirect Support-Seeking* and *Disclosure* to *family* were fixed at 1.0 for this and all subsequent models. Familial support was selected because this item provided the most face-valid anchor for the construct. The exogenous variables *Depression Stigma* and *Generalised Anxiety Stigma* were allowed to correlate; the disturbances of both criterion variables (*ISS* and *Disclosure*) were likewise permitted to correlate. The error term arrows pointing to criterion variables represent the disturbance terms for their respective latent factors. Standardized parameters estimates are presented in the model; significance levels for these paths are based on the unstandardized estimates as EQS does not provide standard errors to conduct significance tests for standardized estimates. Path estimates with a significance of $p > .05$ are represented with a dotted line.

*** $p < .001$

Figure 7. Relationship between Perceived Stigma and Indirect Support-Seeking among Social Support Sources by Gender.

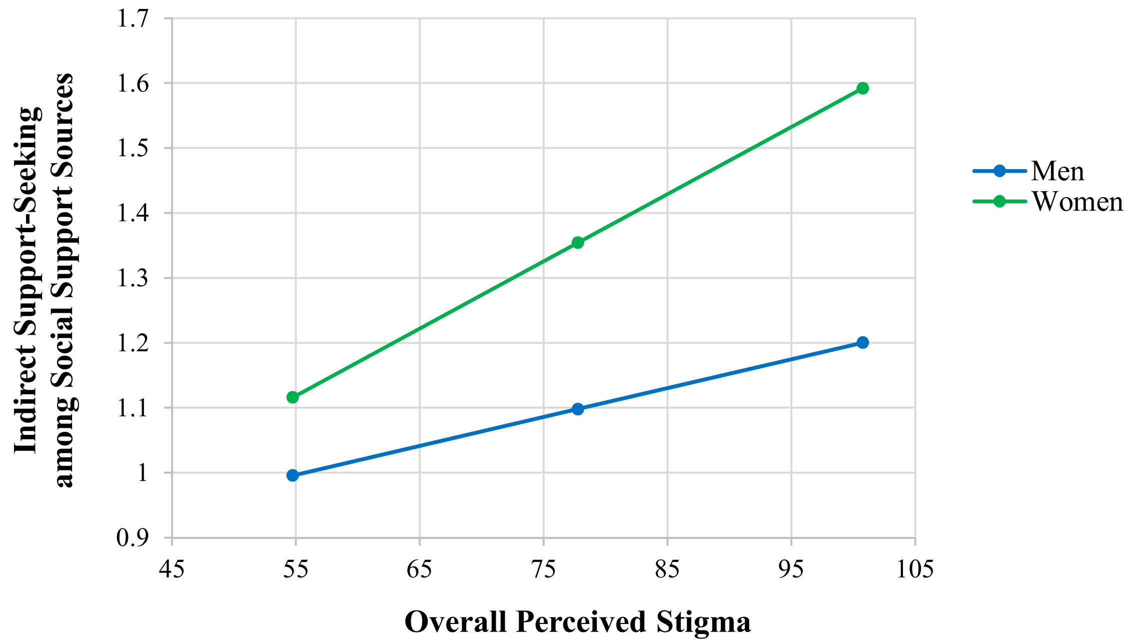


Figure 8. Relationship between Perceived Stigma and Indirect Support-Seeking among Religious Support Sources by Gender.

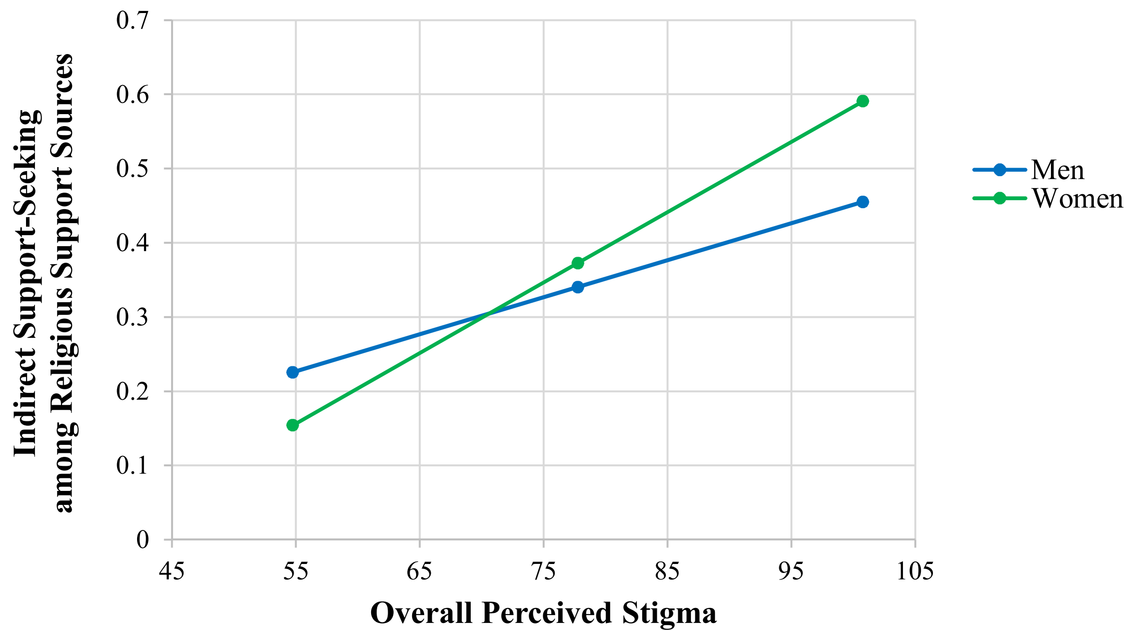


Figure 9. Relationship between Perceived Stigma and Likelihood of Disclosure to Social Support Sources by Gender.

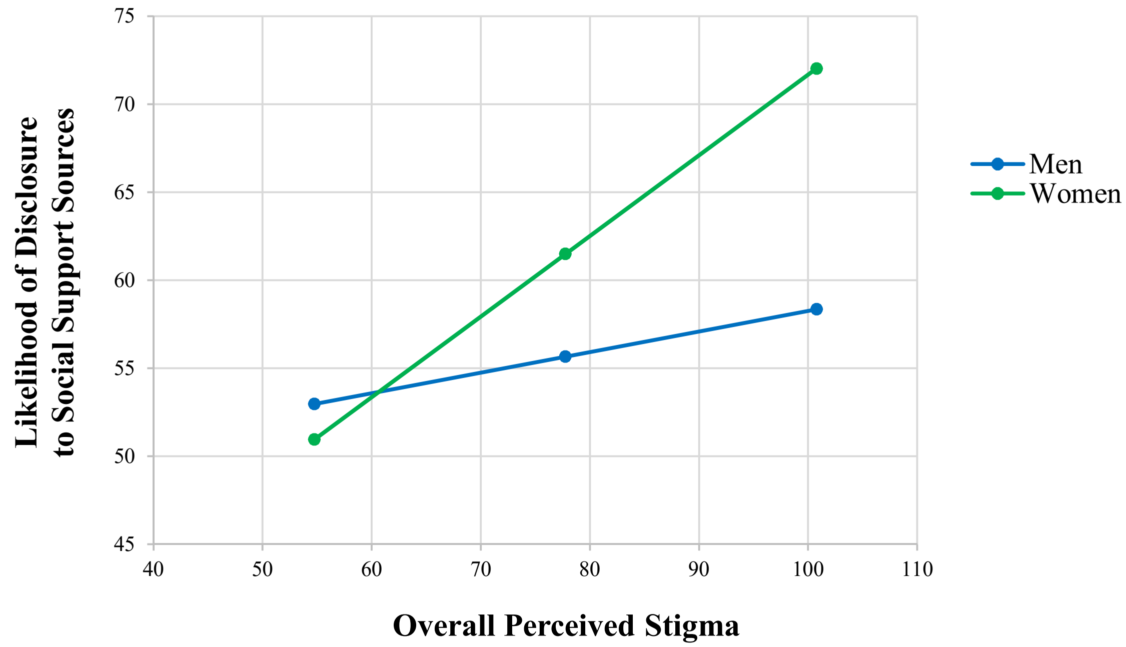
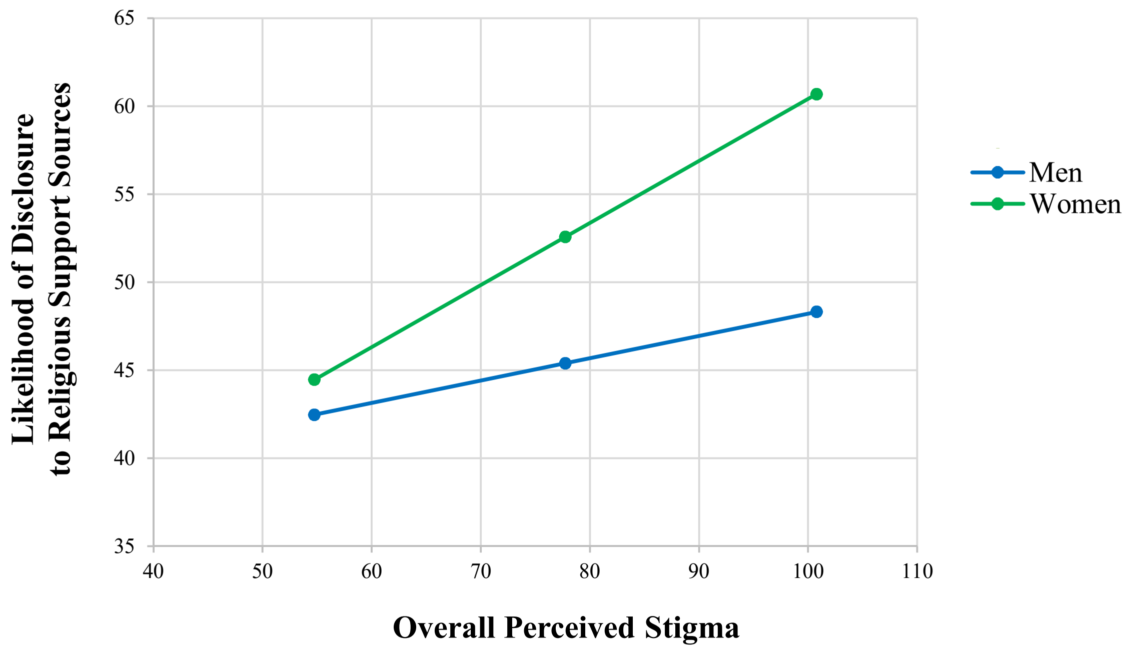


Figure 10. Relationship between Perceived Stigma and Likelihood of Disclosure to Religious Support Sources by Gender.



APPENDIX C

STUDY MEASURES

DEMOGRAPHIC QUESTIONNAIRE

1. [MTurk] In which state do you currently reside?

(0) Alabama
(1) Alaska
(2) Arizona
(3) Arkansas
(4) California
(5) Colorado
(6) Connecticut
(7) Deleware
(8) District of Columbia
(9) Florida
(10) Georgia
(11) Hawaii
(12) Idaho
(13) Illinois
(14) Indiana
(15) Iowa
(16) Kansas
(17) Kentucky
(18) Louisiana
(19) Maine
(20) Maryland
(21) Massachusettes
(22) Michigan
(23) Minnesota
(24) Mississippi
(25) Missouri
(26) Montana
(27) Nebraska
(28) Nevada
(29) New Hampshire
(30) New Jersey
(31) New Mexico
(32) New York
(33) North Carolina
(34) North Dakota
(35) Ohio
(36) Oklahoma
(37) Oregon
(38) Pennsylvania
(39) Puerto Rico
(40) Rhode Island
(41) South Carolina
(42) South Dakota
(43) Tennessee
(44) Texas
(45) Utah
(46) Vermont
(47) Virginia
(48) Washington
(49) West Virginia
(50) Wisconsin
(51) Wyoming
(52) I do not live in the United States

2a. [MTurk] Are you 18 or older?

2b. What is your age? ___________

3. What is your gender?

(0) Man
(1) Woman
(2) Nonbinary
(3) Other (please specify) : __________
(4) Prefer not to answer.

4. Please select one of the following to indicate your primary ethnic identity:

(0) White (Hispanic or Latina/o/x)
(1) White (Middle-Eastern)
(2) White (Not Hispanic or Middle-Eastern)
(3) Black (African American)
(4) Native American or Alaska Native
(5) Asian or Pacific Islander
(6) Multiracial
(7) Prefer not to answer.
(8) Other (please specify) : __________

5. Which of the following best characterizes your sexual orientation?

(0) Heterosexual (Straight)
(1) Homosexual (Gay or Lesbian)
(2) Bisexual
(3) Pansexual
(4) Asexual
(5) Other (please specify) : __________
(6) Prefer not to answer.

6. What is your relationship status?

(0) Single (never married) Bisexual
(1) In a relationship (never married)
(2) Married/domestic partnership
(3) Separated
(4) Divorced
(5) Widowed

7a. [SONA] What is your undergraduate class standing?

(0) Freshman (< 25 credit hours)
(1) Sophomore (25 – 55 credit hours)
(2) Junior (56 – 86 credit hours)
(3) Senior (87+ credit hours)

7b. [MTurk] How would you describe your education experience?

(0) Less than High School
(1) High School Diploma/GED or Equivalent (i.e. HiSet, TASC)
(2) Some College/Associate’s Degree
(3) College Degree (i.e. B.A., B.S.)
(4) Post-Graduate Degree (i.e. M.S., Ph.D, M.D., J.D.)

8. What is your TOTAL household income (i.e., including your income, spouse income, other family income, and any other sources of income)?

(0) Less than $20,000
(1) $20,001 – $40,000
(2) $40,001 – $60,000
(3) $60,001 – $80,000
(4) $80,001 – $100,000
(5) $100,001 – $120,000
(6) Over $120,000

9. Which best characterizes your religious affiliation?

(0) Atheist or Agnostic (None)
(1) Christian
(2) Jewish
(3) Muslim
(4) Spiritual but not religious
(5) Other (please specify): __________
(6) Prefer not to answer

If "Christian" was selected, participants were presented with the following question:
10c. Which branch of Christianity best characterizes your beliefs?

(0) Roman Catholic
(1) Evangelical Non-Denominational
(2) Mainline Protestant
(3) Unknown/Unaffiliated
(4) Other (please specify): __________

If "Jewish" was selected, participants were presented with the following question:
10j. Which Jewish religious movement best characterizes your beliefs?

(0) Orthodox
(1) Conservative
(2) Reconstructionist
(3) Reform
(4) Other (please specify): __________

If "Muslim" was selected, participants were presented with the following question:
10m. Which branch of Islam best characterizes your beliefs?

(0) Sunni
(1) Non-Denominational/Unaffiliated.
(2) Other (please specify): __________

11. In the past 6 months, how often have you attended religious services?

(0) Never
(1) Less than once a month
(2) 1 to 3 times a month
(3) About once a week
(4) More than once a week

12. In the past 6 months, how often have you had contact with each of the following?

	0 Never	1 < Once a month	2 1–3 times a month	3 About once a week	4 More than once a week
Parent(s)	☐	☐	☐	☐	☐
Other family member(s)	☐	☐	☐	☐	☐
Significant other	☐	☐	☐	☐	☐
Friends	☐	☐	☐	☐	☐
Clergy/Spiritual mentor	☐	☐	☐	☐	☐
Members of my faith community	☐	☐	☐	☐	☐

BECK ANXIETY INVENTORY (BAI)
Beck, Epstein, Brow, & Steer (1988)

The following items are related to how you've felt over the past week. Indicate how often you have been bothered by each of the following over past 7 days.

0	1	2	3
Not at all	Some/A little	Occasionally/Often	Most/All the Time

During the past week…

1. Numbness or tingling
2. Feeling Hot
3. Wobbliness in legs
4. Unable to relax
5. Fear of the worst happening
6. Dizzy or lightheaded
7. Heart pounding or racing
8. Unsteady
9. Terrified
10. Nervous
11. Feelings of choking
12. Hands trembling
13. Shaky
14. Fear of losing control
15. Difficulty breathing
16. Fear of dying
17. Scared
18. Indigestion or discomfort in abdomen
19. Faint
20. Face flushed
21. Sweating (not due to heat)

CENTER FOR EPIDEMIOLOGICAL STUDIES–DEPRESSION (CES-D)
Radloff (1977)

Below is a list of the ways that you might have felt or behaved, in general, during the past week. For each of the following, please indicate how often you have felt each of these ways in the past 7 days.

0	1	2	3
None/Rarely	A Little	Occasionally/Often	Most/All the Time
(<1 Day)	(1–2 Days)	(3–4 Days)	(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 talked less than usual.
13. I was happy.[*]
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."

[*]Reverse scored

PENN STATE WORRY QUESTIONNAIRE (PSWQ)
Meyer, Miller, & Borkovec (1990)

For each of the following statements, please indicate how often the statement was characteristic of you over the past 7 seven days.

1	2	3	4	5
Not at all typical of me	Not typical of me	Neutral	Typical of me	Very typical of me

During the past week…

1. If I didn't have enough time to do everything, I didn't worry about it.*
2. My worries overwhelmed me.
3. I didn't tend to worry about things.*
4. Many situations made me worry.
5. I knew I shouldn't have worried about things, but I just couldn't help it.
6. When I was under pressure, I worried a lot.
7. I was always worrying about something.
8. I found it easy to dismiss worrisome thoughts.*
9. As soon as I finished one task, I started to worry about everything else that I had to do.
10. I did not worry about anything.*
11. When there was nothing more I could do about a concern, I didn't worry about it anymore.*
12. I noticed that I had been worrying about things.
13. Once I started worrying, I couldn't stop.
14. I worried all the time.
15. I worried about projects until they were all done.

*Reverse scored

DEPRESSION STIGMA SCALE—MODIFIED (DSS)
Griffiths et al. (2004)

The following vignette was presented to participants, with the subject (Sam) randomly presented as either masculine or feminine. Only pronouns were altered.

Sam is 30-years-old. She (he) has been feeling unusually sad and miserable for the last few weeks. Even though she (he) is tired all the time, she (he) has trouble sleeping nearly every night. Sam doesn't feel like eating and has lost weight. She (he) can't keep her (his) mind on her (his) work and puts off making any decisions. Even day-to-day tasks seem too much for her (him). This has come to the attention of Sam's boss, who is concerned about her (his) lowered productivity.

The next few questions contain statements about Sam's problem. Please indicate how strongly you agree or disagree with each statement.

0	1	2	3	4
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

Internalized Stigma Subscale

I believe that…

1. People with a problem like Sam’s could snap out of it if they wanted.
2. A problem like Sam’s is a sign of personal weakness.
3. A problem like Sam’s is a sign of spiritual weakness.
4. Sam’s problem is not a real medical illness.
5. It is best to avoid people with a problem like Sam’s so that you don’t develop this problem.
6. People with a problem like Sam’s are unpredictable.
7. People with a problem like Sam’s don’t consistently engage in spiritual practices (prayer, studying scriptures, etc.).

I would…

8. Not tell anyone if I had a problem like Sam’s.
9. Not employ someone if I knew they had a problem like Sam’s.
10. Not vote for a politician if I knew they had suffered a problem like Sam’s.

Now we would like you to tell us what you think most OTHER people believe. Please indicate how strongly you agree or disagree with the following statements.

Experienced Stigma Subscale

Most other people believe that…

1. People with a problem like Sam's could snap out of it if they wanted.
2. A problem like Sam's is a sign of personal weakness.
3. A problem like Sam's is a sign of spiritual weakness.
4. Sam's problem is not a real medical illness.
5. People with a problem like Sam's are dangerous.
6. It is best to avoid people with a problem like Sam's so that you don't develop this problem.
7. People with a problem like Sam's are unpredictable.
8. People with a problem like Sam's don't consistently engage in spiritual practices (prayer, studying scriptures, etc.).

Most other people would…

9. Not tell anyone if they had a problem like Sam's.
10. Not employ someone they knew had suffered a problem like Sam's.
11. Not vote for a politician they knew had suffered a problem like Sam's.

GENERALISED ANXIETY STIGMA SCALE (GASS)
Griffiths, Batterham, Barney, & Parsons (2011).

The following vignette was presented to participants, with the subject (Jamie) randomly presented as either masculine or feminine. Only pronouns were altered.

Jamie is 45-years-old and she (he) is often worried. She (he) worries a great deal about her (his) job performance, her (his) children's well-being, and her (his) relationships with men (women). In addition, she (he) worries about a variety of minor matters such as getting to appointments on time, keeping her (his) house clean, and maintaining regular contact with family and friends. It takes Jamie longer than necessary to accomplish tasks because she (he) worries about making decisions. Jamie has trouble sleeping at night and finds that she (he) is exhausted during the day and irritable with her (his) family.

The next few questions contain statements about Jamie's problem. Please indicate how strongly you agree or disagree with each statement.

0	1	2	3	4
Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree

Internalized Stigma Subscale

I think that…

1. Jamie's problem is not a real medical illness.
2. A problem like Jamie's is a sign of personal weakness.
3. A problem like Jamie's is a sign of spiritual immaturity.
4. People with a problem like Jamie's could snap out of it if they wanted.
5. People with a problem like Jamie's should be ashamed of themselves.
6. People with a problem like Jamie's don't have enough faith in God's plan.
7. People with a problem like Jamie's do not make suitable employees.
8. People with a problem like Jamie's are unstable.
9. People like Jamie are to blame for their problem.
10. People with a problem like Jamie's are just lazy.
11. People with a problem like Jamie's are a danger to others.
12. People with a problem like Jamie's are self-centered.

Now we would like you to tell us what you think most <u>OTHER</u> people believe. Please indicate how strongly you agree or disagree with the following statements.

Experienced Stigma Subscale

<u>Most people</u> think that…

1. A problem like Jamie's is not a real medical illness.
2. A problem like Jamie's is a sign of personal weakness.
3. A problem like Jamie's is a sign of spiritual immaturity.
4. People with a problem like Jamie's could snap out of it if they wanted.
5. People with a problem like Jamie's should be ashamed of themselves.
6. People with a problem like Jamie's don't have enough faith in God's plan.
7. People with a problem like Jamie's do not make suitable employees.
8. People with a problem like Jamie's are unstable.
9. People like Jamie are to blame for their problem.
10. People with a problem like Jamie's are just lazy.
11. People with a problem like Jamie's are a danger to others.
12. People with a problem like Jamie's are self-centered.

RELIGIOSITY SALIENCE-COGNITION SCALE—SHORT FORM
Blaine & Crocker (1995).

Please indicate your level of agreement with the following statements.

0	1	2	3	4	5	6
Strongly Disagree	Disagree	Somewhat Disagree	Neither agree nor disagree	Somewhat Agree	Agree	Strongly Agree

1. My religious beliefs are what lie behind my whole approach to life.
2. My religious beliefs provide meaning and purpose to life.
3. I am frequently aware of God in a personal way.
4. I allow my religious beliefs to influence other areas of my life.
5. Being a religious person is important to me.

NOTE: An additional item (*N/A—I don't believe in God*) was added in the branch logic for respondents who reported being atheist or agnostic; N/A responses were coded as 0, as the absence of a belief in God would suggest the lack of religious salience.

REVISED RELIGIOUS FUNDAMENTALISM SCALE
Altemeyer & Hunsberger (2004).

For the following set of statements, indicate how much you agree or disagree. You may find that you sometimes have different reactions to different parts of a statement. For example, you might strongly disagree (*-3*) with one idea in a statement, but slightly agree (*+1*) with another idea in the same item. When this happens, please combine your reactions and wrote down how you feel on balance (*-2* in this case).

-3	-2	-1	0	+1	+2	+3
Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Agree	Strongly Agree

1. God has given humanity a complete, unfailing guide to happiness and salvation, which must be totally followed.
2. No single book of religious teaching contains all the intrinsic, fundamental truths about life.*
3. The basic cause of evil in this world is Satan, who is constantly and ferociously fighting against God.
4. It is more important to be a good person than to believe in God and the right religion.*
5. There is a particular set of religious teachings in this world that are so true, you can't go any "deeper" because they are the basic, bedrock message that God has given humanity.
6. When you get right down to it, there are basically only two kinds of people in the world: the Righteous, who will be rewarded by God; and the rest, who will not.
7. Scriptures may contain general truths, but they should NOT be considered completely, literally true from beginning to end.*
8. To lead the best, most meaningful life, one must belong to the one, fundamentally true religion.
9. "Satan" is just the name people give to their own bad impulses. There is really *no such thing* as a diabolical "Prince of Darkness" who tempts us.*
10. Whenever science and sacred scripture conflict, *science* is probably right.*
11. The fundamentals of God's religion should never be tampered with, or comprised with others' beliefs.
12. *All* of the religions in the world have flaws and wrong teachings. There is *no* perfectly true, right religion.*

*Reverse scored.

NOTE: This scale was not administered to respondents who reported being atheist or agnostic; scores for these participants were imputed to -3, as a lack of belief in God suggests a lack of fundamentalism pertaining to said nonexistent beliefs. Similarly, an additional item (*N/A—I don't believe in God*) was added in the branch logic for respondents who reported being spiritual but not religious; N/A responses were also coded as -3, as the absence of a formal religious belief would suggest a lack of religious fundamentalism.

CHRISTIAN ORTHODOXY SCALE
Fullterton & Hunsberger (1982).

The following set of statements are related to specific religious beliefs. You will probably find that you *agree* with some of the statements, and *disagree* with others, to varying extents. Please indicate how much you agree or disagree with each of the following statements.

-3	-2	-1	0	+1	+2	+3
Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Agree	Strongly Agree

1. God exists as: Father, Son, and Holy Spirit.
2. Man is *not* a special creature made in the image of God, he is simply a recent development in the process of animal evolution.*
3. Jesus Christ was the divine Son of God.
4. The Bible is the word of God given to guide man to grace and salvation.
5. Those who feel that God answers prayers are just deceiving themselves.*
6. It is ridiculous to believe that Jesus Christ could be both human and divine.*
7. Jesus was born of a virgin.
8. The Bible may be an important book of moral teachings, but it was no more inspired by God than were many other such books in the history of man.*
9. The concept of God is an old superstition that is no longer needed to explain things in the modern era.*
10. Christ will return to the earth someday.
11. Most of the religions in the world have miracle stories in their traditions; but there is no reason to believe any of them are true, including those found in the Bible.*
12. God hears all of our prayers.
13. Jesus Christ may have been a great ethical teacher, as other men have been in history. But he was not the Divine Son of God.*
14. God made man of dust in His own image and breathed life into him.
15. Through the life, death, and resurrection of Jesus, God provided a way for the forgiveness of man's sins.
16. Despite what many people believe, there is no such thing as a God who is aware of our actions.*
17. Jesus was crucified, died, and was buried but on the third day He arose from the dead.
18. In all likelihood there is no such thing as a God-given immortal soul which lives on after death.*
19. If there ever was such a person as Jesus of Nazareth, he is dead now and will never walk the earth again.*
20. Jesus miraculously changed real water into real wine.
21. There is a God who is concerned with everyone's actions.
22. Jesus' death on the cross, if it actually occurred, did nothing in and of itself to save mankind.*

23. There is really no reason to hold to the idea that Jesus was born of a virgin. Jesus' life showed better than anything else that he was exceptional, so why rely on old myths that don't make sense.*

24. The Resurrection proves beyond a doubt that Jesus was the Christ or Messiah God.

*Reverse scored.

No response is scored as "0" on the -3 to +3 response scale for each item. It is suggested that the participant's data be discarded if he/she does not answer 10 or more items. Data can easily be prepared for analysis recalling responses such that -3 = 1, -2, = 2, -1 = 3, 0 (or no response) = 4, +1 = 5, +2 = 6, and +3 = 7. The C.O. score is then computed for each subject by summing over the 24 items.

NOTE: Orthodoxy measures were only administered to Abrahamic monotheists (i.e., respondents who indicated belief in Christianity, Judaism, or Islam); participants were administered the Orthodoxy measure that corresponded with their religious affiliation. Scores for all other participants were -3, as disbelief in a religion precludes the existence of Orthodox beliefs.

JEWISH ORTHODOXY SCALE
Malouf & Bailey

The following set of statements are related to specific religious beliefs. You will probably find that you *agree* with some of the statements, and *disagree* with others, to varying extents. Please indicate how much you agree or disagree with each of the following statements.

-3	-2	-1	0	+1	+2	+3
Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Agree	Strongly Agree

1. The Lord is our God; the Lord is one.
2. Man is *not* a special creation of God, he is simply a recent development in the process of animal evolution.*
3. The Torah was given to Moshe by God at Sinai.
4. Every verse in the Torah is equally holy, as they all originate from God, and are all part of God's Torah, which is perfect, holy and true.
5. Those who feel that God hears prayers are just deceiving themselves.*
6. It is ridiculous to believe that God spoke to Avraham.*
7. God is loves all His creations.
8. The Torah may be full of important moral teachings, but it was no more inspired by God than were many other such books in the history of man.*
9. The concept of God is an old superstition that is no longer needed to explain things in the modern era.*
10. The Jewish people were chosen to have a covenant with God as described in the Torah, and to be a light unto the nations.
11. Most of the religions in the world have miracle stories in their traditions; but there is no reason to believe any of them are true, including those found in the Torah.*
12. God hears all of our prayers.
13. Moshe may have been a great ethical teacher, but he was not a prophet, let alone the greatest of prophets.*
14. Though they use metaphors and analogies, the Nevi'im (books of the Prophets) are divine and true.
15. God will reward those who observe His commandments and punish those who intentionally transgress them.
16. Despite what many people believe, there is no such thing as a God who is aware of our actions.*
17. God is not distant in time or detached, but passionately engaged and present.
18. In all likelihood there is no such thing as an afterlife or the World to Come.*
19. If the prophets ever existed, they were just normal men and women, not prophets of God.*
20. People are born with both an inclination to do good, and an inclination do evil; within each person, there are opposing natures continually in conflict.
21. God holds each individual responsible for their own actions.

22. Fasting on Yom Kippur is an important social duty, but it does not help you atone for any wrongdoing.*

23. Good deeds are nice, but they don't help sanctify the world or bring it any closer to God.*

24. Actions are more important than beliefs and beliefs must be made into actions by performing good deeds.

*Reverse scored.

No response is scored as "0" on the -3 to +3 response scale for each item. It is suggested that the participant's data be discarded if he/she does not answer 10 or more items. Data can easily be prepared for analysis recalling responses such that -3 = 1, -2, = 2, -1 = 3, 0 (or no response) = 4, +1 = 5, +2 = 6, and +3 = 7. The C.O. score is then computed for each subject by summing over the 24 items.

NOTE: Orthodoxy measures were only administered to Abrahamic monotheists (i.e., respondents who indicated belief in Christianity, Judaism, or Islam); participants were administered the Orthodoxy measure that corresponded with their religious affiliation. Scores for all other participants were -3, as disbelief in a religion precludes the existence of Orthodox beliefs.

MUSLIM ORTHODOXY SCALE
Malouf & Shehadeh

The following set of statements are related to specific religious beliefs. You will probably find that you *agree* with some of the statements, and *disagree* with others, to varying extents. Please indicate how much you agree or disagree with each of the following statements.

-3	-2	-1	0	+1	+2	+3
Strongly Disagree	Disagree	Slightly Disagree	Neither agree nor disagree	Slightly Agree	Agree	Strongly Agree

1. There is no god but God, and Muhammad is the final messenger.
2. Man is *not* a special creation of God, he is simply a recent development in the process of animal evolution.*
3. Muhammad is the true messenger of God and Muhammad's Message came for all people.
4. The Qur'an is the revealed words of God.
5. Those who feel that God hears prayers are just deceiving themselves.*
6. It is ridiculous to believe that the archangel Jibrīl spoke to Muhammad.*
7. Every person's duty is to serve God.
8. The Qur'an may be an important book of moral teachings, but it was no more inspired by God than were many other such books in the history of man.*
9. The concept of God is an old superstition that is no longer needed to explain things in the modern era.*
10. There will be a day of judgment (hereafter) when everyone will be held accountable for whatever they did in this worldly life.
11. Most of the religions in the world have miracle stories in their traditions; but there is no reason to believe any of them are true, including those found in the Qu'ran.*
12. Everyone's fate is in the hands of God.
13. Muhammad may have been a great ethical teacher, as other men have been in history. But he was not a messenger of God.*
14. It is unjust for a wealthy person to neglect giving to charity; zakat is part of the covenant between God and a Muslim.
15. Believing that Muhammad is a prophet is necessary for salvation from Hell.
16. Despite what many people believe, there is no such thing as a God who is aware of our actions.*
17. Every follower of Islam should perform their pilgrimage if they are able.
18. In all likelihood there is no such thing as an eternal life in the hereafter.*
19. If Adam, Ibrahim, and Isa ever existed, they were just men and not prophets of God.*
20. I believe in Satan's capability of alluring man.
21. There is a God who is concerned with everyone's actions.
22. It does not matter if anyone fasts during Ramadhan.*

23. There is really no reason to hold to the belief that God has ever or will ever split the moon. The Qur'an's teachings show that it is an exceptional book, so why rely on old myths that don't make sense.*

24. The month of Ramadhan is that in which the Qur'an was revealed, a guidance for the people and clear proofs that discriminate between right and wrong.

*Reverse scored.

No response is scored as "0" on the -3 to +3 response scale for each item. It is suggested that the participant's data be discarded if he/she does not answer 10 or more items. Data can easily be prepared for analysis recalling responses such that -3 = 1, -2, = 2, -1 = 3, 0 (or no response) = 4, +1 = 5, +2 = 6, and +3 = 7. The C.O. score is then computed for each subject by summing over the 24 items.

NOTE: Orthodoxy measures were only administered to Abrahamic monotheists (i.e., respondents who indicated belief in Christianity, Judaism, or Islam); participants were administered the Orthodoxy measure that corresponded with their religious affiliation. Scores for all other participants were -3, as disbelief in a religion precludes the existence of Orthodox beliefs.

RIGHT-WING AUTHORITARIANISM—REVISED SCALE (RWA-RS)
Manganelli Rattazzi, Bobbio, & Canova (2007).

The following statements pertain to our country. You may find that you agree with some statements and disagree with others; for each of the following statements, please indicate your level of agreement.

0	1	2	3	4	5	6
Totally Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Totally Agree

Authoritarian Aggression and Submission Items

1. Our country desperately needs a mighty leader who will do what has to be done to destroy the sins and radical new ways that are ruining us.
2. The majority of those who criticize proper authorities in government and religion only create useless doubts in people's minds.
3. The situation in our country that is getting so serious, the strongest method would be justified if they eliminated the troublemakers and got us back to our true path.
4. What our country really needs instead of more "civil rights" is a good stiff dose of law and order.
5. Obedience and respect for authority are the most important values children should learn.
6. Crime, sexual immorality, and recent displays of public disorder all show that we have to crack down harder on deviant groups and troublemakers if we are going to save our moral standards and preserve law and order.
7. What our country needs most is disciplined citizens following national leaders in unity.

The following statements have to do several groups of people. You may find that you agree with some statements and disagree with others; for each of the following statements, please indicate your level of agreement.

Conservatism Items [Reverse Scored]

1. Atheists and others who have rebelled against the established religions are no doubt every bit as good and virtuous as those who attend religious services regularly.
2. A lot of our rules regarding sexual behavior are just customs which are not necessarily any better or holier than those which other people follow.
3. There is absolutely nothing wrong with nudist camps.
4. Homosexuals and feminists should be praised for being brave enough to defy "traditional family values."
5. Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.
6. People should pay less attention to religious leaders, and instead develop their own personal standards of what is moral and immoral.
7. It is good that nowadays young people have greater freedom to "make their own rules" and to protest against things they don't like.

INDIRECT SUPPORT-SEEKING—MODIFIED
Williams & Mickelson (2008).

Sometimes we like to share our experiences and feelings with others in a more round-about manner. The following is a list of behaviors people sometimes use when they have problems or are upset. Please think about how many times during the past 6 months when you have been upset (sad, angry, etc.) and indicate, overall, how often you have acted in each of the following ways toward each of the following people:

	0 Not at all	1	2 Sometimes	3	4 Very often
Parent(s)	◻	◻	◻	◻	◻
Other family member(s)	◻	◻	◻	◻	◻
Significant other	◻	◻	◻	◻	◻
Friends	◻	◻	◻	◻	◻
Clergy/Spiritual mentor	◻	◻	◻	◻	◻
Members of my faith community	◻	◻	◻	◻	◻

1. Asked them to do something (e.g., tell you a joke) to get your mind off your problems.
2. Griped about your problems.
3. Felt like you wanted comfort from them but didn't tell them why.
4. Just hung out with or talked about other things to distract yourself.
5. Complained about your problems in a general way, without telling details or asking for help.
6. Came across as sad but didn't state exactly why or didn't give details.
7. Joked about how rough life is but didn't provide specifics.
8. Were noticeably irritated/upset about something or distracted when you were with them but didn't tell them why.
9. Asked for prayer but didn't provide details.
10. Asked for Scripture specific to a topic (e.g., encouragement, anxiety, etc.) but didn't explain why.
11. Stated you were "struggling" but did not provide a reason why.
12. Expressed that you were questioning your faith but did not provide details.
13. Told others you were experiencing "spiritual warfare" but didn't explain how.

STRATEGIES FOR REVEALING SECRETS
Afifi & Steuber (2009).

For the following set of questions, imagine that you were revealing a secret about yourself to [one of your friends / one of your family members / a clergy member]. With this specific person in mind, how likely would you be to use these different ways of revealing your secret?

0	1	2	3	4	5	6
Very unlikely	Unlikely	Somewhat unlikely	Could go either way	Somewhat likely	Likely	Very likely

If I was going to reveal a secret about myself to a [friend/family/clergy], I would…

Preparation and Rehearsal Subscale

1. Test out the secret first with other people.
2. Rehearse the telling of the secret first with other people.
3. Rehearse the way I would tell this person the secret.
4. Rehearse how I would tell this person the secret to myself.
5. Practice the telling of the secret with other people first.
6. Create a script for how I would reveal the secret first and *then* tell this person.
7. Create a script with other people first for how I would reveal it and *then* tell this person.

Directness Subscale

1. Tell this person the secret in person, face to face.
2. Tell this person directly myself.
3. Admit it if this person asked me about the secret.
4. Reveal it to them if the subject came up.

Third-Party Revelations Subscale

1. Tell other people the secret first, who could then tell this person the secret.
2. Let the person find out the secret from others.
3. Tell someone else who I know would tell this person the secret

Incremental Disclosures Subscale

1. See how this person would respond to the secret by revealing smaller parts of it first.
2. Only reveal part of the secret to this person to see how they would respond.
3. Reveal the secret to this person if they respond positively to a similar secret.
4. Reveal bits and pieces of the secret first to see how this person would react.
5. Reveal subtle hints about the secret to see how this person would respond to it.

Entrapment Subscale

1. Leave evidence or information about the secret for the person to discover.
2. Reveal it directly to the person in the heat of an argument.
3. Reveal it directly to the person out of anger.

Indirect Mediums Subscale

1. Reveal the secret to this person in a letter or email.
2. Tell this person the secret over the telephone.
3. Reveal the secret to this person via text or instant messenger.

APPENDIX D

IRB APPROVAL DOCUMENTATION

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Social and Behavioral Sciences, School of (SSBS)

On 8/9/2018 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	The Moderating Roles of Religiosity and Gender on the Relationship between Mental Illness Stigma and Indirect Support-Seeking.
Investigator:	Kristin Mickelson
IRB ID:	STUDY00008601
Funding:	Name: Psychology
Grant Title:	
Grant ID:	
Documents Reviewed:	• MaloufProtocol_v2.0.pdf, Category: IRB Protocol; • Malouf_ProposedMeasures.pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • CONSENT FORM [MTURK]v2.0.pdf, Category: Consent Form; • CONSENT FORM [SONA]v2.0.pdf, Category: Consent Form; • DEBRIEF FULL [SONA].pdf, Category: Recruitment Materials; • DEBRIEF FULL [MTURK].pdf, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 8/9/2018.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

ASU Knowledge Enterprise Development

EXEMPTION GRANTED

Social and Behavioral Sciences, School of (SSBS)

On 8/28/2018 the ASU IRB reviewed the following protocol:

Type of Review:	Modification
Title:	The Moderating Roles of Religiosity and Gender on the Relationship between Mental Illness Stigma and Indirect Support-Seeking.
Investigator:	Kristin Mickelson
IRB ID:	STUDY00008601
Funding:	Name: Psychology
Grant Title:	None
Grant ID:	None
Documents Reviewed:	• Malouf_ProposedMeasures[v3.0].pdf, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); • DEBRIEF FULL [MTURK].pdf, Category: Recruitment Materials; • DEBRIEF FULL [SONA].pdf, Category: Recruitment Materials; • CONSENT FORM [SONA]v3.5.pdf, Category: Consent Form; • CONSENT FORM [MTURK]v3.5.pdf, Category: Consent Form; • MaloufProtocol_v3.0.pdf, Category: IRB Protocol;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 8/28/2018.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator