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The Influence of Visibility on Mental Health amongst the Muslim Female Population in
the United States

by

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of the requirements for the degree of
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Abstract

The purposes of this study were to examine the relationship between visibility, perceived religious discrimination, psychological association with Islam, and mental health amongst females in the Muslim American population. In the current Islamophobic atmosphere of the United States, anti-Muslim sentiment and behavior is rampant and rapidly rising. Muslim women who wear the hijab are particularly vulnerable to anti-Muslim discrimination and prejudice because the hijab makes their religious identity visible. Self-report survey data was collected from 222 Muslim American women. A scale that took into account frequency and intensity of the Hijab measured visibility. Results showed that visibility was significantly and positively correlated with symptoms of depression and anxiety as. It was also found that perceived religious discrimination was responsible for complete mediation of the relationship between visibility and mental health. Lastly, psychological association with Islam was found to moderate the influence of visibility on mental health. The findings highlight the negative influence of perceived religious discrimination on mental health particularly when Islamic identity is made visible as in the case of hijab-wearing Muslim women. This information can help schools and employers to create safe environments for their Muslim students or employees. Additionally, it can help practitioners understand and treat deteriorating mental health amongst their Muslim hijab-wearing clients.

The Influence of Visibility on Mental Health amongst the Muslim Female Population in
the United States

The post 9/11 era has seen a global rise in anti-Muslim sentiment but there has been an additional spike in Islamophobic hate crimes in the wake of Donald Trump's entry into office as President of the United States of America (Patel & Levinson-Waldman, 2017). Some have attributed this to the Trump administration's appearing to publicly accept and reinforce racist ideology targeting Muslims, subsequently giving birth to a newfound normalization of anti-Muslim violence and discrimination (Buncombe, 2017). This increasingly hostile climate has resulted in amplified feelings of vulnerability and marginalization amongst the Muslim American community. Previous research has shown that discrimination against marginalized or minority groups in the United States promotes their alienation, which places "a substantial strain on the mental health of targeted individuals" and is therefore correlated with the onset of mental health disorders such as depression and anxiety (Brondolo, Ng, Pierre, & Lane, 2016).

In current times, as anti-Islamic sentiment proliferates throughout the nation, it has managed to become "a form of acceptable religious and racial prejudice" and therefore will have an impact on the psychological health of Muslim communities in the United States (Carter, 2008; Padela & Curlin, 2012). Muslim women who wear the "hijab", commonly identified as the headscarf, are particularly susceptible to anti-Muslim sentiment and behavior (Gulamhussein & Eaton, 2015). The hijab makes their religious identity visible to the public eye, potentially making them targets of racially motivated violence and discrimination (Gulamhussein & Eaton, 2015). Thus, increased visibility should be positively correlated with increased depression and anxiety symptomatology.

Although racial discrimination has been shown to negatively impact mental health across minority groups, the magnitude of influence it may have on hijab-wearing women in the Muslim American community has been grossly understudied.

The purpose of this study is to examine the influence of visibility, as measured by the practice of hijab accounting for degree, context, and frequency, on mental health (depression and anxiety). Additionally, the study aims to explore the role of perceived religious discrimination as a mediator in the relationship of visibility and mental health. Lastly, the study intends to explore the role of psychological association with Islam as a moderator in the relationship of visibility and mental health.

The results of this study can serve to play a role in the future of mental health treatment for Muslim Americans, specifically female hijab-wearing Muslim women, who may struggle with the effects their visibility may have in their life. Additionally, the findings from this study can help school officials and employers create safe spaces for their Muslim students. It will aid in properly training and educating employees and students on the dangers of microaggressions. In general, study results can promote understanding and maintaining well-being in the community.

On the basis of past research, the following hypotheses have been formed: Increased visibility will be positively correlated with symptoms of depression and anxiety. Thus, there will be a positive correlation between total scores on the Hijab scale and scores on the Beck Anxiety Inventory and The Center of Epidemiological Studies-Depression. Additionally, it is hypothesized that perceived religious discrimination will mediate the effects of visibility on symptoms of anxiety and depression. Lastly, it is hypothesized that

psychological association with Islam will moderate the effects of visibility on symptoms of anxiety and depression.

Literature Review

The Effect of Racism, Discrimination, and Prejudice on Mental Health

In the United States, Muslims are one of the many minority groups that are subject to discrimination and prejudice. Aside from the very apparent harmful effects of discrimination on those subject to it, research has shown that racism, discrimination, and prejudice has a negative effect on mental health across a multitude of minority groups (Brondolo et al., 2016; Cassidy et al., 2004). Many theoretical models propose that racial and ethnic discrimination is a significant stressor in the lives of stigmatized people (Cassidy et al., 2004). The biopsychosocial model developed by Clark et al. (1999) theorizes racism to be a stressor in the African American community and predicts the negative effects of racism can manifest in both physical and mental health. This model will provide the framework needed to analyze the relationship between visibility, perceived religious discrimination, and mental health amongst females in the Muslim American community.

Research shows that racist ideology reflected in behavior or action in any way, regardless of the type of situation it's manifested in, has a negative effect on mental and physical health amongst those on the receiving end of the behavior (Karlsen & Nazroo, 2002). While racism exists on multiple levels such as interpersonal, environmental, institutional, and cultural, a great degree of studies focus on the health impact of interpersonal racism, which is defined as "directly perceived discriminatory interactions between individuals whether in their institutional roles or as public and private

individuals”(Brondolo et al., 2009; Krieger 1990). Racism, specifically in the form of self-reported ethnic or racial discrimination includes “social exclusion, workplace discrimination, stigmatization and physical threat and harassment” (Brondolo et al., 2009).

Extended exposure to both chronic interpersonal stressors such as racial microaggressions and acute interpersonal stressors such as racist verbal assault, contribute to the production of stress responses (Clark et al., 2009). A study exploring the effects of racism on health in the Black community in the United States found interpersonal discrimination to be positively correlated to high blood pressure (Krieger, 1990). Many authors have proposed that the physiological responses to stress lead to the prolonged activation on the sympathetic nervous system contributing to raised blood pressure and therefore increased risk of hypertension (Clark et. al, 1999). Additional research suggests that perceived stress resulting from racist encounters is associated with reduced immune function, further increasing the susceptibility for negative health outcomes (Brondolo et al., 2016).

While some studies link maladaptive physiological symptoms to the stress induced by racism and discrimination, bodies of research also provide consistent evidence linking self-reported racism to mental health impairment (Lewis et al., 2015). Studies have shown that racism generally alters the way groups see themselves and internalized racism in turn can easily alter individual self-esteem (Brondolo et al, 2009). Individuals from marginalized groups display lower self-esteem if their groups are associated with negative stereotypes. Additionally, increased reports of discrimination have been positively associated with multiple mental health impairments such as

increased psychotic experiences, symptoms of post traumatic stress disorders and binge eating across a number of different stigmatized groups (Oh et al., 2014; Ellis et al., 2008; Durso et al., 2012). Existing literature on the mental health effects of racism highlights the increase in feelings of negative mood, symptoms of depression and anxiety in targeted individuals (Brondolo et al., 2016).

For the purposes of this study, it is particularly important to understand depression and anxiety, as these are the aspects of mental health that will be analyzed. A number of studies found discrimination to be positively associated with symptoms of depression and anxiety across minority groups including Blacks, Asians, and Latinos (Banks et al., 2006; Beiser & Hou, 2006; Bhui et al., 2005; Crouter et al., 2016).

According to the National Institute of Mental Health (2018) depression is defined as “a condition in which a person feels discouraged, sad, hopeless, unmotivated, or disinterested in life in general for more than two weeks and when the feelings interfere with daily activities”. Psychological symptoms include feelings of worthlessness, guilt, and pessimism while somatic symptoms include fatigue, difficulty sleeping, aches or pains, and appetite changes. In this study, the Center for Epidemiologic Studies Depression scale (Radloff, 1977) is being used to analyze the effects of visibility and perceived religious discrimination on symptoms of depression. It is significant to note that the CES-D scale’s (Radloff, 1977) primary focus is not to clinically diagnose for major depressive disorder or MDD but to measure frequency of the symptoms of depression.

Anxiety is defined “as an emotion characterized by feelings of tension, worried thoughts, and physical changes like increased blood pressure” (Kazdin, 2000). The

National Institute of Mental Health (2016) classifies worrying too much about a variety of things and difficulty concentrating as psychological symptoms of anxiety disorders while somatic symptoms include fatigue, restlessness, increased blood pressure, nausea. Many of the aforementioned studies that were assessing the relationship between discrimination and physiological health found a positive relationship between the two. Some of the somatic symptoms of anxiety such as raised blood pressure overlap with the physiological health impact of racism such as hypertension. In this current study, the Beck Anxiety Inventory will be used to measure symptoms of anxiety as influenced by visibility and perceived religious discrimination amongst females in the Muslim American community.

Anti-Muslim Discrimination and Islamophobia in the United States

While many minority groups have been studied in the United States, there has been a lack of empirical research on the psychological stress amongst Muslim Americans in the United States (Clay, 2017). One of the most stigmatized groups in the United States, it is important to consider the impact of ethnic or religious discrimination on the mental health within the Muslim American community. Islamophobia defined as “dread of hatred of Islam and fear or dislike of Muslims”, is not new to the United States (Sheridan, 2006). Anti-Muslim sentiment started accelerating in the 1980s and the idea that Islamic culture is not mainstream and possibly incompatible with American culture has thereafter been sweeping across the nation (Haddad, 2004). Although identification as a Muslim is a religious identification, often times it can bring similar types of discrimination as racial ones. In the biopsychosocial model Clark et al. (1999) developed, racism is defined as “the beliefs, attitudes, institutional arrangements, and acts that tend

to denigrate individuals or groups because of phenotypic characteristics or ethnic group affiliation”. Since Muslims are treated “and perceived as a monolithic group” regardless of ethnic background, anyone who is identified or recognized as Muslim are subject to experiences of prejudice and discrimination based on their group affiliation (Haddad, 2004). America’s war with the Middle East along with the notion of Muslims being the “other” and the media’s constant demonization of Muslims throughout the years has built anti-Muslim prejudices in the minds of the American people (Disha, Cavendish & King, 2011). Thus, the resulting racialization of Muslims allows for this study to utilize the biopsychosocial model (Clark et al., 1999) as framework for predictions and analyses of data.

While Muslim approval ratings were low in the pre 9/11 era, the world trade center attack showed a 1700% increase in anti-Muslim hate crimes and violence (Gotanda, 2011). In 2010, the Muslim approval rate was 35% and in 2014 national polls indicated a substantial drop with a 27% approval rating. From the year 2009 to the year 2010, hate crimes against mosques spiked from a total of 13 incidents to a total of 53 incidents. (Seward & Khan, 2015). A study conducted on 600 Muslim found that more than half these students experienced bullying which is twice as high as the national average (Clay, 2017). In just 2 years (2014 -2016), the years between the campaign and election, the FBI reported a 67% surge in anti-Muslim hate crimes (Lichtblau, 2016). Within the first three months of 2017, anti-Muslim hate crimes doubled from the parallel time period in the previous year (Patel & Levinson-Waldman, 2017). With this increasingly hostile environment towards Muslims, it is important to look at how Muslims feel about themselves in regards to both their religious and national identity.

Perceived Religious Discrimination

Although they do not see themselves as any less American, Muslim Americans are very conscious of the stigma that surrounds their identity in the United States and subsequently display negative emotional and cognitive responses (Khan, 2014). After 9/11, the Arab Muslim community reported increased levels of fear and anxiety for their physical and mental wellbeing. They reported fearing for their safety, job security, and general prejudice (Abu Ras & Abu Bader, 2008).

As previously mentioned, research on other minority groups in the United States has shown that prejudice and discrimination have negative mental health effects. Previous research shows that racial micro-aggressions, whether it be subtle such as overlooking the Black racial experience or obvious such as racial slurs have been correlated with lower levels of self-esteem in the black community (Sue et.al, 2009). Similarly, a study on Asian immigrant communities in the United States found that higher levels of perceived racial discrimination is positively correlated with psychological distress (Yip et al., 2008).

Looking at historical stigmatization and otherization of other groups in the United States history allows for a better understanding of the current Muslim American experience. Using the excuse of national security, the United States interned thousands of Japanese Americans in one of the most “traumatic and salient episodes of the past” (Nagata, 1991). The psychological trauma was particularly present amongst second-generation Japanese Americans who felt “betrayed by their country of citizenship”. This situation parallels with the United States’ ongoing conflict with the Arab world and the current rise of Islamophobia throughout the nation. A week after taking office, President

Donald Trump signed an executive order banning travelers from seven Muslim majority countries from entering the United States (Patel & Levinson-Waldman, 2017).

Additionally, President Trump stated that Muslims would have to go through a process of “extreme vetting” before being allowed to enter the United States. (Patel & Levinson-Waldman, 2017). With the President’s inflammatory rhetoric on Islam and the presence of noted Islamophobes in the White House, Islamophobia has become increasingly normalized by the public (Patel & Levinson-Waldman, 2017). Like in the case of the Japanese, much of the vilification of Muslims by media propaganda relies on the usage of physical attributes or visible characteristics to promote the “otherness” of the stigmatized group (Renteln, 1995; Clay, 2017). In the case of the Japanese Americans, the mental health impact was passed down to the next generation and children of interned parents felt particularly vulnerable and had low self esteem (Nagata, 1991). Likewise, Muslim Americans feel the psychological effects of the government’s, media’s, and nation’s support of Islamophobic rhetoric, ideas, words, and actions.

In the western world, specifically in the United States, Muslim populations are becoming increasingly stigmatized, hated, and feared which is resulting in increased amounts of religious discrimination amongst group members. Religious discrimination is beliefs, attitudes, acts, and institutional arrangements that deny a group of people equal rights on the basis of their religious group affiliation (Rippy & Newman, 2006).

Religious discrimination is measured and recorded in the form of self-reports, which implies that results rely on individuals’ perception of discriminatory incidents or events. Perceived religious discrimination is a measure of an individual's subjective experience of discrimination on the basis of religion (Every & Perry, 2014). In accordance with the

definition of racism provided by Clark et al. (1999), Muslims face prejudice and discrimination based on their group affiliation. Group members can experience forms of overt discrimination such as name-calling or intimidation as well as covert discrimination such as increased attention from law enforcement or unfair service at a restaurant (Rippy & Newman, 2006).

Studies have found that perceived discrimination includes everything from obvious acts of discriminatory behavior such as racially motivated hate assaults to subtle forms of discrimination such as racial micro-aggressions, all of which can lead to “higher levels of stress and poor mental health outcomes” (Nadal, 2012). Ethnic minorities in the United Kingdom who experienced racism or perceived encounters to be racist in any form had increased negative health consequences (Karlsen & Nazroo, 2002). Perceived ethnic discrimination has become so chronic and distressing in nature that the term “racial battle fatigue” was coined to describe the long-term psychological, physiological, and behavioral stress effects that results from facing micro-aggressions on a daily basis (Smith et al., 2007). Ethnic minorities reporting higher levels of discrimination were also reporting higher levels of physiological and psychological distress as well as increased aggression in comparison to those who were not (Williams & Mohammed, 2008).

While Muslims in the United States have reported facing increasingly larger amounts of religious discrimination, specifically in the form of micro-aggressions, their psychological health are amongst the least studied (Khan, 2012). With the Muslim community feeling increasingly more ostracized and isolated in the United States, community members report feeling severe loss of community and security (Abu Ras &

Abu Bader, 2008). Additionally, members of these communities feel they cannot turn to public authorities for assistance. With Islamophobia becoming embedded in the “culture and institutions of society”, it can play a role in the production of discriminatory behavior even in otherwise, not prejudiced individuals (Williams & Mohammed, 2008). Members of Muslim communities report incidences of being negatively stereotyped by social workers, therapists, and other public authorities. As the biopsychosocial model suggests, being aware of the discriminatory behavior towards them can lead to added stress in targeted individuals (Clark et al., 1999). Consequently, they avoid turning to these sources for help in fear of unfair targeting and racially motivated discriminatory behavior. Instead, they rely on spiritual healers and religious leaders for aid (Abu Ras & Abu Bader, 2008). The post traumatic stress of the attacks have not just weighed heavily on the American community, but the attack with the addition of the aftermath of an attack likely placed huge mental health burdens on the Muslim American population. Therefore, it is worthwhile and increasingly more urgent to push in the direction of building a more extensive knowledge base as well as more effective forms of therapy for the Muslim community.

Visibility in the Muslim American Community

Hate crimes are generally directed to people, organizations, or places that are visibly Muslim or mistaken for Muslim. In 2015, a study reported NYC Middle Eastern and South Asian taxi drivers who most closely resemble what is thought to be Muslim, experienced decreased civility from patrons (Ristau & Rozin, 2016). The presence of religious visibility is quite interesting because it highlights the racialization of Muslims and the significance of labeling groups as the “other” in regards to the formation of

prejudice. In public settings, Muslims often try to hide their religious identification to protect themselves from discrimination and prejudice (Carter, 2008). They'll engage in behaviors that are not permitted in Islam such as eating non-halal food, consuming alcohol, or participating in free gender mixing activities in an effort to appear normal (Khan,2004). Therefore, men and women with certain skin color or certain garments that make them appear Muslim are the most vulnerable. Sikh men who wear the turban, commonly mistaken for being Muslim, and Muslim women who wear religious garment in the form of hijab (headscarf) are the dominant target populations for hate crimes (Khan, 2014). The hijab is of particular importance because many Muslim women wear the hijab for religious or spiritual reasons. While it is a significant part of their religious practice, the hijab also distinctly identifies these women as Muslim.

Hijab is frequently defined as the head-covering worn in public by some Muslim women. In a broader sense, it is the rules governing a Muslim women's standard of modesty in a given situation (Kulenovic, 2006). Muslims believe that the commandment for Hijab comes directly from God in their Holy Scripture: the Qur'an (Esposito, 2009). Consequently, many Muslim women observe Hijab in the public sphere. It is important to note that Hijab is not observed in a dichotomous manner (Gulamhussein & Eaton, 2015). Although frequently identified as the headscarf, hijab can be observed on a range of degrees. For example, a conservative practice of hijab may include covering of the face, hands, and feet while a more liberal practice of hijab may exclude covering of the neck.

Women, who are visibly Muslim or perceived to be Muslim by wearing the "hijab" or the headscarf rather, may be particularly vulnerable. The "recognition of muhajabbas", those who wear the hijab, "as Muslim by prejudiced individuals in the

broader society makes them the focus of anti-Muslim sentiments and behaviors” (Gulamhussein & Eaton, 2015). In the west, along with being a religious practice, the hijab is a symbol and clear identifier of Islamic identity. This “tangible marker of difference” makes Muslim women who wear the hijab susceptible to more anti-Muslim sentiment.

The visibility of the Muslim identity can lead to increased risk of harassment, discrimination, and prejudice in a number of settings. For example, in one study, results showed that Muslim women who wore the hijab had lower expectations of getting a job in comparison to a Muslim woman who did not wear the hijab. Increased public interaction associated with the job and increased status of the job was negatively correlated with expectations of hijab-wearing woman to get the job. (Ghumman & Jackson, 2009). Additionally, a strong Muslim identity has been linked to poor college adjustment amongst a population of Female American Muslim student studying college (Rangoonwala et al., 2011).

Although required by faith, as mentioned previously, hijab is not a dichotomous religious practice. Women have different interpretations, ideas, and feelings about the commandment itself, which leads to a spectrum of how hijab is maintained or worn (Jasperse et al., 2012). These differences can lead to different degrees of coverage when hijab is practiced. For the purposes of this study, hijab was measured with regard to frequency on a spectrum of contexts as well as a spectrum of degree or intensity. The more conservative the level of hijab and the more frequently worn, the higher the levels of perceived discrimination reported by Muslim women in the United States (Jasperse et al., 2012).

While the hijab has been associated with negative mental health impacts in Muslim American women, it has also been shown to have protective factors (Gulamhussein & Eaton, 2015). For example, hijab may act as a buffer against negative beauty messages promoted by the media. Studies reveal that women wearing the hijab have more positive body image (Swami et al., 2014). It is also important to mention that hijab observed by diasporic Muslim women is often a result of choice and may serve as more than just a behavioral practice. It can serve as a sociopolitical statement or function to preserve relationships between those who wear it and the wider Muslim community (Jasperse et al., 2012). Research shows that hijab has been linked to facilitation of social support and communion because the visibility allows for identification with the broader Muslim community during times of stress (Meyer, 2003).

This evidence leads us to propose that the hijab itself may not cause decreased mental health well-being. Rather, the Islamophobic atmosphere of western societies that transforms hijab into a visible target for discriminatory and prejudiced behavior may play a role in decreased psychological well-being amongst women in the Muslim American community.

It is also important to note that there may be some protective factors influencing the relationship between the hijab and mental health. In studies of the hijab, the relationship between levels of religiosity and subjective well-being have been analyzed. Studies have shown that increased religiosity has been linked to increased subjective well-being, increased self-esteem and decreased anxiety levels in Kuwaiti Adolescents (Abdel-Khalek, 2011). Positive psychological effect of the religiosity was also found in a group of Muslim women living in the United States (Gulamhussein & Eaton, 2015).

This parallels the findings of some studies on perceived ethnic discrimination that found strong ethnic identity to buffer the negative effects of discrimination on mental health (Lee, 2005; Mossakowski, 2003; Sellers et al., 2006). The social identity theory proposes that strong ethnic identity “buffers the harmful effects of everyday stressors on psychological adjustments” such as in the case of depressive symptomatology (Tajfel, 1974; Umaña-Taylor et al., 2014). Social identity is thought to be part of one’s self-concept that is derived from group membership (Thibeault et al., 2017). Positive feelings regarding that membership leads to a “greater sense of intergroup connectedness” which in turn will prompt positive cognitive coping mechanisms in response to negative mental health effects brought by discrimination (Thibeault et al., 2017).

While this may lead us to predict a buffering effect of strong religious identification, an opposing theory hypothesizes strong ethnic identity to exacerbate the negative mental health effects of discrimination (Thibeault et al., 2017). The rejection sensitivity hypothesis is supported by studies that found strong identification with minority groups was detrimental to mental health and high ethnic identity made individuals more sensitive to discrimination and (Clark & Clark, 1947; Operario & Fiske, 2001).

Given the conflicting literature regarding identification with minority groups, there was no prediction as to the specific direction of moderation conducted by psychological association with Islam, rather it was hypothesized that strong religious identification or psychological association with Islam would moderate the influence of visibility on depression and anxiety.

Though vulnerable to increased levels of discrimination and therefore increased impact on mental health, hijab-wearing Muslim women are rarely studied and in much need of assistance given the continued marginalization of the group. Media's constant demonization and other-ization of Muslims along with government's anti-Islamic stance has largely contributed to the propagation of stereotyping of Muslims (Clay, 2017). Inherently distinguishing, the hijab contributes to the "otherness" of Islamic identity. Although not consistently supported by empirical evidence, "in many instances visible minorities or "others" are believed to be at greater risk for mental health problems, particularly due to the greater stress of discrimination as a result of visibility (Jasperse et al., 2012). As a result of the hijab, Muslim women observing it in the United States may possibly face higher levels religious discrimination. Faced with the constant threat of being victims of hate crimes or discrimination, these women should display higher levels of anxiety and depression.

The purpose of the current study is to explore the relationship between visibility, perceived religious discrimination, and mental health amongst females in the Muslim American community. Increased visibility makes a potential victim more vulnerable and easily targeted. Thus, it is hypothesized that increased visibility will be positively correlated with higher levels of depressive and anxious symptomatology. It is also hypothesized that perceived religious discrimination will mediate the relationship between visibility and decreased psychological well-being. Lastly, it is hypothesized that strong psychological association with Islam will moderate the influence of visibility on psychological well-being. The current study will analyze self-reported data on participants' Islamic identity, mental health, and demographics to explore the influence

of visibility and perceived religious discrimination on mental health amongst the Muslim American community in the United States.

Theoretical Model

The current study proposes the model in Figure 1. The model provides a visual representation of the hypothesis. As shown, the first hypothesis is that visibility will be positively correlated with symptoms of anxiety and depression. The second hypothesis is that perceived religious discrimination will mediate the relationship between visibility and mental health. The third and final hypothesis is that psychological association with Islam will moderate the relationship between visibility and mental health.

Methods

Procedure

Participants were recruited through Facebook Posts on public and private pages as well as via word of mouth. To be eligible, participants had to identify as a 18 years or older female Muslim living in the United States. An anonymous link to the survey along with a brief introduction about the study were posted on a variety of public pages for Muslims such as the Muslim Student Association (MSA) pages of colleges based in New York City, Islamic Circle of North America pages, MusCare and others. The Survey was kept open for a total of one month. All screening and consent was done via the online survey. Upon opening the link, participants had the opportunity to consent to screening. If the participant consented to be screened, they were taken to the screening portion of the survey which was a total of 4 questions comprised of the eligibility criteria. After answering “Yes” to each screening question and identifying themselves as eligible, they

were asked if they wished to take the survey and if they consented for their results to be recorded for usage by the researchers. Once participants consented to taking the survey to be a part of the research study and then proceeded to take the survey, their results were recorded on Qualtrics.

Participants

There was a total of 222 participants. Some demographic characteristics of the study sample are outlined in Table 1. Participants' ages range from 18 to 48 ($M=23.9$, $SD=5.02$). The ethnically diverse sample self identified as Asian ($n=142$), Black ($n=6$), Hispanic/Latinx ($n=2$), Middle Eastern ($n=27$), White, ($n=7$), mixed ($n=7$) and other ($n=30$). Majority of the Asian participants identified as South Asian ($n=123$). In the Middle Eastern category, majority of the participants identified as Egyptian ($n=14$). In terms of educational background of the participants are categorized as followed: 30% with High School as highest level of Education, 5.9% with an Associate's Degree, 49.1% with a Bachelor's degree, 10.4% with a Master's degree, 2.7% with a Doctoral degree, and 1.4% with a Professional degree.

Majority of participants reside in New York (78.8%, $n=175$). Most of the participants identified as single ($n=165$). Household income varied but the two categories with the highest frequencies included an annual household income between \$30,000-\$39,999 (i.e 11.7%, $n=26$) and 100,000-149,999 (i.e 10.8%, $n=24$). Of the different types of Muslim, 88.7% were Sunni Muslims, 1.4% was Shia Muslim, 4.5% was culturally Muslim, 3.2% was from Mixed religious heritage, and 1.8% classified themselves as other.

Measures

Demographic Information. Participants were asked for the following information: age, relationship status, employment, education, household income, amount of time living in the United States, place of residence (state and city), racial and/or ethnic background, parental background, Islamic sect they belonged to, and financial situation from both the present and when growing up.

Islamic Identity. The instrument was adapted from Jasper (2009) measure which was used in a study of Muslim women's Islamic identity in New Zealand. The instrument assessed 3 components of Islamic identity: psychological, behavioral, and visibility.

Psychological: The psychological component of Islamic Identity scale was used to measure for psychological association with Islam because these questions explored how participants felt about their group membership in the Muslim community. The psychological aspects of Islamic identity that were explored include centrality, ingroup effect, and ingroup ties. These scales were adapted from a study on the three-factor model of social identity (Cameron, 2004). The centrality subscale focused on how often individuals thought about being a member of their group. There were 7 items in the centrality subscale and examples include "I often think about the fact that I am Muslim" and "In my everyday life I often think about what it means to be Muslim". The ingroup affect subscale was a 6 item scale that included statements such as "In general, I am glad to be Muslim" and "I feel good about being Muslim" to explore the positivity of feelings associated with being a member of the group. The ingroup ties subscale was a 7 item scale that included statements such as "In a group of Muslims I feel like I belong" and "I

don't feel a sense of being connected with other Muslims" to explore how strongly individuals felt a sense of belonging in their group. In all three subscales, participants were able to choose from a scale of 1-5, ranging from strongly disagree (1) to strongly agree (5). Negative statements were reverse coded. Total sums were calculated for each participant with higher total scores indicating "stronger psychological association with Islam" (Jaspers, 2009). The data from this sample showed a Cronbach's alpha of .870.

Behavioral: The behavioral aspects of Islamic identity were accounted for by a scale that measured frequency of practice in regards to the 5 pillars and 5 additional religious acts. The 5 pillars of Islam are considered to be the 5 obligatory acts that shape the life of a Muslim (Esposito). The five pillars are as follows: declaration of faith, praying 5 times a day, paying a yearly alms tax, fasting from sunrise to sunset everyday during the month of Ramadan (the ninth month of the lunar Islamic calendar), and making pilgrimage to the city of Mecca at least once in a lifetime (Esposito). The first 4 items on the scale were in reference to the 5 pillars (aside from the first pillar) such as " I pray five times a day" and "I fast during Ramadan" while the second 5 items on the scale included religious acts such as "I read the Quran". Participants were able to choose from a scale of 1-5, ranging from never (1) to always (5). Total sums were calculated for each participant and higher total scores indicated "a higher frequency of Islamic practices" (Jaspers, 2009). The data from the sample in this current study had a reliability with a Cronbach's alpha of .86.

Visibility: The visibility aspect of Islamic identity amongst the participants was accounted for by a scale that indicated the presence and extent of "visibility" (i.e, whether a Muslim woman wore only the hijab, headscarf or if she chose to cover her face as well

), the frequency (how often she wore it), and the context (where she wore it including school,shops, public transportation). The extent of visibility subsection of the scale had 8 items and the context subsection had 8 items. Total scores could range from 16-80. Participants were able to choose from a scale of 1-5, ranging from never (1) to very often (5). Higher scores indicated higher visibility. The data from this sample showed an overall reliability of .96.

Comfort wearing the hijab: A section of the questionnaire explored how comfortable or uncomfortable Muslim women were in wearing a hijab depending on the context. The question stem was “Are there any contexts where you’d like to wear the hijab but choose not to” and the scale included 8 item. The same contexts (i.e school,shops, public transportation) mentioned in the aforementioned visibility scale were used. Participants were able choose from a scale of 1-5, ranging from never (1) to very often (5). Higher scores indicated higher levels of discomfort of wearing the hijab across a variety of contexts. In this sample, the data showed a reliability of .97.

Perceived Religious Discrimination. This Perceived Religious Discrimination Scale was taken from Jaspers, 2009. This scale was originally adapted from Noh and Kasper’s (2003) seven-item scale. Participants were asked if they experienced certain things based on their religious background making the scale specific to perceived religious discrimination. Statements included the original 5 items on the Noh and Kasper scale in addition to a few more such as “You are treated disrespectfully” or “You are treated as inferior”. Participants were able choose from a scale of 1-5, ranging from never (1) to very often (5). Total sums were calculated for each participant with high scores indicating higher levels of perceived religious discrimination. This scale was repeated a

second time in the questionnaire, with an introduction urging participants to indicate if they experienced any of these things growing up. In this sample, the data was found to be reliable with a Cronbach's alpha of 0.94.

Open-ended questions included those asking participants about their experiences with hijab and discrimination. Additionally, participants were asked about their attitudes and experiences in terms of racism/prejudice in the past 6 months as well as those when growing up.

Beck Anxiety Inventory (BAI). The current study employed the BAI or Beck Anxiety Inventory, a self-report measure of anxiety. It measures levels of anxiety by asking participants to identify the severity of particular psychological and physiological symptoms of anxiety. The test consists of 21 symptoms that are commonly associated with and used to test for Generalized Anxiety Disorder. Participants choose 1 of the 4 choices: not at all, mildly but didn't bother me much, moderately- it wasn't pleasant at times, and severely- it bothered me a lot, for each symptom. Not at all is scored as 0, mildly but didn't bother me is scored as 1, moderately- it wasn't pleasant at times is scored as 2 and severely- it bothered me a lot is scored as 3. The scores for each question were then added up to produce a total score for each participant. Total scores from 0-21 indicate low anxiety levels, 21-35 indicate mild anxiety levels, and 36 and above indicate high anxiety. The BAI was tested for reliability ($\alpha=.94$) and validity (Beck et al., 1988). In the current sample, data shows a reliability (Cronbach's alpha) of .95.

Center for Epidemiologic Studies Depression Scale (CES-D) The current study employed the CES-D or the Center for Epidemiologic Studies Depression scale, a self-report measure of "depressive symptomatology in the current population" (Radloff,

1977). It's important to note that the CES-D is specifically more useful in measuring depressive symptomology in the general population than to clinically diagnose for major depressive disorder. It is a 20 item scale that measures symptoms of depression by asking participants to identify the severity of particular psychological and physiological symptoms of anxiety. Participants choose 1 of the 4 choices: not at all (less than one day), some/little (1-2 days), occasionally (3-4 days), and most/all (5-7 days), for each item. Not at all is scored as 0, mildly but didn't bother me is scored as 1, moderately- it wasn't pleasant at times is scored as 2 and severely- it bothered me a lot is scored as 3. Ratings from positive items were scored in reverse and the sum of all scores produced a total score. Higher scores represent higher levels of depressive symptomatology. The CES-D was tested for reliability with Cronbach's alpha "ranging from .85 to .90 across studies" and validity (Hunter et. al, 2003). In this current sample, the data showed a reliability coefficient of .938.

Depression Anxiety Stress Scales. (DASS) The Depression Anxiety Stress Scales is a 42 item self-report measure of depression, anxiety, and stress. Items include symptoms of depression, anxiety, and stress that generally fall under negative affect. Participants can choose from 4 choices: 0 (did not apply to me at all), 1 (applied to me to some degree), 2 (applied to me to a considerable degree), or 3 (applied to me very much) to indicate to what extent they experienced the given item. The sum of all ratings are taken for a total score. Items fall under one of the three categories: stress, anxiety, or depression and a higher total score for a category indicates higher symptomology of that condition. The DASS while not used for clinical diagnoses, has been tested for reliability ($\alpha = .96, .89, \text{ and } .93$ for depression anxiety and stress respectively) and validity

(Lovibond, 1995). In this particular sample, the data shows Cronbach's alpha of .96, .95, and .97 for stress, anxiety, and depression respectively.

Rosenberg Self Esteem Scale. This study employs the Rosenberg self esteem scale, a self-report measure of individual self-esteem. It is a 10 item Likert-type scale. Each item represents an attitude about oneself either positive or negative. Participants can choose from 4 choices: 1 (strongly disagree), 2 (disagree), 3 (agree), or 4 (strongly agree) to indicate to what extent they agree with the given statement. Positive items are rated as stated while negative items are rated in the reverse manner. The sum of all ratings are taken for a total score. Scores between 15-25 represent normal self esteem (Rosenberg, 1965). The Rosenberg Self Esteem Scale has been tested for validity and reliability with a Cronbach's alpha ranging from 0.82-0.85. In this current sample, the data showed a reliability coefficient of .912.

The Resilience Research Centre Adult Resilience Measure. The Resilience Research Centre Adult Resilience Measure or the RRC-ARM-28 was used in this study. It is a self-report measure of resilience or an individual's ability to "adapt well in the face of adversity or stressors" such as social disadvantage. It is a 28 item scale that include attitudes regarding the participants' community and self. Participants can choose on a 5 point scale ranging from 1 (not at all) to 5 (a lot) to indicate how strongly they agree with each item. Higher scores indicate higher resilience. (Liebenberg et al., 2012). In this sample, the data was tested for reliability and showed a Cronbach's alpha of .94.

Results

Descriptive Statistics for the Variables

The range, means, and standard deviations for variables of interest in this study are reported in Table 2. Visibility scores ranged from 16-80 ($M=35.77$, $SD=19.28$) in the current sample. Perceived religious discrimination scores ranged from 9- 45 ($M=18$, $SD=10.5$) and scores for Psychological Association with Islam ranged from 20-100 ($M=67.59$, $SD=29.38$). Beck Anxiety Inventory scores ranged from 0-63 ($M=12.53$, $SD=14.07$) while Center of Epidemiological Depression Scale scores ranged from 0-53, ($M=16.19$, $SD=14.13$).

Zero Order Correlations

Zero Order Correlations were utilized to better understand the relationship between the various independent and dependent variables in this study. The data for the Zero Order Correlations are presented in Table 3.

In agreement with the hypothesis, the data showed a statistically significant positive correlation between visibility (score on the Hijab scale) and levels of anxiety measured on the BAI, $r=.334$, $p<.01$. Higher levels and a higher frequency of Hijab across different contexts was associated with higher scores on the BAI. Additionally, there was statistically significant correlation between extent of visibility and scores on the CES-D ($r=.401$, $p<.01$) and the DASS ($r=.316$, $p<.01$).

Unsurprisingly, the data also showed a statistically significant positive correlation between visibility and scores on the Perceived Religious Discrimination Scale ($r=.707$, $p<.01$). This may indicate that higher levels of visibility are correlated with higher levels of perceived religious discrimination. Data also showed a positive significant correlation,

though not as high, between perceived religious discrimination and anxiety levels measured on the BAI ($r=.467, p<.01$). Higher levels of perceived discrimination would in fact be positively correlated with increased anxiety but to better understand the relationship of visibility and anxiety, a partial correlation test was conducted. The partial correlation test did not show a significant correlation between visibility and Anxiety (BAI scores) while controlling for Perceived Religious Discrimination ($r=.007, p=.915$). Similarly partial correlation tests on visibility and CES-D scores ($r=.023, p=.731$) as well DASS scores ($r=.009, p=.893$) while controlling for Perceived Religious Discrimination were statistically insignificant. This implies that perceived religious discrimination may act as a mediating variable between visibility and psychological well-being as measured by the BAI, CES-D, and DASS.

Hierarchical Multiple Regression: Perceived Religious Discrimination as a Potential Mediator

Mediation analyses were conducted following the steps suggested by Baron and Kenny (1986). The mediating variable was perceived religious discrimination and its effects on the relationship between visibility and psychological well-being were observed.

Baron and Kerry outline a set of criteria that determines if a variable is indeed serving as a mediating variable: a) the independent variable: visibility and dependent variable: mental health (i.e symptoms of depression, anxiety) are significantly and positively correlated in the absence of the mediating variable: perceived religious discrimination, b) upon the addition of the perceived religious discrimination, the relationship between the visibility and mental health are no longer significant, and c)

upon adding the perceived religious discrimination, visibility and mental health both have to be significantly and positively correlated with perceived religious discrimination. A significance of $p < .01$ was used to determine the significance of the path standardized beta coefficients.

Visibility, Perceived Religious Discrimination and Anxiety. The data showed results that were in correspondence with the criteria outlined by Baron and Kenny suggesting the mediating effects of perceived religious discrimination as a variable. Hierarchical regression analysis showed that visibility is significantly and positively related with anxiety as measured by BAI scores (Figure 2, Model 1) and accounts for 11.2% of variance in anxiety ($F=27.69$, $p < .001$). Once perceived religious discrimination was added, visibility was no longer significantly related to anxiety indicating a complete mediation (see Figure 2, Model 2). However, perceived religious discrimination was significantly and positively related to visibility and visibility was significantly and positively related with anxiety. A Sobel's test was conducted ($z= 5.1015$, $p < .001$) to find full mediation of perceived religious discrimination on the relationship between visibility and anxiety. The total model accounted for 21.8% of the variance in anxiety ($F=30.475$, $p < .001$).

Visibility, Perceived Religious Discrimination and Symptoms of Depression. Consistent with Baron and Kenny (1986), perceived religious discrimination played a role as a mediating variable between visibility and perceived religious discrimination. Hierarchical regression analysis showed that visibility is significantly and positively related with depressive symptomatology as measured by CES-D scores (Figure 3, Model 1) and accounts for 16.1% of variance in depressive symptomatology ($F=42.26$, $p < .001$).

Once perceived religious discrimination was added, visibility was no longer significantly related to depressive symptomatology indicating a complete mediation (see Figure 3, Model 2). However, perceived religious discrimination was significantly and positively related to depressive symptomatology and visibility was significantly and positively related with depressive symptomatology. A Sobel's test was conducted ($z = 6.0342$, $p < .001$) to find full mediation of perceived religious discrimination on the relationship between visibility and symptoms of depression. The total model accounted for 30.1% of the variance in anxiety ($F = 47.16$, $p < .001$).

Hierarchical Multiple Regression: Psychological Association with Islam as a Potential Moderator

Moderation analyses were conducted following the steps suggested by Baron and Kenny (1986). A series of hierarchical multiple regressions were conducted to examine whether psychological association with Islam was a moderator of the relationship between visibility and aspects of psychological well-being

In accordance with suggestions by Cohen et al. (2003), the predictor variables: visibility and psychological association with Islam were first centered, then the interaction term: visibility x psychological association with Islam was created. Based on the guidelines provided by Baron and Kenny (1986), the predictor variables were entered into the hierarchical multiple regression analyses as follows: Step 1) visibility was entered, Step 2) psychological association with Islam was entered, and Step 3) the interaction term: visibility x psychological association with Islam was entered.

Visibility, Psychological Association with Islam, and Anxiety. The results of the hierarchical multiple regression analyses showed that visibility was significantly and

positively associated with symptoms of anxiety as measured by the BAI ($p < .01$) ; accounting for 11.2 % of the variance in anxiety. In Step 2, was no longer significantly related to anxiety (see Table 5). Additionally, psychological association with Islam was added in the second step and both variables accounted for a significant amount of variance in symptoms of anxiety $R^2 = .121$, $F(2, 219) = 15.14$, $p < .01$. In Step 3, the interaction term was significant ($p < .05$) and accounted for 2.5% of the variance, $F(1,218)=6.48$, $p=.012$ indicating that psychological association with Islam did moderate the relationship between visibility and anxiety.

The interaction was graphed and the graph shows the moderating effects of psychological association with Islam on the relationship between visibility and symptoms of anxiety (see Figure 4). Symptoms of anxiety increase when visibility is high and psychological association with Islam is low. Additionally, symptoms of anxiety were lowest when visibility is low and psychological association with Islam is high suggesting that psychological association with Islam may mitigate the influence of visibility on anxiety.

Visibility, Psychological Association with Islam, and Symptoms of Depression .The results of the hierarchal multiple regression analyses showed that visibility was significantly and positively associated with symptoms of depression as measured by the CES-D ($p < .01$) ; accounting for 16.1 % of the variance in anxiety. In Step 2, two variables: psychological association with Islam and visibility were entered (see Table 6). Visibility remained significantly correlated with symptoms of depression ($p < .05$). Additionally, psychological association with Islam was also significantly correlated with symptoms of depression. Both variables accounted for a significant

amount of variance in symptoms of anxiety $R^2 = .181$, $F(2, 219) = 24.2$, $p < .01$. In Step 3, the interaction term was significant ($p < .01$) and accounted for 6.9% of the variance, $F(1, 218) = 20.04$, $p < .01$ indicating that psychological association with Islam did moderate the relationship between visibility and depression symptomology.

Next, the interaction was graphed. The graph shows the moderating effects of psychological association with Islam on the relationship between visibility and symptoms of depression (see Figure 5). Symptoms of depression increase when visibility is high and psychological association with Islam is low. Additionally, symptoms of depression were lowest when psychological association with Islam is high suggesting across different levels of visibility indicating that psychological association with Islam may to mitigate or diminish the influence of visibility on symptoms of depression.

Discussion

The purpose of this study was to 1) examine the relationship between visibility and aspects of mental health such as anxiety and depressive symptomatology, 2) explore the potentially mediating effects of perceived religious discrimination on the relationship between visibility and mental health, and 3) explore the potentially moderating effects of psychological association with Islam on the relationship between visibility and mental health. It was hypothesized that as visibility increased, aspects of mental health would worsen and data would show increased symptoms of anxiety and depression. Next, it was hypothesized that perceived religious discrimination would mediate the relationship such that the presence of perceived religious discrimination would explain the effect of visibility on symptoms of anxiety and depression. Lastly, it was hypothesized that

psychological association with Islam would moderate the relationship between visibility and mental health.

In agreement with the hypothesis, visibility was found to be significantly and positively correlated with symptoms of anxiety and depression. As scores on the hijab scale increased, scores on the BAI and CES-D also increased. Past research provided mixed results in regards to hijab and mental health. Studies found hijab to be negatively correlated with increased symptoms of anxiety and depression, as well as positively correlated with increased self-esteem and positive body image (Gulamhussein & Eaton 15; Swami et al., 2014). However, hijab or visibility is also found to be positively associated with discrimination and hate crimes (Khan, 2012).

The mixture of positive and negative effects of the hijab indicate that hijab itself may not contribute to worsened mental health, rather it is the fact that hijab's role in visibility that has an indirect effect on increased symptoms of anxiety or depression. The hijab's role as an identifier of Islamic identity makes the individual's religious identity or association visible. Therefore, it brings with it higher risk of discrimination. The minority stress theory states that stigmatized minority face higher levels of stress due to factors like discrimination and prejudice which may be detrimental to mental health (Meyer, 2003). Previous studies have shown that increased levels of both overt and covert microaggressions may lead to negative mental health effects in the Muslim population (Nadal et al., 2012). These factors lead to the proposition in the current study that perceived religious discrimination would act as the mediating variable between visibility and mental health.

In accordance with previous studies, visibility was found to be positively and significantly related to perceived religious discrimination. Muslim women who wear the hijab more frequently and to a greater degree are more at risk to be targets of hate crimes or discrimination (Khan, 2014). With the rise of anti-Muslim sentiment in the United States, Muslims may experience more forms of both overt and covert discriminatory behavior. Previous research has introduced the concept of “passing” which state that certain privileges are afforded to Muslim women who are not visibly muslim or who can “pass” as a non-minority (Johnston & Nadal, 2010). Muslim women who do “pass” or are mistaken for “non-Muslim” may have different experiences of discrimination from visibly Muslim women.

The data shows that perceived religious discrimination was in fact responsible for complete mediation of the relationship between visibility and mental health. Initially visibility was significantly and positively correlated with symptoms of depression, as well as anxiety. However, when perceived religious discrimination was controlled for, visibility was no longer a significant predictor of increased symptoms of depression or anxiety.

Being able to classify perceived religious discrimination as a mediating variable on the relationship between visibility and mental health allows for a clearer understanding of the veil. While the hijab itself may not be predictive of mental health deterioration, it’s ability so serve as an identifier for Muslim identity makes women wearing the hijab visible targets of anti-Muslim sentiment and behavior. The United States’ Islamophobic sociopolitical climate contributes to the transformation of hijab from a religious practice to a symbol of stigmatization.

The third hypothesis was proposed in light of previous evidence for moderating effects of strong identification with minority groups. While the literature was mixed in regards to directionality of moderation, it is noteworthy to consider that previous studies on populations similar to the current study found protective qualities of religious identification. In particular, an earlier study on a population of Muslim American females found that self reported religiosity was negatively correlated with internalizing psychopathology (Gulamhussein & Eaton, 2015). The data in this study found that psychological association with Islam did moderate the influence of visibility on mental health in both anxiety and depressive symptomatology. Strong psychological association with Islam buffered the influence of visibility on both anxiety and depression indicating protective effects of strong religious identity.

Limitations

While this study can contribute to the understanding of visibility, perceived discrimination, and mental health in the Muslim American community, there were some limitations to the study that should be taken into consideration. First, the data used in this study was collected using self-report measures in a cross-sectional study design. This can be particularly problematic when making conclusions about the causal relationship between two variables. Unlike longitudinal studies that can be more effective in filtering out environmental effects, cross-sectional study designs have increased limitations on controlling for confounding variables. Additionally, both the independent and dependent variables were collected using the same method which may have contributed to shared method variance consequently inflating the relationship between variables.

The sample in this current study was composed primarily of South Asian Muslims which didn't allow for the study to thoroughly separate the group by racial or ethnic background. Intergroup differences between races could have lead to more discoveries about the aspects of visibility that possibly play a role in the relationship between perceived discrimination and mental health. For example, a racially white hijab-wearing Muslim woman may have different experiences of a racially black hijab-wearing Muslim woman because intersectional identities may produce unique types of discrimination. Additionally, the study did not look at other intergroup or intragroup differences such as age, household income, and marital status which may have lead to significant variability in the data. Future studies should aim to recruit participants from a more varied background to make the necessary comparisons.

Implications and Future Direction

The research in this study can contribute to the growing body of research on the effects of perceived religious discrimination on mental health. Institutions for study, work, and commerce to name a few can utilize this information to enforce policies that promote healthier environment. Teachers and employers in both public and private institutions can be aware of the unique challenges their Muslim, particularly their Hijab-wearing female Muslim students, employees, and clients face. Counter-bullying programs at school can focus on spreading awareness of the detrimental effects of both overt and subtle covert forms of microaggressions. Similarly, employers can create safe and healthy spaces for their employees and clients by remaining vigilant and attempting to combat discriminatory speech, behavior, and actions.

This research and further research in this direction can help mental health workers identify underlying causes of increased symptoms of depression and anxiety in clients. Being aware of the root of maladaptive mental health will help therapists, counselors, and other health care workers treat the patient or client. This will be especially useful in understanding the unique stress Muslim women who wear the hijab experience. As previously mentioned, future studies can look at intersectional identities to examine how a variety of minority statuses interact with each other and impact mental health. It may also be of interest and benefit to look at intragroup discrimination within the Muslim community to identify factors of influence on relationships between in-group members. Lastly, previous studies show aggression and psychotic experiences to be positively linked to discrimination in minority groups (Williams & Mohammed, 2008; Oh et al., 2014). Future studies can look at how this may play a role in radicalization of stigmatized individuals.

Conclusion

The purpose of this study was to explore the relationship between visibility, perceived religious discrimination, and mental health amongst females in the Muslim American community. It was hypothesized that visibility would be detrimental to aspects of mental health. Additionally, it was proposed that perceived religious discrimination would mediate the effect of visibility on mental health. It was found that increased visibility is positively and significantly correlated with increased symptoms of anxiety and depression. Furthermore, perceived religious discrimination was found to be responsible for complete mediation of the relationship between visibility and anxiety. The findings in this study can prove useful to practitioners when dealing with Muslim clients.

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Table 1.

Sample Demographics

Characteristic	N	%
Racial/Ethnic Background		
Asian	142	64.25%
Black	6	2.71%
Hispanic/ Latinx	2	0.90%
Middle Eastern	27	12.22%
White	7	3.17%
Mixed	7	3.17*
Other	30	13.57%
Highest Level of Education		
High School	68	30.63%
Associate	13	5.86%
Bachelors	109	49.10%
Masters	23	10.36%
Doctoral	6	2.70%
Professional	3	1.35%
Type of Muslim		
Sunni	197	89.14%
Shia	3	1.36%
Culturally Muslim	10	4.52%
Mixed	7	3.17%
Other	4	1.81%

Table 2.

Descriptives

Variable	Range	M	SD
Psychological Association with Islam	0-97	67.59	29.38
Islamic Behavior	0-45	27.45	13.42
Visibility (Hijab Scale)	16-80	35.77	19.28
CES-D	0-53	16.19	14.13
BAI	0-63	12.53	14.07
DASS	0-126	25.12	31.55
Rosenberg Self-Esteem Scale	0-40	21.90	12.76
Perceived Religious Discrimination	0-45	18.00	10.05
RRC-ARM-28	0-140	85.59	51.76

Table 3.

Zero Order Correlations

	1	2	3	4	5	6	7	8	9
1. Visibility	1								
2. Psychological Association with Islam	.809**	1							
3. Islamic Behavior	.838**	.906**	1						
4. BAI	.334**	.328**	.305**	1					
5. CES-D	.401**	.408**	.410**	.823**	1				
6. DASS	.316**	.667**	.277*	.854**	.824**	1			
7. Rosenberg Self Esteem Scale	.555**	.738**	.699**	.144**	.218**	.090	1		
8. Perceived Religious Discrimination	.707**	.712**	.715**	.467**	.548**	.439**	.491**	1	
9. RRC-ARM-28	.550*	.724**	.693**	.269**	.327**	.262**	.842**	.489**	1

* $p < .05$. ** $p < .01$.

Table 4.

Mediation Analyses for Anxiety

Order of Entry	Predictor	F for step	T for step	df	Coefficients
Step 1: Dependent Variable: Anxiety					
1	Visibility	27.69*	5.26*	1, 220	.334*
Step 2: Dependent Variable: PRD					
1	Visibility	219.8*	14.8*	1, 220	.707*
Step 3: Dependent Variable: Anxiety					
1	PRD	30.47*	5.44*	2, 219	.460*
2	Visibility		.107	2, 219	.009

Note: PRD= perceived religious discrimination. *p<.05, **p<.01.

Table 5.

Mediation Analyses for Symptoms of Depression

Order of Entry	Predictor	F for step	T for step	df	Coefficients
Step 1: Dependent Variable: Depression					
1	Visibility	42.46*	6.50*	1, 220	.401*
Step 2: Dependent Variable: PRD					
1	Visibility	219.8*	14.8*	1, 220	.707*
Step 3: Dependent Variable: Depression					
1	PRD	47.16*	6.62*	2, 219	.529
2	Visibility		.345	2, 219	.028

Note: PRD= perceived religious discrimination. *p<.05, **p<.01.

Table 6.

Moderator Analysis: Hierarchical Multiple Regression for Anxiety

	Step 1	Step 2	Step 3
Visibility	.334**	.119	.273*
Psychological Association with Islam		.168	-.272
Visibility x Psychological Association with Islam			-.414*
ΔR^2	.112**	.121**	.025*
ΔF	26.69**	15.14**	6.48*

p<.05. ** p<.01. Standardized Beta Coefficients are Shown

Table 7.

Moderator Analysis: Hierarchical Multiple Regression for Symptoms of Depression

	Step 1	Step 2	Step 3
Visibility	.401**	.207*	.331**
Psychological Association with Islam		.240*	-.485*
Visibility x Psychological Association with Islam			-.682**
ΔR^2	.161**	.181**	.069**
ΔF	42.26**	24.2**	20.04**

p<.05. ** p<.01. Standardized Beta Coefficients are Shown

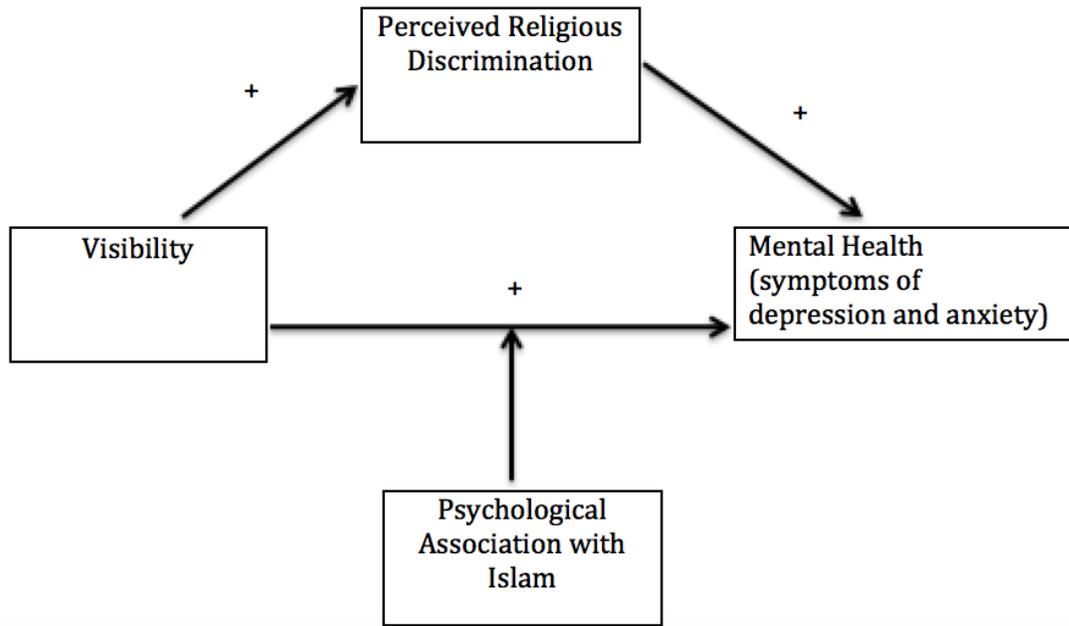


Figure 1. Theoretical Model

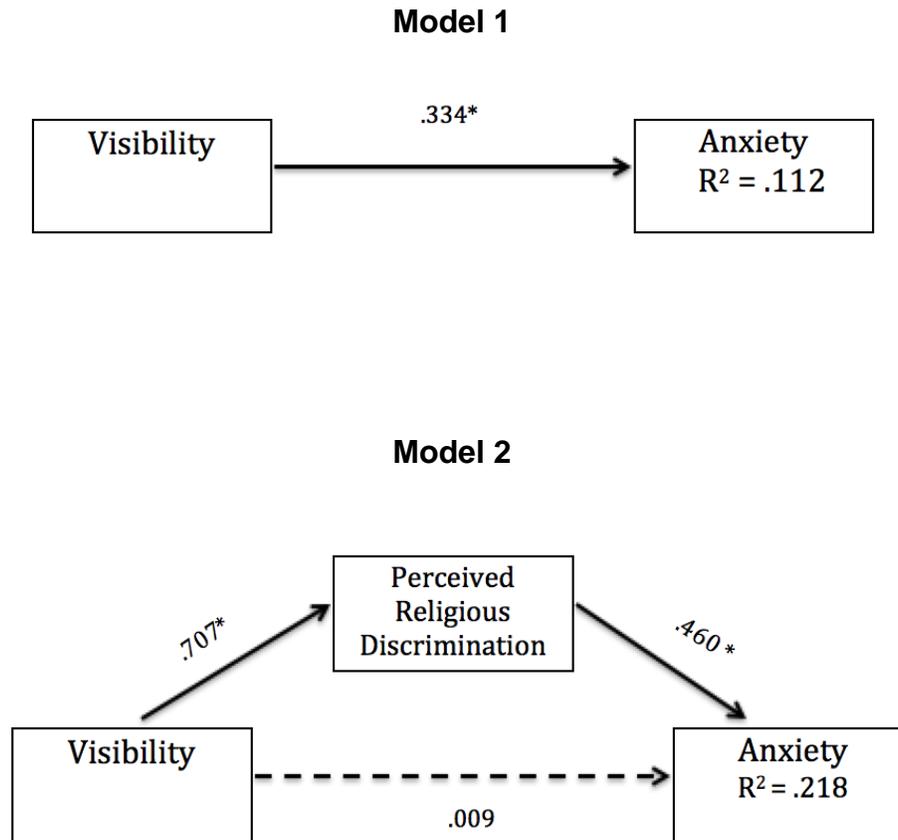


Figure 2. Models for Anxiety. Standardized beta coefficients are present for each path. Dotted lines represent a non-significant path. * p <.001

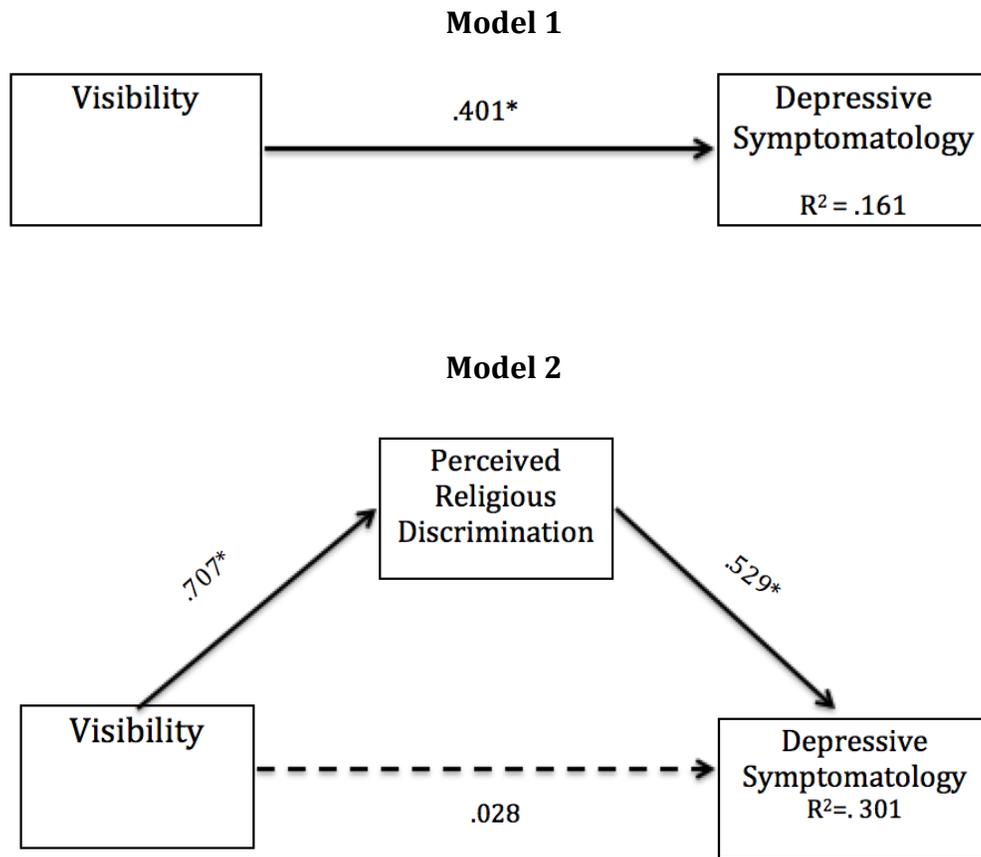


Figure 3. Models for Depressive Symptomatology. Standardized beta coefficients are present for each path. Dotted lines represent a non-significant path. * $p < .001$

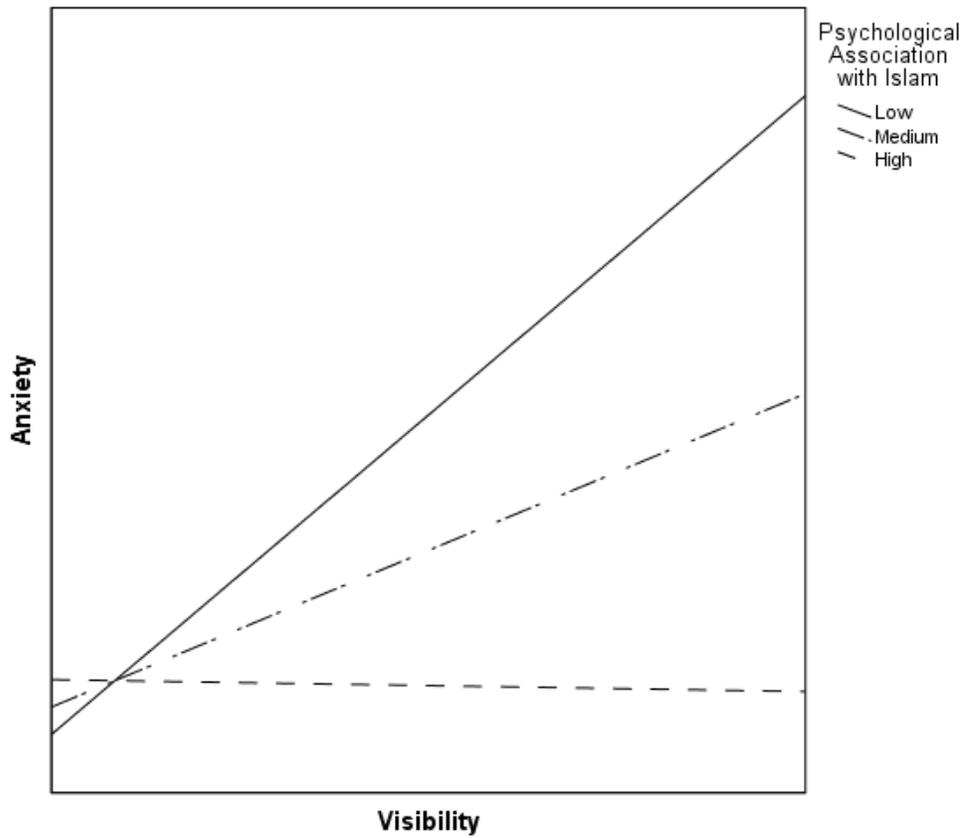


Figure 4. Moderating Effects of Psychological Association with Islam on the relationship between Visibility and Symptoms of Anxiety

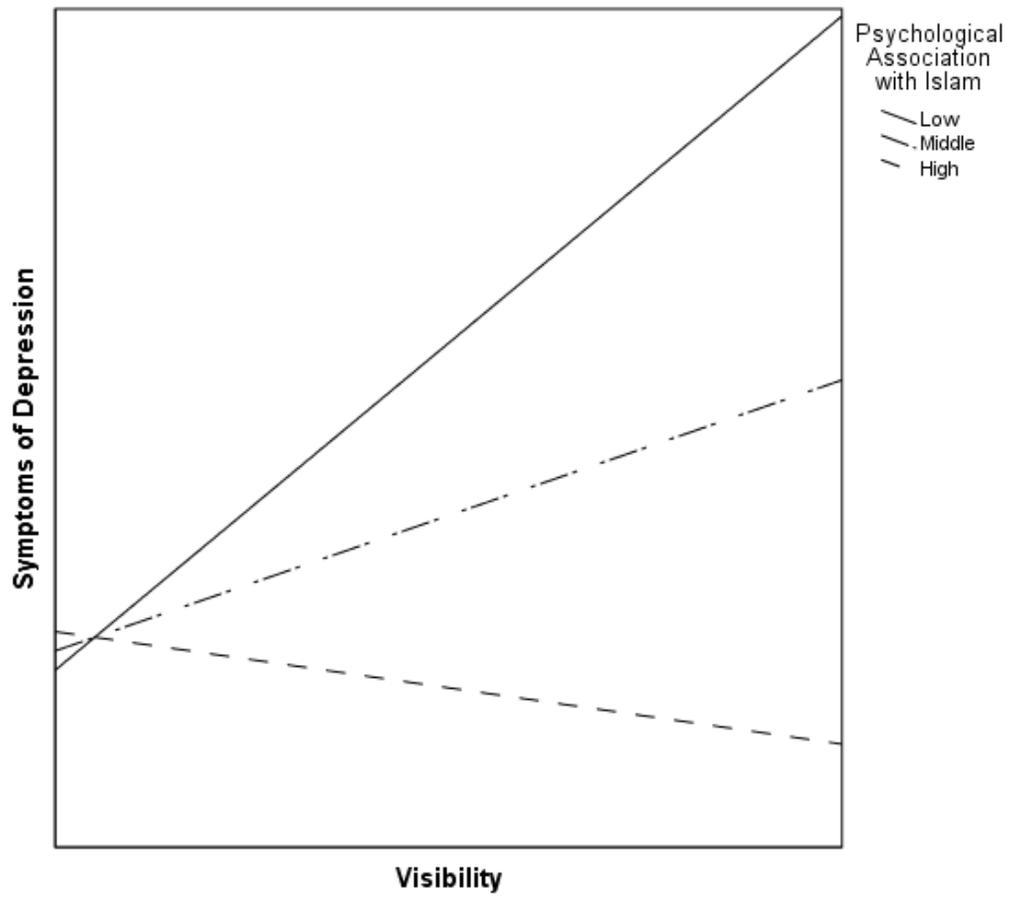


Figure 5. Moderating Effects of Psychological Association with Islam on the relationship between Visibility and Symptoms of Depression.

