Evaluation of Factors Affecting Attitudes of Muslim Americans: Toward Seeking and Using Formal Mental Health Services

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Abstract

This study investigated the effects of four independent variables—cultural beliefs about mental health; knowledge and familiarity with mental health problems, services, and providers; shame and stigma associated with mental health; and help-seeking preferences—on the attitudes of Muslim Americans toward formal mental health services. Data was collected in September 2011 via paper surveys given out at a national conference and through online data collection. The results of multiple regression analysis on 166 participants indicated that more favorable attitudes toward seeking and using formal mental health services are correlated with less cultural beliefs, more perception of shame, more knowledge and famil-
familiarity with formal services; and higher preference for formal help resources. Implications of the findings are discussed.

Keywords: Muslim, help-seeking, attitudes, stigma, knowledge, familiarity

Introduction

Over the last several decades, there have been significant improvements in mental health care (Ciftci, Jones, & Corrigan, 2012); nevertheless, it remains underutilized (Ciftci et al., 2012; Karlin, Duffy, & Gleaves, 2008). This pattern has been the same, or in some cases, more pronounced among racial/ethnic minority groups in the United States, including among populations of black (Cheng & Robinson, 2013; Kranke, Guada, Kranke, & Floersch, 2012), Asian (Chang, Natsuaki, & Chen, 2013; David, 2010), Latino (Villatoro, Morales, & Mays, 2014), and Native Americans (Gone, 2013), as well as religious minority groups such as American Muslims (Laird, Amer, Barnett, & Barnes, 2007; Padela & Curlin, 2013).

Several factors have been associated with this phenomenon, including lack of knowledge about existing formal mental health services (Nguyen & Bornheimer, 2014), negative attitudes toward mental health services and their providers (Villatoro, Morales, & Mays, 2014), prejudice and discrimination in healthcare settings (Cho, Kim, & Velez-Ortiz, 2014), the use of alternative informal resources, societal stigma attached to mental illness (Knifton, 2012; Mantovani, Pizzolati, & Edge, 2017), cultural beliefs related to the cause of mental illness (Park, Cho, Park, Bernstein, & Shin, 2013), and the proximity and accessibility to culturally and linguistically compatible mental health services (Nguyen & Bornheimer, 2014; Walker, Cummings, Hockenberry, & Druss, 2015).

Muslims in the U.S. have also been reported to experience many cultural, social, and emotional problems due to numerous stressors common to minority groups (Kira, Lewandowski, Ashby, Templin, Ramaswamy, & Mohanesh, 2014; Sirin, Ryce, Gupta, & Rogers-Sirin, 2012). Furthermore, major national and international events in the last two decades as well as the September 11th attacks have intensified longstanding negative perceptions and acts of discrimination directed at Muslims in the U.S. (Ciftci et al., 2012; Martin, 2015). This socio-political milieu has amplified the levels of stress among Muslim Americans causing mental health problems such as anxiety, depression, and post-traumatic stress disorder (Abu-Raiya, Pargament, & Mahoney, 2011; Rousseau, Hassan, Moreau, & Thombs, 2011). In 2017, CAIR issued a quarterly report indicating that the number of hate crimes in the first half of 2017 spiked 91 percent compared to the same period in 2016, which was the worst year for
such anti-Muslim incidents since the civil rights organization began its current documenting system in 2013 (CAIR, 2017).

Despite the growing body of work on a distinctively Islamic theoretical framework for Islamic psychology and psychotherapy in the last few decades (Carle, 2019; Haque, Khan, Keshavarzi, & Rothman, 2016; Rothman & Coyle, 2018), alongside the multiplication of culturally competent mental health services, many Muslims remain reluctant to seek professional help (Haque, 2008). In other words, despite the growing recognition of Muslim mental health care, Muslims may still be afraid of seeking help due to the stigma associated with mental illness (Ciftci et al., 2012). These feelings, along with mistrust of service providers, language access issues, fear of treatment, fear racism and discrimination, and perceived lack of culturally competent providers have created a barrier between Muslims and the field of mental health (Haque & Keshavarzi, 2014; Haque, Khan, Keshavarzi, & Rothman, 2016). In order to overcome this complex and enduring barrier and provide Muslim Americans with enhanced treatment options, baseline research on a wider scale is essential.

Negative attitudes toward mental health services and providers

Past research has indicated the presence of negative attitudes in the Muslim population toward mental health services and providers (Ciftci et al., 2012). This may present barriers to seeking mental health care services. Many Muslims approach Western psychology with doubts regarding its congruence with Islamic perspectives on mental health or the Islamic way of life (Rassool, 2015). When considering religious, cultural, historical, and social contexts, especially of the immigrant Muslim community, it is apparent that Western mental health settings may not be favorable for Muslim immigrant clients (Amri & Bemak, 2012). Take, for example, how some religious beliefs and cultural norms that prescribe gender roles and sets limitations for intergender interactions would impact finding support; pairing a female client with a male counselor would be heavily looked down upon (Amri & Bemak, 2012; Walpole, McMillan, House, Cottrell, & Mir, 2013). Furthermore, because of the collectivist nature of the Muslim community, many Muslims may be unfamiliar and unwilling to draw attention to the self in a therapeutic setting because mental illness is seen as a “private family matter” (Ciftci et al., 2012; Walpole et al., 2013); partially for this reason, it is more socially acceptable to seek help from within the family or community as this approach protects the family’s social status (Amri & Bemak, 2012). Muslims may also hesitate to disclose religious conflicts, questions, and doubts related to matters of faith and God, among others, for fear that is morally wrong to do so and that it might incite negative appraisals or stigmatizing retort (Abu-Raiya, Exline, Pargament, & Agbaria, 2015). For immigrants and minorities, cultural mistrust of mental health counselors is one
of the longstanding barriers to accessing mental health services (Amri & Bemak, 2012). The reasons for this include past experiences of racism, discrimination, and social exclusion that can be traced as far back to the tense post 9/11 socio-political climate which has negatively influenced help-seeking behaviors (Amri & Bemak, 2012). In addition, this mistrust is compounded by the fear that non-Muslim American counselors do not have the background needed to understand the cultural and religious contexts in which Muslims live, and for this reason they may suggest actions or lead the individual in a direction that may conflict with their values and belief systems (Amri & Bemak, 2012; Rassool, 2015).

Cultural beliefs associated with the cause of mental disorders

Studies show that for the expectations of both healthcare providers and their patients to be met, they must share similar conceptualization of disease and cure (Padela, Killawi, Forman, DeMonner, & Heisler, 2012). Therefore, for patient populations whose religious and cultural beliefs inform expectations of healthcare providers and serve as alternative philosophical frameworks for articulating the meaning of health and appropriate help-seeking behaviors, the formal healthcare setting may be unwelcoming (Padela et al., 2012; Martin, 2015; Rassool, 2015). This frame of help-seeking attitudes and behaviors may also explain the underutilization of mental health services among Muslims (Rassool, 2015). The Islamic perspective on mental health significantly contrasts with the secular etiology of mental health (Rassool, 2015). This is particularly important because although the Muslim community is ethnically, racially and socioeconomically diverse, it is bound together by religious worldviews that cut across social lines to inform how its members appraise distress, seek help and interact with the healthcare system (Padel & Curlin, 2012; Padela et al., 2012). Nevertheless, the diversity within this population means that for clinicians looking to understand beliefs related to the causes of mental illness, they must be aware the difference between culture and religion.

Some Muslims believe that depression occurs due to lack of faith; individuals or families with this opinion are less likely to acknowledge symptoms or seek professional psychological help due to the stigma (Amri & Bemak, 2012; Walpole et al., 2013). Consequently, such Muslims are more likely to use alternative informal resources that are more socially acceptable and within the frame of their beliefs (Ciftci et al., 2012; Haque & Keshavarzi, 2014). These alternative informal resources can be imams or local sheikhs, religious figures seen as indirect Divine authorities that are equipped to provide a variety of spiritual and non-spiritual services (Ciftci et al., 2012; Padela, Killawi, Heisler, DeMonner, & Fetters, 2011). Religious leaders play multiple overlapping roles, and imams have diverse qualifications and expertise owing to the absence of a formalized, uniform clergy system (Padela et al., 2011). Studies show that
imams play an influential role in how families and communities view and respond to illness (Ciftci et al., 2012). In addition, they are also trusted figures and providing counseling to their congregants, adjudicating ethical challenges in matters related to medical care, and promoting healthy mental well-being (Ciftci et al., 2012; Padela et al., 2011). Muslims may also use a range of religiously endorsed coping strategies and beliefs (Padela et al., 2011; Walpole et al., 2013), alongside orthodox psychiatric or similar help (Walpole et al., 2013), without disclosing such information to mental health professionals for fear of being misunderstood (Samari, 2016).

It is not uncommon for Muslims to attribute depression to supernatural forces at work, and this includes possessions by demons known as jinns, ramifications for past sins, being cursed by the evil eye (al-ayn), black magic (seher; Amri & Bemak, 2012; Haque & Keshavarazi, 2014; Rassool, 2015), and witchcraft (jadoo; Walpole et al., 2013). Another belief common among Muslims is that mental illness is caused by Divine chastisement or a test on the forbearance of the individual which leads to increased tolerance of mental illness, as the individual is subjecting themselves to God’s will (Amir & Bemak, 2012; Walpole et al., 2013). These beliefs about the cause of mental illness may influence patterns of help seeking and response to treatment (Amri & Bemak, 2012; Ciftci et al., 2012).

Shame and stigma attached to mental health problems and services

While studies have identified numerous factors contributing to mental health disparities, stigma is perhaps one of the most significant and constant challenges to accessing mental health services (Amri & Bemak, 2012; Ciftci et al., 2012). The U.S. Department of Health and Human Services has reported that social stigma is probably the single largest hidden contributor to the burdens of mental illness (USDHHS, 2001). Studies show that in many cultures mental illness and treatment is heavily stigmatized; in the same manner, psychopathology is heavily stigmatized within the immigrant Muslim community (Amri & Bemak, 2012). Stigma not only discourages people from seeking help for psychological distress (Amri & Bemak, 2012), it is itself a source of psychological distress (Hankir, Carrick, & Zaman, 2017).

Research has indicated that some Muslims disapprove of mental disorders and consider it a shameful action to seek mental health services and use psychiatric medications which may lead affected individuals to hide their mental health issues; this causes problems with interpersonal relationships and integration within the community (Rassool, 2015). This negative attitude toward seeking professional help may also be due to feelings associated with reputation among family, tribe, and society, which bear weight across a diversity of cultures (Ciftci et al., 2012).
Unfamiliarity with the existence of formal services

The reluctance of some Muslims to seek formal help has also been linked to their lack of familiarity with the formal health care system (Lai & Surood, 2013). A study examining the experiences of immigrant patients in mental health services suggests that unfamiliarity with how health care services operate in the host country is among the issues specific to immigrant groups (Sandhu et al., 2013). In other words, unfamiliarity with the health care system, or how health care services function is a major challenge to building therapist-patient alliance (Sandhu et al., 2013). Studies show that South Asians are more likely to deny having psychological problems because they’ve been socialized to not disclose problems to people outside the family for fear of negative response, and for this reason they are less confident in seeking help from mental health professionals (Lai & Surood, 2013). Considering these limitations, it is not surprising that some Muslims choose informal methods of treatment, closely related to cultural values and Islamic beliefs, over formal mental health services. However, with the growing body of work on religion and spirituality in clinical practice, alongside the successful application to clinical practice (Haque et al., 2016), demands for effective treatment practices are likely to increase religiously observant Muslims seeking culturally competent professional help.

Materials and Methods

The purpose of this study was to explore factors that affect mental health help-seeking attitudes of Muslim Americans. The current study looked at the attitudes toward mental health issues, their causes and treatment, knowledge about and familiarity with mental health problems, services and providers, the perceived societal stigma, and the help-seeking preferences of Muslim Americans.

Research Hypotheses

Controlling for length of stay in the U.S., gender, age, education, and socio-economic variables, the following hypotheses were proposed:

1. Muslim Americans with more culturally traditional beliefs about mental health will report less favorable attitudes toward formal mental health services;

2. Those who perceive higher levels of shame associated with the seeking formal mental health services will report less favorable attitudes toward formal mental health services;
3. Those with less knowledge about and familiarity with mental health problems, services, and providers will report less favorable attitudes toward formal mental health services; and
4. Muslim Americans who choose informal resources as their most preferred help resources will report less favorable attitudes toward formal mental health services than those who choose formal resources as their most preferred help resource.

Participants and the Selection Process

This research study was approved by Midwestern University Institutional Review Board (IRB) prior to collection of data.

The participants were recruited at an annual convention using non-random, convenience sampling method. Moreover, about one-third of the participants were recruited online through social media using similar sampling methods. The study sample was restricted to individuals aged 18 years old or older, identify themselves as Muslims, and currently live in the United States.

Measures

The questionnaire in this study was previously used in a study on Arab American Muslims living in Columbus, Ohio (Aloud & Rathur, 2009). Written permission was obtained from the primary author before conducting this study.

The 58-question survey is divided into four sections:

1. **Attitudes toward seeking formal mental health services.** This portion was developed and adapted by Aloud from the Attitudes Toward Seeking Professional Psychological Help Scale (ATSPPH; Fischer and Turner, 1970). The newly constructed instrument was called The Attitude Toward Seeking Formal Mental Health Services (ATSFMHS) and was constructed based on a Likert-type scale (1 = Strongly Agree, 2 = Agree, 3 = Disagree, and 4 = Strongly Disagree).

2. **Cultural beliefs about mental health problems.** This section assessed the influence of cultural, traditional, and Islamic beliefs regarding the causes and treatment of mental health problems among Muslims. The instrument consists of eleven Likert-type items (0 = False, 1 = Probably False, 2 = Probably True, and 3 = True) and was developed for the specific use previous (Aloud & Rathur, 2009).

3. **Knowledge and familiarity with formal mental health services.** This section was developed by Aloud and Rathur (2009) to specifically examine the extent to which Muslims are familiar with the types of mental health problems (e.g., depression, anxiety, schizophrenia, etc.).
This section also examines how familiar the respondent is with the role of mental health professionals in various settings, along with the location and means of contacting local formal mental health providers, and common formal mental health interventions.

4. **Demographic information.** The 12 questions in this section assess the basic demographic information of the respondent (e.g., age, gender, length of stay in the U.S.), and their history of using mental health services.

**Results and Discussion**

All collected data was analyzed on the IBM’s Statistical Package for the Social Sciences (SPSS v 17.0). First, all variables were examined for any missing data, accuracy of data entry, and whether the variables were appropriate for the regression analysis. One case was removed because the participant had skipped more than 5 questions. The rest of the missing data was replaced with the mean of all collected data from the same variable. A total of 166 participants were included in this study.

**Demographic Variables**

Descriptive analyses were conducted on all demographic and background vari-

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>100</td>
<td>60.2</td>
</tr>
<tr>
<td>Female</td>
<td>66</td>
<td>39.8</td>
</tr>
<tr>
<td><strong>Age</strong> (Range = 18-67)</td>
<td>166</td>
<td></td>
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<tr>
<td>Mean</td>
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<td></td>
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<tr>
<td>SD</td>
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<tr>
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<tr>
<td>Yes</td>
<td>83</td>
<td>50</td>
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<tr>
<td>No</td>
<td>83</td>
<td>50</td>
</tr>
<tr>
<td><strong>Country of Birth</strong></td>
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<tr>
<td>Pakistan</td>
<td>72</td>
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<tr>
<td>India</td>
<td>50</td>
<td>30.1</td>
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<tr>
<td>Palestine</td>
<td>14</td>
<td>8.4</td>
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<td>USA</td>
<td>5</td>
<td>3.0</td>
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<td>Egypt</td>
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<td>2.4</td>
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<td>Afghanistan</td>
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<td>1.2</td>
</tr>
<tr>
<td>Burma</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Iraq</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Syria</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>7.8</td>
</tr>
</tbody>
</table>
When taking demographic variables into consideration, some interesting findings were observed in the collected data. With regards to age, there was a statistically significant (p<.01) inverse relationship observed. As the age of participant increased, their adherence to cultural beliefs decreased. This is a counterintuitive finding against previous research by Al-Adawi and colleagues (2002) which reported that younger individuals tend to be less accepting of cultural and traditional explanations of mental health problems than older individuals (2002). With regards to the level of education, it was observed that as the level of education increased, adherence to cultural beliefs decreased. This inverse correlation was also statistically significant (p<.05).
The sample’s primary characteristics (i.e., gender, age, education level, socioeconomic status, etc.) were analyzed by using descriptive statistics, including frequency distributions, measures of central tendency, and measures of variability. Dummy-coding method was used to add the categorical variable (help-seeking preferences) into the regression analysis. The original six help resource categories were re-coded from formal to informal sources of help where the mental health professional was the most formal source, followed by a medical doctor, etc.

Summary of Responses to the Questionnaire

Tables 2 summarizes the means, standard deviations, and the ranges of the responses. Muslim Americans endorsed somewhat favorable attitudes (mean=2.77, SD=0.408) toward the seeking and using formal mental health services. Participants reported somewhat decreased levels of stigma and shame (mean=2.08, SD=0.528) associated with seeking help for mental health problems, somewhat lower levels of internalized cultural beliefs about mental health problems (mean=2.25, SD=.470), somewhat increased amount of knowledge and familiarity of mental health problems, formal services, and professional providers (mean=2.55, SD=0.755). Finally, participants reported to be more likely to seek help from a formal mental health professional than an informal source (mean=4.00, SD=.823).

<table>
<thead>
<tr>
<th></th>
<th>Attitudes</th>
<th>Stigma</th>
<th>Cultural Beliefs</th>
<th>Knowledge &amp; Familiarity</th>
<th>Help-Seeking Preference</th>
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<tr>
<td>Mean</td>
<td>2.77</td>
<td>2.08</td>
<td>2.25</td>
<td>2.55</td>
<td>4.00</td>
</tr>
<tr>
<td>SD</td>
<td>.408</td>
<td>.528</td>
<td>.470</td>
<td>.755</td>
<td>.823</td>
</tr>
<tr>
<td>Range</td>
<td>1.53 – 3.87</td>
<td>1.00 – 3.60</td>
<td>1.00 – 3.27</td>
<td>1.00 – 4.00</td>
<td>1.00 – 6.00</td>
</tr>
</tbody>
</table>

A bivariate correlation analysis was conducted to check for correlations between variables and assess the variation in the data. As Table 3 suggests, attitudes of Muslim Americans were statistically significant when compared with the four independent variables. Attitudes were positively correlated with societal stigma, negatively correlated with cultural beliefs, positively correlated with knowledge and familiarity, and positively correlated with help-seeking behaviors of Muslim Americans. In other words, Muslim Americans who perceive higher levels of societal stigma, have lower cultural beliefs, are more knowledgeable and familiar with mental health issues, and will seek formal mental health services have favorable attitudes toward seeking and using mental health services. Another statistically significant result was the negative correlation between cultural beliefs and knowledge and familiarity. In other words, Muslim Americans who have stronger cultural beliefs will have low knowledge
and familiarity with mental health issues. Cultural beliefs appear to have the strongest influence on attitudes, followed by societal stigma, knowledge and familiarity, and help-seeking preferences.

Hierarchical Multiple Regression Analysis

Hierarchical multiple regression analysis addressed the question: “Among Muslim Americans, which of the following factors best explains individual attitudes toward seeking and using formal mental health services?” Four independent variables were selected and their effects on help-seeking attitudes toward formal mental health services was tested: a) cultural beliefs about mental health problems; b) perceived societal stigma; c) knowledge and familiarity with formal mental health services; and d) help-seeking preferences. Demographic characteristics (gender, age, education level, income, and length stay in the U.S) were treated as controlled variables in the regression analysis.

The data was tested to check for the violation of regression analysis assumptions of linearity, homoscedasticity, and normality. No violations were observed in the data.

Test for significance of the regression models.

Since the researchers wanted to reduce the effects of demographic variables, they were controlled for in this study. Therefore, demographic variables (such as gender, age, length of time in the U.S., etc.) were all entered into the first block (Model I) in the regression analysis. The four remaining variables were separately entered into the regression analysis one at time, as presented in Table 4.

As can be seen in the first model, variable of “attitudes” was regressed on the independents variables gender, age, education level, income, and length of stay in the U.S. This model yielded an insignificant \( R^2 \) of <0.0001 (\( p = .42 \)). This suggests that the linear combination of these selected demographic variables does not explain much variance in the dependent variable (attitudes of Muslim Americans toward the seeking and using formal mental health services).
In the second regression analysis, the independent variable cultural belief about mental health problems was added to the regression equation. This model yielded a statistically significant \( R^2 \) of 0.142 (p<.01), suggesting that the cultural beliefs variable contributed significantly and accounted for an additional 14% of the variance in the attitudes variable above and beyond effects of selected demographics characteristics. In other words, Muslim Americans who attribute the causes of mental illness to metaphysical forces, a belief rooted in some Islamic and cultural traditions, tended to report less favorable attitudes toward seeking and using formal mental health services.

In the third regression analysis, perceived societal stigma variable was added to regression equation. This yielded a statistically significant \( R^2 \) of .204 (p<.01), suggesting that the perceived societal stigma variable contributed significantly and accounted for an additional 6% of the variance in the attitudes variable. The results did not support the second research hypothesis that Muslim Americans who perceive higher levels of shame associated with seeking formal mental health services will report less favorable attitudes toward formal mental health services. Instead, the results indicated that higher levels of stigma associated with seeking formal mental health services is positively correlated with favorable attitudes toward seeking professional help. The higher levels of stigma within the Muslim community is a known phenomenon. Similar finding has been associated with the previous similar study where the data suggested the presence of stigma even with positive attitudes due to the shame associated with having a mental illness (Aloud & Rahur, 2009). Research has indicated that some Muslims disapprove of mental disorders and consider it a shameful action to seek mental health services or use psychiatric medications (Abu-Ras, 2003). Lastly, according to the data collected, Muslim American women tend to experience more stigma than men.

This could be explained by emerging trends in the last decade. First, religious figures and Muslim mental health professionals are raising awareness about mental illness and advocating for the utilization of formal services (Padela et al., 2011). Second, more studies are being done on religion and spirituality in clinical practice. Finally, there is a growing network of mental health

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>Adjusted R Square</th>
<th>R Square Change</th>
<th>Sig. F Change</th>
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<tr>
<td>1</td>
<td>.175</td>
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<td>.42</td>
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<td>2</td>
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<td>5</td>
<td>.545</td>
<td>.256</td>
<td>.041</td>
<td>&lt;.01</td>
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professionals developing and applying effective interventions and techniques within Islamic psychology (Haque et al., 2016; Rassool, 2015). In addition, it is likely that factors such as economic and education status played significant roles in this finding. Studies show economic status is correlated with access and utilization of mental health services (Aloud & Rathur, 2009), and for this reason, many of the participants being in higher income and education brackets could explain why there are more favorable attitudes toward formal mental health services (Aloud & Rathur, 2009). Education could also be a significant contributing factor, that is, with many of the participants being highly educated they are more likely to be knowledgeable and familiar with formal mental health services, as well as recent advances in religious and spiritual approach to mental health treatments. Lastly, Muslim women tend to experience more stigma related to most aspects of life (marriage and divorce, gender roles, etc).

In the fourth regression analysis, the independent variable knowledge about and familiarity with formal mental health services was added to the regression equation. This model yielded a statistically significant $R^2$ of 0.218 ($p<.05$), suggesting that knowledge about and familiarity with formal mental health services contributed significantly and accounted for an additional 2% of the variance in the attitudes variable. These findings support earlier research regarding the lack of knowledge found among Muslims (Abu-Ras, 2003; Al-Krenawi, 2002; Erickson & Al-Tamimi, 2001). Knowledge of and familiarity with psychological disorders and services offered has been shown to affect the attitudes of general population in past studies (Couture & Penn, 2003; Jorm, 2000; Mickus, Colenda, & Hogan, 2000).

In the fifth and final regression analysis, the independent variable, help-seeking preferences, was added to the regression equation. This model yielded a statistically significant $R^2$ of 0.256 ($p<.01$), suggesting that this model's variable set accounted for 25.6% of the variance in the dependent variable. The results supported the fourth research hypothesis that Muslim Americans who choose informal resources as their most preferred help resources will report less favorable attitudes toward formal mental health services than those who choose formal resources as their most preferred help resource. This is also consistent with the literature regarding the effects of available informal resources on the utilization of formal mental health services (Al-Krenawi, 2002; Al-Krenawi & Graham, 2003).

The correlation coefficients supported the research hypotheses. A lesser degree of cultural and traditional beliefs about mental health problem correlated with lesser perceptions of shame associated with seeking formal mental health services; the higher preference for formal help resources over informal help resources, the more likely the respondent is to hold favorable attitudes toward the seeking and using of formal mental health services.
Implications of the Study Findings

The results from this study indicate that Muslim Americans’ attitudes toward mental health are significantly influenced by multiple factors. This study also has implications for changes in mental health policies. Results from this study bring attention to the urgency of making accessible, affordable, and culturally sensitive mental health services for Muslims. Policies should focus on the establishment of ethnic-specific facilities and community outreach programs in order to increase the utilization of formal services, lower dropout rates, and have better intervention outcomes.

For professionals working in mental health settings (psychiatrists, psychologists, social workers, therapists, and counselors), this study provides significant information regarding the cultural and religious views of Muslims in general, and Muslim Americans in particular. The above-mentioned variables should be taken into account when working with Muslim Americans. Mental health professionals need to educate themselves about Islamic cultures and traditional beliefs of Muslims and their religious practices in order to better assist their Muslim clients. This study demonstrated that Muslim Americans are more likely to choose informal resources over formal ones. Therefore, mental health professionals should become aware of the roles played by informal resources in determining how formal mental health care is sought.

Local Islamic organizations should be made aware of these findings and their implications. The results of this study have demonstrated the increased need for culturally adapted mental health services for Muslims. Since Muslims are often attached to local mosques and organizations, it becomes the job of these organizations to educate and assist their community members with regards to mental health problems and solutions. By using the data from these studies, Islamic organizations should also seek government funding for the creation and distribution of culturally sensitive resources.

References

Al-Adawi, S., Dorvlo, A., Al-Ismaily, S., Al-Ghafr, D., Al-Noobi, B; Al-Salim,


Jorm, A. (2000). Mental health literacy: Public knowledge and beliefs about mental


