MENTAL HEALTH HELP-SEEKING IN SOUTH ASIAN AMERICAN MUSLIMS:

THE ROLE OF CULTURAL BELIEFS, ATTITUDES, AND KNOWLEDGE

A Dissertation Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Doctor of Philosophy

By

Nadia Damani-Khoja

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Acknowledgement

"Let us be grateful to people who make us happy, they are the charming gardeners who make our souls blossom." Marcel Proust

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Abstract

Background: Islam is one of the fastest growing religions in the U.S. It is imperative for mental health researchers and clinicians to learn about group differences among South Asian American Muslims to avoid misconceptions and stereotypes. **Purpose:** This study examined if there are differences in (a) cultural beliefs, attitudes, and knowledge and familiarity towards formal mental health help between three South Asian Muslim groups—Sunni, Shia, and Ismaili—controlling for the effects of age and generational status; (b) cultural beliefs, attitudes, and knowledge and familiarity between men and women; and (c) preferences towards seeking formal (physicians, mental health professionals) versus informal (family, friends, and religious leaders) mental health resources based on Muslim group. **Method:** Participants included 252 South Asian American Muslims. Measures included demographics, the Cultural Beliefs about Mental Health Problems scale, the Attitudes Towards Seeking Formal Mental Health Services scale, the Knowledge About and Familiarity with Formal Mental Health Services scale, and an author-generated measure of preferences towards formal versus informal mental health resources. **Results:** A one-way between-groups MANCOVA, controlling for age and generational status, was conducted. Sunnis endorsed the most traditional cultural beliefs, compared to Shias and Ismailis. Shias endorsed the least positive attitudes and the least knowledge and familiarity, compared to both Sunnis and Ismailis. Women endorsed more positive attitudes and knowledge and familiarity than men but there were no significant differences for cultural beliefs. Shias preferred reaching out to informal support first while both Sunnis and Ismailis preferred reaching out to formal support. **Conclusion:** Results suggest that mental health help seeking in South Asian American

Muslims is complex, especially when it comes to cultural beliefs, and can have implications for engagement in seeking formal services. Clinical implications are discussed and suggestions for future research provided.

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Chapter I

Introduction

Islam is the second largest religion around the globe with 1.6 billion followers (Pew Research, 2013) and has become one of the fastest growing religions in the United States (Daneshpour, 2009). The current estimation of 5-7 million American Muslims is projected to more than double in the U.S. by 2030 (CFR, 2012; Esposito, 2011). Despite being a sizeable minority in the United States (Esposito, 2011), American Muslims, their mental health needs, and their utilization of mental health services remain empirically unidentified. Larger gaps remain when it comes to understanding subgroups within the Muslim American group (Sauerherber, Nims, & Carter, 2013; Springer, Abbott, & Reisbig, 2009). One such subgroup is South Asian American Muslims. Little is known about mental health help-seeking attitudes among subgroups of South Asian American Muslims.

South Asian Americans compose the third largest minority group within the larger 17.3 million Asian Americans (U.S. Census Bureau, 2010). More than 3.4 million Asian Americans trace their heritage to South Asia, and they are considered to be the most diverse U.S. ethnic group depicting varied national, religious, linguistic, and cultural heterogeneity (Masood, Okazaki, & Takeuchi, 2009). The number of South Asian Muslims is not agreed upon. However, according to one source, about 28% of all U. S. Muslims are thought to be of South Asian descent (Pew Research, 2011). South Asian Americans are seen as educated, driven, and professional. Some may even see them within the “model minority” portrayal of Asian Americans. However, such positive portrayal is misleading due to the recent terrorism shadow on American Muslims and

underreported psychosocial stressors (Masood et al., 2009). Islam and its followers have been on the forefront of domestic and global media and politics in recent years. In light of the war on terror, worldwide attention has been directed towards the ongoing conflict between the Muslim world and the Western world. Recent rise of the so-called ISIS, global unrest in Syria and Egypt, mass Muslim refugee migration to Europe, recent Paris and Brussels attacks, and the consequent representation of Global Muslims as "terrorists" in mass media has left American Muslims in a constant struggle of balancing multiple identities. Researchers have documented that the Muslim community worldwide is experiencing Islamophobia, slights, prejudices, hate crimes, and social exclusions resulting in increased anxiety, stress, and depression for this group (Akhtar, 2010; Ali, 2008; Dunning, 2011; Rassool, 2015). There have been indicators that American Muslims are increasingly experiencing both physical and mental health problems (Kira et al. 2010; Rippy & Newman, 2006). Despite noting such increased stressors on American Muslim communities, there continues to exist a lack of empirical data on their mental health needs and help seeking attitudes and behaviors.

Research studies involving religion and spirituality have noted that in Islam, balance between spirit, body, and soul plays an important role in understanding and treating mental health problems. In essence, religious values, beliefs, cultural norms, and practices shape Muslim's perception of mental health, behaviors, and service utilization (Rassool, 2015). To date, there have been no large-scale epidemiological reports on the prevalence rate of mental health problems of Muslims, domestically or globally (Rassool, 2015). Much of what is available on American Muslims' attitudes and behaviors towards health and help seeking is in the medical literature, which is mostly presented through the

lens of expert commentaries, and very few empirical studies are offered on this topic (Hammoud, White, & Fetters 2005; Laird, de Marrais, & Barnes, 2007; Simpson & Carter 2008). Most of the psychology literature on Islam has also previously relied on clinical observation, anthropological methods, and theological positions (Abu Raiya, Pargament, Stein, & Mahoney, 2007). Although more empirical studies are emerging on Islam, its practices, beliefs, and impact on the well being of Muslims, the overall studies on American Muslims remain sparse. In response to 9/11, literature has addressed intergroup relations and terrorism and attempted to highlight backlash experiences of American Muslims, Islamophobia, hate crimes, and media bias. However, research studies involving American Muslims and reporting on their mental health needs, help seeking behaviors, health disparities, coping with discrimination, and culturally effective clinical practices remain sparse (Amer & Bagasra, 2013).

A three-decade content analysis of psychological research conducted with South Asian Americans done by Inman et al. (2014) revealed that South Asian Americans have constantly been under stress due to recent world events. This included results from studies that looked at general psychological distress of South Asian Americans due to intergenerational conflicts, workplace discrimination, acculturative stress, domestic violence, ethnic-identity challenges, substance abuse, and racial discrimination. However, the content analysis also revealed that underutilization of formal mental health services remained apparent for this group, despite the heightened psychological anguish. There have been some studies conducted with South Asian population residing in Canada and U.K. (Sheikh & Funham, 2000). Data largely suggest mixed results with some studies indicating South Asians and particularly South Asian Muslims being less likely to access

mental health services than the general population and other ethnic minorities and some contradicting such results (Kulwicki, Miller, & Schim, 2000; Sheikh & Funham, 2000).

Several factors may contribute towards difficulty in seeking mental health help for South Asian American Muslims. Firstly, how American Muslims are represented in the Census Data is problematic, as there is no category for religious affiliation. For example, Arab Muslims have been historically counted in Census Data within the Caucasian category and South Asian American Muslims are counted within the Asian category. Secondly, American Muslims are often viewed as a homogeneous group, lumped together and consequently the uniqueness of various groups is inadvertently overlooked. Lack of culturally appropriate research methods, measures, or clinical interventions may also discourage groups such as South Asian American Muslims in participating in valuable research or in seeking much needed mental health help. Since 9/11 and the subsequent domestic and global events, Muslims in the United States, despite their education or professional status, seem to be under the extremist or terrorism shadow. The shadow is cast even longer if the person is deemed as 'other' with drastically different dress code or custom than the mainstream. Therefore, the struggle to integrate and be accepted remains for Muslim Americans who may face discrimination and hostility, often in the shape of Islamophobia (Esposito, 2011). Media portrayals and public opinions are rarely backed up by sound research. This, coupled with the lack of accurate information on Islam and unfamiliarity towards the national, racial, ethnic, cultural, and political diversity that exists within the Muslim world, results in gross misconceptions and misrepresentation of a major religion and its followers. Consequently, the majority of peace loving Muslims worldwide may find themselves

coping with prejudice, discrimination, and the resulting distress (Akhtar, 2010) and regrettably, South Asian Muslim Americans may constantly find themselves in positions of having to defend their racial and ethnic identities in this new discourse. Increased psychological distress due to discrimination and hostile behaviors towards American Muslims may result in American Muslims' mistrust of the healthcare system which in turn can have further negative mental health consequences for this group (Abu-Ras & Abu-Bader 2009; Padela & Heisler 2010). It is not entirely surprising that Muslim Americans would avoid participating in any mainstream studies that they may perceive as an additional stressor or would avoid seeking formal mental health help that may become another way of inviting more undesirable emphasis on their communities. Lastly, often, providers may inadvertently treat American Muslims differently as a result of widespread stereotypes or unfamiliarity towards group differences in cultural practices (Padela, Killawai, Heisler, Demonner, & Fetters, 2011). Consequently, multiple layers of challenges remain in understanding South Asian American Muslims' mental health needs, their help seeking attitudes and behaviors, and the most effective way of providing culturally efficient mental health services to them.

Given the paucity of empirical studies on South Asian American Muslims, the purpose of this study has been to explore attitudes towards mental health help seeking among three groups within the South Asian American Muslims – South Asian Sunni American Muslims, South Asian Shia American Muslims, and South Asian Ismaili American Muslims. It is hoped that this foundational study will enhance our research and practice by acquiring precise information about the South Asian American subgroups and thereby refining our knowledge towards the larger American Muslim group. Assuming a

participant-observer position as a first generation South Asian Ismaili American Muslim and a clinician who works with this population, the researcher strongly believes in the positive research and practice implications that lie within this investigation.

First, details on Islam, Muslims, American Muslims, and South Asian American Muslims will be considered. Next, cultural beliefs about mental health causes and treatments, knowledge about mental health and available resources, preferences towards informal mental health resources, attitudes towards formal mental health providers, social stigma felt towards seeking mental health, demographic factors, and any other circumstances that may help or deter South Asian Americans' in seeking mental health help will be reviewed. Methodology, results, and analysis will follow. Last, discussion on limitations of the present study, and implications for future research and practice will be presented. Considering the lack of literature availability on the South Asian American Muslim groups, existing literature on American Muslims and South Asian Americans will be reviewed.

Chapter II

Literature Review

Islam

Islam is the last major monotheistic and Abrahamic tradition that emerged in the early 7th century C.E, in the town of Mecca in the Arabian Peninsula. The word *Islam* has a linguistic connection to the word *salam* (peace) and is translated as "submission" or "surrender." A Muslim then is thought to submit and surrender to the will of Allah (Gordon, 2002; Lumumba, 2003). Islam is the second largest religion in the world and one of the fastest growing religions in the United States. Approximately 23% of the world's population, about 1.6 billion, are followers of Islam, putting it behind the 31% of the world's population who are Christian. (Pew Research, 2013). Despite the popular belief that the majority of Muslims are Arabs, only 12% of Muslim worldwide are Arab (Sechzer, 2004). Of the total Muslim population, two-thirds live in ten countries. Of those, six are in Asia, in Indonesia, Pakistan, India, Bangladesh, Iran, and Turkey, three are in North Africa in Egypt, Algeria, and Morocco, and one is in Sub-Saharan Africa, in Nigeria (Pew Research, 2013). Considering the diversity in Islam, based on geography, different Islamic sects, different interpretation of Islamic laws, and the political structure, the face of Islam then becomes a complex one, making it impossible to simplify or generalize accurately (Sechzer, 2004).

Branches of Islam

Muslims worldwide differ in their histories, SES, culture, political affiliations, attire, customs, rituals, and food preferences. However, they are bound together by their belief in Allah, the Holy Quran, Sunnah (Prophet Muhammad's teachings), the five

pillars of Islam namely Shahada (testimony of faith), Salah (five prayers a day), Zakah (2.5% of net earning almsgiving or poor tax) , Sawm (fasting during the month of Ramadan), and Hajj (obligatory once in a lifetime pilgrimage to Mecca), and the three basic Islamic tenets namely belief in Allah, Yawm al-Hisab (Day of Judgment) and belief in Al-Qadar (divine predestination and free will) (Esposito, 2011; Gordon, 2002).

There are no denominations in Islam. However, there exist divisions, sects, and school of thoughts that primarily arose after the death of Prophet Muhammad, as he did not appoint his successor. Consequently, the political and religious leadership got divided after his death resulting in fundamentally different visions of Islam. Separation of religion and state has been always a contentious issue within the Islamic world. This is the primary reason for such diversity in terms of religious, political, economic, and social variations within Islam (Esposito, 2011). The two main branches of Islam are the Sunni and the Shi'a Muslims. The main difference between the two groups is their identification of the successor of the Prophet Mohammad. The majority, Sunnis, believed the successors were the elected religious leader, while Shi'as believed that Prophet himself appointed his successor. Several groups then also emerged within the two groups, such as Ismaili Muslims within Shias and Hanifi Muslims within Sunnis. Some other groups also emerged after the death of prophet Mohammad, such as Sufis (Sechzer, 2004). Despite the commonality in fundamental beliefs within the Sunni and Shi'a groups, there are noted differences in doctrine, ritual, law, theology, and religious organizations around the globe (BBC, 2011).

Sunni Muslims. This is the largest branch of Islam comprising 85-90% of all Muslims. Sunni Muslims consider themselves as the traditionalist branch of Islam and

emphasize a codified system of Islamic law. The Holy Quran and Sunnah (Prophet Mohammad's ways) are strictly followed. The term Sunni comes from Ahl al-Sunnah, which means the people of tradition. After the Prophet's death, Sunnis believed that the best or most qualified person should be selected or elected as the Caliph who would serve as the protector of the faith but would not enjoy any status or inspiration on the religious level. Therefore, they elected Prophet Muhammad's father-in-law, Abu Bakar Siddiqui as the first Caliph. The Sunni group elected first four Caliphs, after which it carried on as a dynasty, which ended after the Ottoman Empire fell in 1923. Currently, there are four major jurisprudence schools within Sunni branch that are based geographically, including Hanafi (Arab World & South Asian), Habali (Saudi Arabia), Maliki (Africa), and the Shafii (East Africa and Southeast Asia). These schools are not in opposition to each other but rather are utilized to settle minor application of certain principles in religion. Sunni branch also has one major movement, the Salafi movement that also includes Wahhabism in Arabian Peninsula, carrying the most literal interpretation of the Quran and Sunnah. While Sunnis are a majority in most of the Muslim countries, notable Sunni population are in Algeria, Kuwait, Afghanistan, Egypt, Turkey, Saudi Arabia, Libya, and Syria (BBC, 2011; Esposito, 2011).

Shia Muslims. The second branch of Islam holds about 10-15% of all Muslims. The term has historical roots in Shiat-Ali, or the party of Ali, and emerged as a political faction after the Prophet's death. Shi'a tradition holds a distinct messianic way to the faith and can have a hierarchy of clerics who may practice through independent and subjective interpretation of Islamic texts and is considered comparatively moderate (BBC, 2011). The Shia minority can be found worldwide but the majority of Shias are

noted in Iran, Iraq, Lebanon, Nigeria, Azerbaijan, and Bahrain. In opposition to the Sunni and the Caliphs, Shia believed that succession to the leadership, post Prophet Muhammad, should be hereditary in the form of Imams. These Imams should be the direct male descendants of Prophet Muhammad through his daughter Fatima and the son-in-law Ali. Imams were to serve as both the religious and political leaders, as interpreters of God and Prophet. In doing so, they followed Ali as their first Imam. Shia Muslims have since then struggled to follow their ways, being oppressed and persecuted by the majority Muslims. Such history of oppression has led to sectarian wars in recent historical events such as the Iran revolution, Kashmir conflict, Lebanon conflict, rise of Khomeni in Iran, recent Syrian civil war, and several other recent transnational jihadi network.

Ismaili Muslims. Historically, three main divisions developed within Shias, based on the disagreement over the number of Imams after Imam Ali. Zaydis (or Fivers), recognized five Imams, Ismailis (or Seveners), recognized seven Imams, and Ithna Ashari (or Twelvers) recognized twelve Imams. Nizari Ismailis further split from the Seveners, formed the Fatimid Dynasty, and continued on with a line of hereditary Imams after Imam Ali. The Shia Imami Ismaili Muslims, called the Ismailis, reside in over 25 different countries, with majority numbers fund in Central and South Asia, Africa and the Middle East, with the rest living in Europe, North America and Australia. Today, their Harvard educated Imam, Prince Karim with the title of Aga Khan, is their 49th hereditary Imam who encourages Ismailis towards spiritual and material success by emphasizing higher education, social progress, and a moderate interpretation of Islam (Esposito, 2011). Despite its transnational personality, the Ismaili Community worldwide is bound

by a common identity, under their living Imam, who helps interprets the Islamic message according to the present time. Ismailis view their faith as esoteric with emphasis on spiritual needs, compassion, and tolerance. This tradition views the Imam of the time as the custodian of an individual's rights to intellectual search and the guardian of ethical vision of a society. Ismailis have made major contributions to the progression of Islamic civilization over centuries under a well-established institutional framework that helps global citizens regardless of their race or religion. For example, The Aga Khan Development Network (AKDN) works towards the betterment of health, economics, education, and healthcare worldwide. The Aga Khan University (AKU) in Karachi focuses on providing training for medical professionals, educators, and scholars. The University of Central Asia (UCA) focuses on social and economic development in Central Asia. Finally, The Aga Khan Program for Islamic Architecture (Harvard University and MIT), and The Aga Khan Museum (Toronto, Canada) highlight the many contributions that Islamic civilizations have made to world heritage (The Ismaili, 2016). South Asian Ismaili American Muslims are uniquely placed in the United States and are typically seen as more progressive than the rest of the American Muslims as this group tends to be more educated, secular, and economically successful with more moderate family set up and less acculturative struggles due to their well-established community institutions.

American Muslims

Although it is difficult to accurately estimate the exact number of American Muslims, as the U.S. Census does not collect data on religious affiliation, it is estimated that about 5-7 million reside in the United States, with 75% being born outside of the

U.S. (Esposito, 2011). The total number of American Muslims is projected to grow by more than double in the U. S. by 2030 (CFR, 2012). Muslims have a long history in the United States, starting with the New World of Columbus. However it should be noted that the Spanish Muslims hid their Islamic faith at that time. With the African slaves brought to America, 14-20% were Muslims who were forced to convert to Christianity. Indians and Arabs however, during that period, were able to maintain their Muslim identity. Large numbers of immigrants from the Arab world settled during the 19th century, mostly working class. After World War II, large number of elite Muslims from Palestine, Middle East, and South Asian, looking for higher education and professional gains, immigrated to the United States. In recent decades, significant numbers of Muslims have arrived in the United States for educational and professional reasons as well as forced migration due to political unrest in their native countries (Esposito, 2011).

According to a comprehensive survey by the Pew Research Center (2011), American Muslims in U.S. are divided into immigrant (63%) and indigenous or U.S. born population (37%). About 60% of the indigenous population is African American and approximately 40% of all U.S. immigrant Muslim adults have arrived since 2000. In terms of racial composition, 30% of Muslim Americans classify themselves as white, 23% as Black, 21% as Asian, 19% as mixed/other, and 6% as Hispanic. Religion and attending services seem important, with 69% stating religion is highly important and 48% report praying five times a day. The overwhelming majority of American Muslims, 96%, report they believe in Allah and Prophet Muhammad. However, most reject a dogmatic approach to religion and about 57% of American Muslims report believing that there is more than one true way to interpret the teachings of Islam. Due to the overwhelming

proportion of the group being younger immigrant population, twice as many American Muslims enroll at the college level and have a higher graduation rate than other Americans. After Jewish Americans, the American Muslim community is the most educated with 40% of the total American Muslims earning a college degree or more (Esposito, 2011, Pew Research, 2011). The largest Muslim communities in the United States are in large metropolitan cities such as Boston, New York, Chicago, Los Angeles, Houston, etc. American Muslims work hard to sustain their Islamic identity and pass it inter-generationally. They are well integrated into the American society by contributing educationally, professionally, and politically. In addition to contributing as doctors, lawyers, educators, corporate executives, small business owners, and blue color workers, American Muslims are now serving in the U.S. Congress, government agencies, and in local politics. American Muslims are also more visible in lobbying and a number of organizations have been created to benefit American Muslims (Esposito, 2011).

Asian Americans

Between the years 2000-2010, the total U.S. population grew from 281.4 million to 308.7 million, a growth of 9.7%. In comparison, during the same time, the Asian American population increased four times faster from 10.2 million to 14.7 million, a growth of 43%. Currently, Asian Americans are the third largest minority group in the U.S. (U.S. Census Bureau, 2010). Psychological literature on Asian Americans includes a number of countries and ethnicities that emerged from the Asian continent, often represented under the banner of the larger Asian group. In doing so, however, the cultural nuances of the various Asian subgroups have a potential of being overlooked. South Asians are one of the fastest growing Asian American groups in the United States

(Masood et al., 2009). There is a dearth of research knowledge on this sub-group, who are represented as Asians in the US Census. Existing literature can be found on some South Asian groups, such as South Asian Indians, the second largest Asian group in the United States (Mehrotra & Calasanti, 2010). However, there appears a larger literature gap concerning the South Asian American Muslim group (Sauerherber et al., 2013).

South Asian Americans

The South Asian American group includes people who trace their lineage to India, Pakistan, Bangladesh, Sri Lanka, Maldives, and Bhutan. There is a vast diversity in terms of the country of origin, ethnicity, religion, and language. South Asian Americans are typically included in the larger Asian American group within the psychological literature. There are 17.3 million Asian Americans, representing 5.6% of the total U.S. population. More than 3.4 million Asian Americans trace their heritage to South Asia, making this group one of the fastest growing immigrant groups in the United States. Comparing the census data between 2000 and 2010, the South Asian American community as a whole grew 81%. The five states with the largest South Asian American populations are California, New York, New Jersey, Texas, and Illinois. Indian Americans compose the largest segment, followed by Pakistani Americans (U. S. Census Bureau, 2010). South Asian American have an immigration history of over 400 years, moving to the U.S. in three different waves, the late 19th century (laborers for the transcontinental railroad), the 1920's (refugees due to political unrest), and from 1965 (immigration reforms allowing families) to the present. While the early settlers were working class and land owners, post 1965 South Asian Americans have been mostly well educated and professionals with the means to import and maintain many aspects of their cultural background. South Asian

Americans are documented to have higher educational levels than the general population, Whites, and even the overall Asian population (U.S. Census Bureau, 2010). South Asian Americans are often portrayed as the model minority group within the literature, excelling in mathematics and science, with the majority in medicine, engineering, and computer science careers (Asher, 2008). It appears that the exact number of South Asian American Muslims is not agreed upon but some estimate that about 28% of all American Muslims trace their ancestry to the South Asian subcontinent (Pew Research, 2011). Literature documents that the majority of South Asian Americans (75%) were born outside of the U.S. (SAALT, 2014).

Cultural Beliefs about Mental Health Causes and Treatment

According to Lynch and Medin (2006), how people understand and explain illness is profoundly different across cultures, which consequently results in markedly different ways of treating ailments. They explain that how people understand the causes of ailments can have an effect on their attitudes and intentions to seek help. Ultimately, people tend to choose help based on the services that align with their conceptualizations or worldviews. Bagasra and Mackinem (2014) explained that the Islamic conceptions of mental illness could be elusive, as the concepts could look different based on the cultural and social concepts. Religion and spirituality have an important place in most Muslim lives. In general, Islamic conceptualization of mental illness can be understood in three ways: theoretical concepts offered by Islamic philosophers, religious leader, and scholars; doctrines based on the Holy Quran, Hadith, or Sunnah (prophetic traditions); and the beliefs and conceptualizations of causes and treatment of mental illness within Muslim societies.

Many Asian cultures conceptualize mind and body as inseparable and therefore distress in one is not distinguished from the other. As such, many Asian Americans may express psychological distress somatically and may be more likely to seek comfort from a traditional healer rather than a psychologist (Abdullah & Brown, 2011). Similarly, in Islam, health is understood as a harmony between material and spiritual life and equal importance has been given to spirit, body, and soul. Islam is a comprehensive way for a Muslim to live a purposeful life in accordance to the ethical and moral ways, as per taught by the religion. The traditional Islamic conception of mental illness emphasizes a psycho-spiritual basis and is connected to a Muslim's spiritual awareness of his or her Creator (Haque, 2004). The dualistic view in Islam promotes the idea that the body is perishable while the soul is everlasting. Life after death is considered more permanent and important. Soul is the primary vehicle for maintaining human behavior in Islam and it is taught that if one follows the soul, no harm can come. Soul is thought to be made up of *ruh* (spirit; a quality of God), the *qalb* (heart; wisdom), and the aql (intellect; faculty of reasoning). Islam encourages reflection on all three parts of human soul. Health and mental health then is considered in Islam as presence of virtues that balances all parts of the soul. Quran is also explicit about external virtues (act of worship, doing good to others, following Islamic ways) and internal virtues (reasoning, good intentions, seeking knowledge, contemplation), that if corrupted could result in mental health problems (Haque, 2004).

Traditionally, any ailment has been historically explained in Islam as a struggle, God's will, a test, or as a punishment. Mental illness in traditional Islam is viewed as a part of human suffering, as atonement for sins, or a positive event that purifies the soul.

The more one handles such issues with patience and prayers, the more alleviation will be awarded (Padela & Curlin, 2013; Rassool 2015; Youssef & Deane, 2006). In addition to attributing good mental health to the presence of virtues and absence of vice that are within one's control, some external factors are also seen to contribute to mental illness, such as black magic, evil eye, and spirit possession (Haque, 2004). The concept of evil eye and possession by evil spirits has been widely documented in many cultures (Rassool, 2015; Rassool & Gemaey, 2014). The traditional Islamic way recognizes supernatural connections to mental illness. Prophet Mohd's tradition noted incidents that included the work of Jinn, evil eye, and black magic. In several documents, he recited particular prayers to ward off such evil presence. These narratives of conceptualization continue to explain psychopathology for many individuals in South Asia, South Africa, and the Arab world (Al-Adawi et al., 2002; Ally & Laher, 2008). Studies exploring Arab Muslims' conceptualization of mental health have also noted that mental illness is often understood by possession supernatural entities such as demon spirits (jinn), the evil eye, or magic (Al-Adawi et al., 2002; Al-Issa, 2000; Al-Subaie & Alhamad, 2000). Evil eye is mentioned in the Holy Quran in the context of envy and is interpreted as babies and young children being the most vulnerable population as they are the most often praised and commented upon (Rassool, 2015). In one study conducted by Abu-Ras and Abu-Bader (2009), they found that 98% of the Arab American Muslims perceived life stressors as a test of their faith while 84% believed in evil spirit possession. The most common psychological symptoms caused by evil eye or evil spirits have been reported as anxiety, insomnia, hyperactivity, obsessions, seizures, altered consciousness, and psychotic disturbances (Al-Ashqar, 2003; Al-Habeeb, 2003). Several studies show that in

general, Asians tend to have a unique explanation for illness as they hold superstitious causal beliefs rather than biological causal beliefs (Jobanputra & Furnham, 2005; Swami et al., 2009).

Studies involving the South Asian population residing in the United Kingdom and Canada note that South Asians are more likely to present their mental distress in form of somatic complaints. Often, South Asians conceptualize their depressive symptoms as social or moral problems and sometimes as a negative reaction to an adverse situation. Rarely is the mental illness understood as a disease that requires professional treatment (Cooper et al., 2006; Husain, Waheed, Husain, 2006). Acculturation studies have noted variability in the presentation of psychological distress within American Muslim population. For example, working with American Muslim immigrants and refugees, Erickson and Al-Timimi (2001) noted that somatic complaints such as body aches, fatigue, or gastrointestinal concerns are regularly presented more often than emotional issues in immigrant and refugee population. Studies conducted with Arab Muslims have noted that they do not distinguish emotional or psychological distress from physical illness and therefore the majority of the distresses presented in this population are recorded as somatic concerns (Al-Krenawi & Graham, 2000, Al-Subaie & Alhamad, 2000).

Cultural perspective on mental health is another factor that may affect utilization of formal mental health services. Ahmed and Reddy (2007) documented Muslims presenting symptoms of anxiety and depression similar to the mainstream population. However, researchers have noted that Muslims tend to tolerate mental health problems for a long time before considering it a problem or seeking help (Kulwicki et al., 2000).

This could be due to the varied understanding of the causes of mental illness, as explained above and may prevent Muslim Americans from seeking help unless the struggles become intolerable. Varied results were noted in a mixed method study conducted by Bagasra and Mackinem (2014) with 250 American Muslims while exploring their conception of mental illness. The majority of the participants (45%) in this study were Asians (South, South East, and Asian Indians) and about 58% participants were immigrants while 42% were indigenous American Muslims. Results indicated that majority of the participants endorsed the dominant Western biomedical model of mental illness. However, open-ended questions reflected a more complex endorsement of mental illness, ranging from biological, environmental, and psycho-spiritual origins, suggesting the role of contextual influences.

Knowledge about mental health and available resources

Literature shows that Arab Muslims are reluctant to seek formal mental health care, often stemming from a lack of awareness of local formal resources. For example, Abu-Ras (2003) examined formal mental health services utilization among survivors of domestic abuse in Arab immigrant females residing in Dearborn, Michigan. The overwhelming majority (93%) of the respondents had no knowledge about how to access formal mental health help. While exploring help-seeking behaviors among South Asian women who had experienced intimate partner violence, Ahmad, Driver, Mcnally, and Stewart (2009) found that the lack of knowledge of formal mental health services was one of the major barriers. Exploring help seeking among older South Asian Gujarati Indians residing in the U.K., Lindesay et al. (1997) found that lack of knowledge regarding formal services and perceptual ineffectiveness of mental health services

prevented reaching out for help. Haque (2004) explained that often Muslim Americans seek help from their religious leaders and do not even look for professional mental health resources. She elaborated that the lack of availability of Muslim counselors or lack of counselors who are well rooted in Islamic approaches to mental health may discourage many in seeking local professional resources.

Attitudes and preferences towards mental health resources

Although more acceptance of psychotherapy has been noted for Muslim Americans, the norm of consulting family, friends, or religious leaders continues. For example, it is typical for a practicing Muslim to seek counseling from an Imam at the mosque (Ali et al., 2005; Padela et al., 2011). In Islam, the process of self-doubt to acceptance of ailments as God's will is a typical process. Any conflict, internal or external, is typically handled by family, a religious leader, or close friends. It is typical for Muslims in general to keep issues private or within their families. Quran also teaches that Muslims should first seek help from one or more relatives (Padela & Curlin, 2013). Muslims believe that this world is transitory and focus is more on life after death. The preferred method for handling distress then may look different from mainstream clients. For example, American Muslims may prefer spiritual guidance in place of traditional psychotherapy or psychopharmacological help. Such guidance typically is received from a religious leader (e.g., Imam at a local mosque), who may prescribe reciting of Quranic verses, also called Ruqyah. The goal is to seek refuge in Allah and to believe that He is the source of healing. This is a common method in traditional Islam to heal evil eye, possession, black magic, and any other unidentified sources of psychological distress (Abu-Ras & Abu-Bader, 2008; Ali et at., 2005; Khan, 2006; Rassool, 2015).

Psychological literature on mental health help seeking behavior has noted that often, it is more acceptable in Muslim communities to seek help from their physicians for somatic complains or religious leaders for issues, rather than mental health practitioners. For example, one study attempted to learn about the role of Imams towards the counseling needs for Muslim Americans residing in New York. The study included 102 worshippers and 22 Imams from numerous mosques. It revealed that only 14% sought help outside the mosque while 22% sought help from a general health care provider for their emotional issues. Only 3% sought help from mental health professionals. The practitioner's lack of knowledge of Islamic faith or being able to accurately assess the mental health needs of Muslim Americans were cited as the main reasons for not seeking mental health counseling (Abu-Ras, Gheith, & Cournos, 2008). While examining attitudes towards formal mental health services, Erickson and Al-Tamimi (2001) found that Arab American Muslims tended to describe formal services as ineffective and believed that only "crazy" people seek psychological help. Similarly, a study conducted with Arab Canadian Muslims also noted that the participants tended to hold positive attitudes towards informal religious services, compared to the formal psychological services (Al-Krenawi & Graham, 2003).

Literature also highlights that traditionally, Muslims live in an extended family set up that tends to provide emotional, psychological, and financial support (Al-Krenawi & Graham, 2003). In working with Israeli Arab Muslims, Al-Krenawi (2002) found a hierarchy in seeking mental health help. He learned that when facing psychological distress, individuals first sought family members, then friends, after which they visited traditional or religious healers, and then their primary physicians. It was only when they

exhausted all the informal resources that they sought mental health practitioners. Aloud and Rathur (2009) suggested that the limited number of Muslim mental health professionals or community volunteers may also sometimes affect seeking professional mental health help whereby individuals either delay, postpone, or seek informal help. They also noted that lack of culturally competent approaches that are often employed by the practitioners can also contribute to Muslim Americans' lack of inclination towards seeking formal mental health help.

Demographic factors

In addition to the South Asian American Muslims' cultural beliefs and knowledge about mental health causes and treatments, their preferences towards formal vs. informal mental health resources and the role of social stigma, some salient demographic features, such as gender differences, generational groups, education level, and length of stay in the United States must also be considered. A seminal study conducted by Khan (2006) in examining attitudes towards counseling with 459 Muslims residing in Ohio revealed a complex demographic pattern. Overall, the majority of the participants expressed a positive attitude towards counseling, even though only 11.1% of the total sample endorsed ever utilizing formal mental health services. Results indicated that sex and age were significantly associated with usage of services. It was reported that more men than female participants held negative views towards counseling services. Also, the higher the education level, the more positive the view for all participants towards seeking formal mental health help. Women participants in this study indicated more need for counseling but women, especially of Arab origin, reported less usage of services. Age was also shown to be a strong predicting factor in this study whereby participant over 45 years of

age indicated more usage of formal mental health services. Ultimately, the majority of the participants indicated that prayers, family, and Quran were a consistent sense of support and comfort during distressing times.

There are some indications that U.S. born Asian Americans may be more likely to utilize formal mental health services than the recent Asian immigrants (Kung, 2003; Kung 2004). A study conducted by Abe-Kim et al. (2007), examining the rates of mental health services utilization among a national sample of 2,095 Asian Americans, revealed that only 8.6% of the total sample sought any help at all. About 4.3% sought help from their medical provider, and only 3.1% sought help from mental health providers. However, they also found that U.S. born Asians, specifically third generation or later, demonstrated a higher rate of utilizing mental health services. Similarly, a study conducted with second-generation South Asian women residing in San Francisco also revealed that the more acculturated and longer the stay in the U.S. indicated more positive professional help-seeking attitudes (Sandhu, Curtis-Boles, Dixit-Brunet, & Singh, 2013).

Present Study

The goal of the current study was primarily to fill a research gap that currently exists on the South Asian American Muslim group, specifically the group differences that may exist between the South Asian Shia American Muslims, South Asian Sunni American Muslims, and South Asian Ismaili American Muslims in seeking formal mental health help. This study explored the following constructs that measured the group attitudes towards mental health help seeking: a) the cultural beliefs about the causes and treatment of mental illness; b) knowledge and familiarity with available formal mental

health services and c) attitude towards formal mental health services. Additionally, preferences towards formal versus informal resources when considering seeking mental health help were also explored. This study addressed the following research questions and hypotheses:

1. Are there significant differences in cultural beliefs about mental health problems, attitudes toward seeking formal mental health services, and knowledge and familiarity with formal mental health services within the three Muslim groups (i.e., Sunni, Shia, and Ismaili), when controlling for the effects of age and generational status? It was hypothesized that there would be significant group differences, with Ismaili Muslims endorsing less traditional cultural beliefs about mental health problems, more positive attitudes towards seeking formal mental health services, and greater knowledge and familiarity with formal mental health services than the other two groups. It was also hypothesized that Sunni Muslims would endorse more traditional cultural beliefs, less positive attitudes, and less knowledge and familiarity than the other two groups.
2. Are there significant differences in cultural beliefs about mental health problems, attitudes toward seeking formal mental health services, and knowledge and familiarity with formal mental health services between men and women? It was hypothesized that women would endorse less traditional cultural beliefs about mental health problems, more positive attitudes towards seeking formal mental health services, and greater knowledge and familiarity with formal mental health services than men.

3. What are the preferences toward formal versus informal resources for seeking mental health help among the three Muslim groups? It was hypothesized that Ismailis would prefer reaching out to mental health professionals first, while Shia and Sunnis would prefer reaching out to informal support (family, friends, and religious leaders) first.

Chapter III

Methodology

Procedures and Participants

The study was described online as an investigation of the mental health help seeking patterns among the South Asian American Muslims residing in the United States. The participants were informed of the voluntary nature of their participation, anonymity, and consent. After indicating the inclusion criteria and informed consent, participants proceeded to complete the three survey questionnaires: Cultural Beliefs about Mental Health Problems (CBMHP), to measure their cultural beliefs about mental illness and their causes and treatment; Attitudes Towards Seeking Formal Mental Health Services (ATSFMHS), to measure their attitudes towards seeking formal mental health services; and Knowledge About and Familiarity with Formal Mental Health Service (KFFMHS), to measure their knowledge and familiarity with mental health services, in counterbalanced order. A demographic questionnaire followed along with four questions inquiring about the preferences towards formal versus informal resources when considering seeking mental health help. Participants were able to complete all the materials online, from their preferred electronic devises. The duration of the completed study was anticipated to take approximately 20-25 minutes for each participant. Anonymity and confidentiality were maintained throughout: no identifying information such as name or contact information was asked at any time. A non-identifying number was assigned to each participant. Data were stored and analyzed in a password-protected file and will be kept for a year on the principal investigator's password protected computer.

Participants for this study included 252 South Asian Muslim adults (28% males, 71% females, and 1% non-binary). Participants were recruited through a non-randomized, snowball sampling method. Inclusion criteria included anyone between the ages of 18-90 years, who identified as being South Asian Shia, Sunni, or Ismaili American Muslim, and currently resided in the United States. The inclusion of a wide age range was to ensure a large sample size. The study was primarily conducted online, in order to recruit participants nationwide and to provide them with easy access to the survey material. Study related information was electronically available and posted on social media sites such as Facebook, Twitter, South Asian/Muslim focused public LISTSERVs, and professional and other networking websites, in order to recruit a heterogeneous sample. It was hoped that more first-generation and older participants would be captured in this way, a population sample that is largely missing in the current literature. Participants were also targeted in the greater Houston area by contacting through email, imams of the local mosques and leaders of the various religious centers by providing the embedded link within the email format for easy dissemination. Additionally, in order to obtain a heterogeneous sample, I traveled to major cites in Texas, namely Austin, San Antonio, and Dallas and met with local imams and leaders to ask for their help in encouraging their members to participate in this study. A flyer with a description of the study, voluntary and anonymous nature of their participation, and the online survey link was distributed at each center.

Power analysis for MANOVA with three independent variables and three dependent variables was conducted in G*Power to determine the sample size using an alpha of .05, a power of 0.95, and an effect size of .09. As there were no studies found in

the current literature that compared the three Muslim groups with the outcomes measured in the current study, the researcher determined a medium effect size to be appropriate. Guidelines for the effect size for MANCOVA were used as per Cohen (1988) and Tabachnick and Fidell (2012), where they suggested small η^2 = .01, medium η^2 =.09, and large η^2 =.25. The desired sample size was determined to be 120.

Measures

Demographic Questionnaire. A demographic questionnaire was developed that asked participants about their age, sex, ethnicity (South Asian), country of origin (listing South Asian countries), country of birth for both their parents and themselves, generation status (1st or 2nd+, with 1st generation as being born outside of U.S.), marital status, religious affiliation (Shia, Sunni, Ismaili), education background (degree and current enrollment), occupation, and length of stay in the United States (approximate number of years). In terms of mental health help seeking preferences, four questions were asked, rating their preferences of formal and informal resources. Participants were asked to rate their preferences for seeking mental health help by rank ordering friends, family, religious leaders (i.e., informal supports), physicians, and mental health providers. Analyses focused on participants' first preference only.

Cultural Beliefs about Mental Health Problems (CBMHP). This is an 11-item instrument, developed by Aloud and Rathur (2009) that measures the influence of cultural, traditional, and religious beliefs about the causes and treatment of mental health or psychological problems. It was originally developed for a study that investigated attitude towards mental health help seeking amongst Arab Muslims. The scale asks respondents to report on a four-point scale from 0 (*false*) to 1 (*probably false*) to 2

(*probably true*) to 3 (*true*). Possible scores on the scale range from 0 to 44. Sample items include "mental health or psychological problems can be caused by Aieen (evil eye)" and "mental health or psychological problems can be treated using traditional prescribed medicines (e.g. black seed)." Two items, "mental health or psychological problems can be caused by biological factors" (item 21) and "mental health or psychological problems can be caused by environmental factors" (item 22) were reverse-scored to test the consistency of participants' responses. Higher total scores indicate a higher endorsement of traditional cultural beliefs about mental health problems, their causes, and treatments. The initial study developing this scale reported a Cronbach's alpha of .73. In the present study, CBMHP had a Cronbach's alpha of .70.

Attitudes Towards Seeking Formal Mental Health Services (ATSFMHS). The original scale, Attitudes Toward Seeking Professional Psychological Help (ATSPPH) developed by Fischer and Turner (1970) consisted of 15 items that explored the relationship between help seeking attitudes and personality variables. It has been widely used with ethnic and racial minority groups and has high reported validity (.89) and reliability (.86). An adapted version of ATSPPH was developed by Aloud and Rathur (2009) to investigate attitude towards seeking formal mental health services amongst Arab Muslims and named it ATSFMHS. Revision included Islamic and Arabic terms and concepts to make it easier for their participants. The adapted version (ATSFMH) of 20 items were used in the present study. The scale asks respondents to report on a four-point scale from 1 (*strongly agree*) to 2 (*agree*) to 3 (*disagree*) to 4 (*strongly disagree*). Possible scores on the scale range from 20 to 80. Higher scores indicate more positive attitudes towards seeking psychological help. Sample items include "a person with strong

Iman (faith) can get rid of a mental health or psychological problem without the need of professional help" and "I would rather be advised by a close relative or friend than by a mental health professional, even for serious psychological problems." Additionally, five supplemental items (items 3, 6, 11, 14, and 18) addressed perceived societal stigma associated with seeking formal mental health help. Sample items include "I would be concerned about what others might think or say if I use professional mental health services" and "I would feel embarrassed to tell others that I used psychological or mental health services." In order to assess the perceived stigma, lower scores on items 3, 6, 11, 14, and 18 would indicate a higher perceived societal stigma associated with mental health help seeking. The study reported reliability for ATSFMH was .74 and for stigma related items, .72. In the present study, ATSFMHS had a Cronbach's alpha of .77.

Knowledge About and Familiarity with Formal Mental Health Service (KFFMHS). This 11-item scale was developed by Aloud and Rathur (2009) and examines familiarity with types of mental health or psychological problems. This scale measures knowledge towards mental health struggles such as depression, anxiety, and schizophrenia. It also gauges familiarity with local practitioners and ways of contacting them, as well as formal mental health interventions. It was originally used to investigate the familiarity of mental health and available services amongst the Arab Muslim participants by Aloud and Rathur (2009). The scale asks respondents to report on a four-point scale from 1 (*not at all*) to 2 (*very little*) to 3 (*somewhat*) to 4 (*very familiar*). Possible scores on the scale range from 11 to 44. Higher scores indicate higher knowledge and familiarity with formal mental health and services. Sample items include "how familiar are you with the availability of mental health and psychological services in

your community location, such as phone number or type of care?" and "how much do you know about common drug treatments prescribed to individuals with mental health or psychological problem?" The study reported reliability of .88 for the original study conducted by Aloud and Rathur (2009). In the present study, KFFMHS had a Cronbach's alpha of .92.

Chapter IV

Results

The current study was designed as a one-way between groups multivariate analysis of covariance (MANCOVA) to determine the group mean differences in attitudes towards mental health help seeking amongst South Asian American Muslims, after removing the effects of age and generational status. The independent grouping variable was the type of Muslim, including South Asian Shia American Muslims, South Asian Sunni American Muslims, and South Asian Ismaili American Muslims. Three dependent variables were: 1) cultural and traditional beliefs about mental health problems, 2) knowledge and familiarity with formal mental health services, and 3) attitudes towards seeking formal mental health services. All analyses were performed using SPSS version 23.0.

Preliminary Analysis

Data were initially screened for outliers, skewness, and kurtosis, and were examined for patterns of missing data. Skewness and kurtosis on each measure were within an acceptable range. For cultural beliefs, skewness was .535 (*SE* = .153) and kurtosis was -.152 (*SE* = .306). For attitudes, skewness was -.291 (*SE* = .153) and kurtosis was .223 (*SE* = .306). For knowledge, skewness was .109 (*SE* = .153) and kurtosis was -.992 (*SE* = .306). There were no outliers or any missing data observed. Descriptive analysis was conducted to record the means, standard deviations, and frequencies of demographic variables. A bivariate correlation matrix was also run for all the continuous variables in order to examine associations between them. Preliminary assumption testing was conducted to check for normality, linearity, univariate and

multivariate outliers, homogeneity of variance-covariance matrices, and multicollinearity. Q-Q plots showed normality with linear relationships. No univariate or multivariate outliers were detected. Equality of covariance was not assumed as Box test was noted to be significant ($p < .001$), therefore, Pillai's Trace was utilized to interpret the multivariate results. MANCOVA was used to control for potential shared variance among covariates in addition to control for Type I error that might have resulted from multiple one-way ANOVA testing. Tamhane post hoc test was conducted as according to Meyers, Gamst, and Guarino (2013), that test is appropriate when heterogeneity of variance is present.

Descriptive Data

Participants self-identified as 34% Ismaili Muslims, 29% Shia Muslims, and 36% Sunni Muslim. Of the 252 participants, 71% identified as female and 28% as male, with 1% as non-binary. Of the 74 Shia Muslims, 35 identified as male, 38 as female, and 1 as non-binary. Of the 91 Sunni Muslims, 14 identified as male, 75 as female, and 2 as non-binary. Of the 87 Sunni Muslims, 21 identified as male, 65 as female, and 1 as non-binary. The majority of the participants (52%) indicated their age over 40 years. The majority of the participants (77%) identified themselves as first generation (born outside of the U.S), with the majority of those (56%) indicating Pakistan as their place of birth. A large number of the participants (42%) self-identified as bicultural. About half (44%) indicated English as their primary language, followed by 35% indicating Urdu as their primary language. The majority of the participants (84%) indicated their education level as four years of college or more. Finally, 71% of the participants indicated being employed, either part-time or full-time, and the majority (75%) indicated being in a relationship. A summary of demographic variables is presented in Table 1.

In regards to mental health help seeking, an overwhelming majority of the participants (80%) indicated that they had not visited any professional for mental health in the last 12 months. However, 82% of the participants indicated visiting a medical doctor at least once in the last 12 months. When asked if participants had ever visited a mental health professional, 44% indicated at least one visit in their lifetime, with 31% of those who visited indicated the visit being helpful. A summary of the mental health help seeking responses is presented in Table 2.

Bivariate correlations are presented in Table 3. Age and generation status (first, second, or third generation) were used as covariates for analyses. The rationale behind not using sex as one of the covariates was unequal sample size (178 females and 70 males). According to Rusticus and Lovato (2014), unequal sample sizes tend to affect the assumption of equal variance, result in loss of statistical power, and increase the probability of Type I error. The rationale for not using the level of education was that the correlation between the level of education and age was noted at -.403. According to Mertler and Vannatta (2001), if more than one covariate is being used, there should be relatively low intercorrelations among all covariates (roughly less than .40). Additionally, the data showed that most participants misunderstood the question regarding the number of years in the U.S. and instead wrote their ages, which made that not appropriate to consider as one of the covariates. Therefore, age and generation status were deemed the most appropriate variables to control for the analysis.

Main Analysis

Hypothesis 1: Are there significant differences in cultural beliefs about mental health problems, attitudes toward seeking formal mental health services, and knowledge

and familiarity with formal mental health services within the three Muslim groups (i.e., Sunni, Shia, and Ismaili), when controlling for the effects of age and generational status? There would be significant differences between the three groups on their cultural beliefs about mental health problems, their attitudes towards seeking formal mental health services, and their knowledge and familiarity with formal mental health services, when controlling for the effects of age and generational status. It was hypothesized that there would be significant group differences, with Ismaili Muslims endorsing less traditional cultural beliefs about mental health problems, more positive attitudes towards seeking formal mental health services, and greater knowledge and familiarity with formal mental health services than the other two groups. It was also hypothesized that Sunni Muslims would endorse more traditional cultural beliefs, less positive attitudes, and less knowledge and familiarity than the other two groups.

Multivariate Analysis of Covariance (MANCOVA) was conducted to examine group mean differences in cultural beliefs, attitudes, and knowledge and familiarity towards formal mental health help amongst South Asian American Muslims, after removing the effects of age and generational status. Results of the MANCOVA are presented in Table 4. The Box's Test of Equality of Covariance Matrices checks the assumption of homogeneity of covariance across the groups using $p < .001$ as a criterion (Tabachnick & Fidell, 2012). Since robustness could not be assumed [F (12, 279566) = 57.376, $p < .001$], the more robust MANCOVA test statistic, Pillai's Trace, was used to interpret the MANCOVA results. MANCOVA results revealed significant group differences among the type of Muslims on the combined dependent variable [Pillai's Trace = .391, $F(6,492) = 19.906$, $p < .001$, partial $\eta^2 = .195$]. Type of Muslim accounted

for 19.5% of the variance in the combined dependent variable. Effect sizes for MANCOVA results are described using the following guidelines: small (η^2 = .01), medium (η^2 =.09), and large (η^2 =.25) (Cohen, 1988; Tabachnick & Fidell, 2012). The covariate age significantly influenced the combined dependent variables [Pillai's Trace = .098, $F(3,245) = 8.877$, $p < .001$, partial η^2 = .098]. The covariate generational status did not significantly influence the combined dependent variables [Pillai's Trace = .007, $F(3,245) = .602$, $p = .614$, partial η^2 = .007].

Follow-up univariate *F* tests were examined using a Bonferroni adjusted alpha level of .017. (i.e., .05/3 = .017) to maintain the probability of type I error at .05. Age covariate was significant for attitudes [$F(1, 247) = 26.10$, $p < .001$, partial η^2 = .096], approached significance for knowledge and familiarity [$F(1, 247) = 3.84$, $p = .051$, partial η^2 = .015], but was non-significant for cultural beliefs [$F(1, 247) = .244$, $p = .622$, partial η^2 = .001]. Older age was related to less positive attitudes and less knowledge and familiarity. Generational status covariate was not significant for any dependent variables: cultural beliefs [$F(1, 247) = .742$, $p = .390$, partial η^2 = .003], attitudes [$F(1, 247) = .110$, $p = .740$, partial η^2 = .000], and knowledge and familiarity [$F(1, 247) = 1.068$, $p = .302$, partial η^2 = .004]. Univariate tests revealed that religious affiliation was significantly related to each dependent variable: cultural beliefs [$F(2, 247) = 17.67$, $p < .001$, partial η^2 = .125], attitudes [$F(2, 247) = 39.18$, $p < .001$, partial η^2 = .241], and knowledge and familiarity [$F(2, 247) = 12.18$, $p < .001$, partial η^2 = .090]. Results are summarized in Table 5.

Pairwise comparisons, using Tamhane T2, were used to examine group differences. According to De Muth (2006), T2 is more conservative but a better option to

utilize when unequal variances are assumed. Sunni Muslims reported more traditional cultural beliefs than both Shia ($p = .002$) and Ismaili ($p < .001$) Muslims. No significant difference in cultural beliefs was observed between Ismaili and Shia Muslims. Shia Muslims reported the least positive attitudes compared to both Sunni ($p < .001$) and Ismaili Muslims ($p < .001$). There was not a statistically significant difference between Sunni and Ismaili Muslims in attitudes toward formal metal health help. Lastly, Shia Muslims reported the least amount of knowledge and familiarity, compared to Sunni ($p < .001$) and Ismaili ($p = .001$) Muslims. There was not a statistically significant difference between Sunni and Ismaili Muslims in knowledge and familiarity.

Hypothesis 2: Are there significant differences in cultural beliefs about mental health problems, attitudes toward seeking formal mental health services, and knowledge and familiarity with formal mental health services between men and women? It was hypothesized that women would endorse less traditional cultural beliefs about mental health problems, more positive attitudes towards seeking formal mental health services, and greater knowledge and familiarity with formal mental health services than men.

As noted before, there were unequal sample sizes based on sex (178 women and 70 men). To test for sex differences, a random sample of women was identified to compare with the male participants. To avoid decreasing the sample size too much, which would result in loss of power, the random sample included 105 of the female participants, representing a 1 to 1.5 men to women ratio. A new data file with 105 women and 70 men was created and multivariate analysis was conducted to examine sex differences for the three dependent variables. MANOVA results revealed statistically difference between

men and women on the combined dependent variable, $F(3, 171) = 16.147$, $p < .001$; Pillai's Trace = .221; partial $\eta^2 = .021$.

Follow-up univariate tests were conducted using a Bonferroni adjusted alpha level of .017. A statistically significant difference was found for attitudes, $F(1, 173) = 37.09$, $p < .001$, partial $\eta^2 = .177$, and for knowledge and familiarity, $F(1, 173) = 24.69$, $p < .001$, partial $\eta^2 = .125$, but not for cultural beliefs, $F(1, 173) = .003$, $p = .959$, partial $\eta^2 = .000$. An inspection of the estimated marginal mean scores indicated that women scored higher on attitudes ($M = 2.69$) and knowledge and familiarity ($M = 2.79$) compared to men but were relatively similar on cultural beliefs ($M = 2.53$). Results are summarized in Table 6.

Hypothesis 3: What are the preferences toward formal versus informal resources for seeking mental health help among the three Muslim groups? It was hypothesized that Ismailis would prefer reaching out to mental health professionals first, while Shia and Sunnis would prefer reaching out to informal support (family, friends, and religious leaders) first. Preferences towards formal versus informal resources when considering seeking mental health help were asked through a drop down menu, in which participants were able to pick their preferences in descending order. A chi-square (χ^2) test of independence was used to examine the group differences on preferences towards formal and informal resources. Results indicated a statistically significant differences between the three groups in terms of their preferences, $\chi^2(4, N = 252) = 18.43$, $p = .001$. Results indicated that the majority of Shias (69%) preferred reaching out to informal support first, with a majority of those (90%) indicating family as their main preference. A greater number of Shias (69%, $n = 51$) endorsed reaching out to informal support compared to the expected number ($n = 39$) and fewer (31%, $n = 23$) indicated their preference of

reaching out to formal support (i.e., physicians and mental health professionals) than expected (n = 35). A majority of Sunnis (53%) indicated formal support (i.e., physicians and mental health professionals) as their first preference, with 85% of those preferring mental health professionals. Results indicated that fewer Sunnis (47%, n = 43) preferred reaching out to informal support than expected (n = 48) and more (53%, n = 48) leaned towards seeking formal support than expected (n = 43). Similarly, a majority of Ismailis (55%) preferred seeking help from formal support first, with 67% of those indicating mental health professionals as their primary choice. Fewer Ismailis (45%, n = 39) indicated seeking informal support than expected (n = 46) and more Ismailis (55%, n = 48) indicated their preference of seeking formal services than expected (n = 41). A summary of the results is presented in Table 7.

Chapter V

Discussion

The goal of the current study was to explore mental health help-seeking among the three South Asian American Muslim groups: South Asian Sunni American Muslims, South Asian Shia American Muslims, and South Asian Ismaili American Muslims. Of the three hypotheses examined in this study, none were fully supported. This chapter will address the mixed findings, limitation of the study, clinical implications, and recommendations for future research and clinical work. To my knowledge, this is the first ever study that compared these three Muslim groups and therefore findings are novel.

The first hypothesis was that Ismaili Muslims would endorse less traditional cultural beliefs about mental health problems, more positive attitudes towards seeking formal mental health services, and a greater knowledge and familiarity with formal mental health services, compared to the other two groups, while Sunni Muslims would endorse more traditional cultural beliefs, less positive attitudes, and less knowledge and familiarity, compared to the other two groups. This hypothesis was partially supported. Sunnis endorsed the most traditional beliefs compared to both Shias and Ismailis. Specifically, Ismailis had fewer traditional cultural beliefs than Sunnis, though they were not significantly different from Shias. Shias endorsed the least positive attitudes compared to both Sunnis and Ismailis. While Ismailis had slightly more positive attitudes, they were not significantly different than Sunnis. Finally, Shias endorsed the least knowledge and familiarity with formal mental health resources, compared to both Sunnis and Ismailis. Sunnis endorsed slightly more knowledge and familiarity but they were not significantly different from Ismailis.

The finding of Sunnis endorsing the most traditional cultural beliefs was expected. Literature indicates that Sunni Muslims consider themselves as the traditionalist branch of Islam and emphasize a codified system of Islamic law (Esposito, 2011). Therefore, it is understandable that their conceptualization of mental health would be rooted in the teachings of traditional Islam. No significant differences were noted between Ismailis and Shias on cultural beliefs, which was an unexpected finding. This finding is in a contrast with Esposito (2011), who described that the Ismaili faith emphasizes higher education, social progress, and a moderate interpretation of Islam. The researcher also expected Ismailis endorsing significantly less traditional cultural beliefs than the other two groups, based on her experiences as an Ismaili Muslim and the cultural learning that Ismailis tend to interpret and practice Islam in a more moderate and secular manner. This affirms the previous findings, though—that mental health and illness in traditional Islam are viewed in a psycho-spiritual manner and as a connection to the Creator (Haque, 2004). The presence of virtues is often attributed to good mental health; mental illness then is either the absence of virtues (Haque, 2004), a test of faith (Abu-Ras and Abu-Bader, 2009), evil eye (Rassool, 2015), possession by supernatural entities, or magic (Al-Adawi et al., 2002; Al-Issa, 2000; Al-Subaie & Alhamad, 2000). Similarly, Bagasra and Mackinem (2014) found that the majority of American Muslims not only endorsed the biomedical model of mental illness but also endorsed environmental, and psycho-spiritual origins.

The unexpected lack of significant difference on attitudes between Ismailis and Sunnis may be understood by examining the sample's demographic variables. Previous studies have found education to be a significant predictor of positive help-seeking

attitudes (Sheikh & Furnham, 2000). Similarly, Khan (2006) found that women held more positive views towards counseling services, compared to men. Taken together, both Sunnis and Ismailis endorsing similar positive attitudes and greater knowledge and familiarity in the present study therefore makes sense, as the majority of the participants (71%) identified as women and the majority (84%) indicated their education level as four years of college or higher. It is possible that significant group differences in attitudes or knowledge may emerge in a more heterogeneous sample. In addition the lack of significant difference in knowledge and familiarity between Ismailis and Sunnis may be understood by furthering examining the Ismaili Muslim group. Mitha and Adatia (2016) explained that Ismaili Muslims, regardless of geography, tend to organize themselves through intra-community social services and programming, primarily through their well-established offices within their Ismaili Centers. While exploring the Ismaili community in Australia, they found that the young Ismailis considered such intra-community activities as a form of social support. Kalek, Mak, and Khawaja (2010) found this sense of social support to be especially true for older Muslim participants. The religious community as a source of social support has been addressed by many other researchers (Asvat & Malcarne, 2008; Moreira-Almeida, Neto, & Koenig, 2006). Perhaps the Ismaili Muslims in the current study may have endorsed a greater knowledge and familiarity if they were asked about exclusive mental health services offered through their Ismaili Centers. Furthermore, the relationship of cultural beliefs, attitudes, and knowledge with actual help seeking behaviors would be a meaningful future exploration with these three groups.

Older participants in the present study endorsed less positive attitudes and indicated less knowledge and familiarity than younger participants. This finding is in

contrast with the previous findings of Khan (2006) who found that older age was correlated to more positive attitudes towards seeking mental health resources in Muslim participants. At the same time, generational status did not have a significant effect on cultural beliefs, attitudes, or knowledge and familiarity, which is in line with the previous findings of Abe-Kim et al. (2007) that more mental health is utilized amongst third-generation Asians. Put together, the results then make sense as the majority of the participants (52%) were 40 years and older but the majority (77%) also identified themselves as first-generation (born outside of the U.S.). These finding also affirm the idea that South Asian American Muslims are unique and need to be examined separately instead of lumping them into the larger Muslim or Asian groups.

It was hypothesized that women would endorse less traditional cultural beliefs about mental health problems, more positive attitudes towards seeking formal mental health services, and greater knowledge and familiarity with formal mental health services than men. This hypothesis was partially supported. Women participants endorsed more positive attitudes towards seeking formal mental health services and demonstrated greater knowledge and familiarity with formal mental health resources. This is in line with previous findings of Khan (2006), who noted that Muslim women tend to hold a more positive view of mental health help-seeking and Kung (2003), who found that Asian American women are more likely to utilize formal mental health services. Soorkia, Snelgar, and Swami (2011) also found South Asian women participants endorsing more positive attitudes towards mental health help seeing, compared to White participants.

Contrary to expectations, women endorsed similar traditional cultural beliefs compared to men. Although unexpected, it nevertheless makes sense, considering the

present literature on the cultural and religious conceptualizations of mental illness endorsed by South Asians and Arab Muslims. Previous studies indicate that both men and women understood mental health concerns as a struggle, test, atonement, or God's will (Padela & Curlin, 2013; Rassool 2015; Youssef & Deane, 2006). Traditional views of mental health among Muslim men and women also included presence of good virtues as well as external factors beyond one's control, such as the evil eye (Haque, 2004). These narratives continue to explain psychopathology for many individuals in South Asia, South Africa, and the Arab world (Al-Adawi et al., 2002; Ally & Laher, 2008). More investigation into how cultural beliefs may translate into actual help seeking behaviors for Sunni, Shia, and Ismaili men and women would be a meaningful scholarly contribution.

Lastly, it was hypothesized that Ismailis would prefer reaching out to the mental health professionals first, while Shia and Sunnis would prefer reaching out to informal support (family, friends, and religious leaders) first. This hypothesis was partially supported. As expected, the majority of Ismailis (55%) indicated formal support as their first preference, with a majority of those (67%) leaning heavily towards seeking help from mental health professionals first. This result is in line with the researcher's experiences within the community, where help seeking is highly emphasized through social and educational events, normalizing seeking help from both physicians and mental health professionals. Kadiwal (2015), while discussing how Ismaili Muslims tend to be more progressive compared to other Muslim groups, explained that Ismailis are encouraged to attain high standards of education, health, and general well-being.

Therefore matters of faith do not stop Ismailis from living both their spiritual and secular lives in harmony.

As expected, the majority of Shias (69%) indicated their preference towards seeking informal support first, with 90% of those indicating family as their first source of support. This is in line with the findings of Al-Krenawi (2002), who found that when facing psychological distress, Arab Muslim participants preferred family members, then friends, then religious healers, and then their primary physicians. They only sought mental health practitioners after exhausting the informal resources. This hesitation for Shia Muslims to seek formal mental health professionals could also be due to the role of stigma noted by previous researchers that prevented help-seeking from formal services among the Muslim participants (Abu-Ras, 2003; Corrigan, 2004; Jorm & Reavley, 2013). Contrary to expectations, a majority of Sunnis (53%) preferred seeking help from formal support first, with 85% of those leaning towards reaching out to mental health professionals. As mentioned before, demographic variables of the participants such as higher education level, full-time employment, and the majority of the sample being women could explain Sunni Muslims being more amenable to seeking help from professional mental health providers. Notably, none of the participants indicated a strong preference towards seeking help from a religious leader. This is in contrast with the previous findings of Abdullah and Brown (2011) who found that Muslim participants preferred seeking help from a traditional healer rather than a psychologist.

Implications and Clinical Considerations

This study extends previous knowledge on help seeking patterns for South Asian American Muslims. Findings are notable due to the unique inclusion of Shia, Sunni, and

Ismaili participants to explore within-group differences. The present study demonstrates that South Asian Muslims tend to be a heterogeneous group in terms of their mental health help-seeking patterns. Results demonstrate that Shia, Sunni, and Ismailis differ in terms of conceptualization of mental health concerns, their attitudes, and their knowledge and familiarity. Clinicians therefore should be mindful of within-group differences when working with this group, assuming a curious stance rather than making any cultural or religious assumptions. Results showed that both Sunnis and Ismailis indicated preferences of seeking help from a mental health provider first but Shias indicated preferring families first, when considering seeking help. Traditionally, South Asian American Muslims tend to discourage sharing their mental health problems with anyone other than their families and relatives due to stigma and shame (Basit & Hamid, 2010). The Quran also teaches that Muslims should first seek help from one or more relatives (Padela & Curlin, 2013). For such clients, seeking informal mental help and understanding illness based on religious teaching may be common. Clinicians should avoid categorizing such hesitations as non-cooperation or resistance. Inquiring about clients' cultural and religious identities and their formal versus informal preferences of seeking help would facilitate establishing a strong therapeutic alliance as well as a safe therapeutic environment for South Asian American Muslims. Rassool (2015) suggested incorporating Islamic counseling with other therapeutic approaches. He suggested bringing in the aspects of Islamic spirituality that may be salient for clients. In addition, perhaps involving significant others during the therapeutic process, such as family, religious leaders, or community members could benefit the overall support for clients.

When counseling South Asian Muslims, practitioners should also remember to incorporate cultural considerations that maybe unique to the group. For example, the present study shows that even though Ismaili Muslims are considered a part of Shia Muslims, they endorsed more positive attitudes and a greater knowledge of resources compared to Shia Muslims. Recognizing the nuances within the groups could allow practitioners to help clients in a culturally-competent manner. The majority of the participants in the current study identified as first generation (born outside of the U.S.). While issues of acculturation and discrimination were not examined, a familiarity with the literature on acculturative stress and the state of Islamophobia may also help put things in perspective for the clinician, considering the within group differences in Islam. Esposito (2011) stated that the struggle to integrate and be accepted remains for Muslim Americans who may face discrimination and hostility, often in the shape of Islamophobia. Similarly, this study did not examine the help-seeking behaviors or the role of cultural barriers in seeking formal mental health help. That Shia participants endorsed a preference for seeking help from family first could be an indication of their hesitation towards formal services, perhaps due to cultural barriers, such as stigma. Clinicians may consider offering online therapy services that could ensure their confidentiality and anonymity, an avenue worth exploring for providing culturally-effective clinical services. Indeed, research on online service delivery has supported its use: exploring mental health help-seeking with college students, Fox (2012) found that young adults frequently looked for online spaces to seek help; similarly, Mo and Coulson (2010) found online therapy services to be effective with HIV-positive patients, who endorsed stigma as a barrier in seeking formal mental health care. Lastly, a counselor

who has examined his/her own cultural identity, socialization, and cultural biases may be the most culturally-competent counselor for minority clients such as South Asian American Muslims, as that counselor may have better awareness of issues of power, privilege, and mental health concerns across cultures and therefore may be better able to provide a safe clinical space for his/her client. Developing such cultural competencies as psychology scholars and practitioners will allow us to contribute meaningfully toward the positive mental health of the ever-changing U.S. demographic landscape.

Limitations and Future Recommendations

This study adds another layer toward understanding group differences between South Asian American Muslims in their cultural beliefs, attitudes, knowledge and familiarity, and preferences towards formal versus informal resources. Results are notable due to the dearth of research and clinical information currently available on these three South Asian Muslim groups. The findings of this study need to be considered in light of several limitations, and therefore the results should be interpreted with some caution. As noted before, American Muslims tend to be a unique and a heterogeneous group and therefore sample composition for this study may not completely mirror the actual South Asian American Muslim population. Results therefore should be understood as exploratory in nature and generalizing to the larger South Asian population or Muslim population should be avoided. This was a cross-sectional, correlational design using non-random and snowball sampling, all of which may have impacted the findings. Results may look different with different methodology or sampling; for example, recruiting solely from local mosques, exploring long-term changes, or employing qualitative component to the questionnaires could have provided different insights. Additionally, the

majority of the participants were employed, educated, bicultural, first-generation, and with access to online tools to complete the surveys. Participants recruited through social media may have a particular interest in the present research topic and may be different from those who chose not to participate. Self-report measures with their inherent social desirability bias may be another limitation here. It is not possible to know if the respondents endorsed expected rather than actual attitudes towards seeking formal mental health resources in responding to the questions. Providing surveys in English only may eliminate many potential participants, especially elders from various South Asian countries, who may not be proficient in English and who may have responded differently. In general, Muslim Americans tend to hesitate disclosing family-related or mental health matters to any outsiders and therefore, it is unknown if the participants truly disclosed their stand on sensitive matters such as mental health struggles and their ideas on formal mental health help seeking. Lastly, due to the current negative political and social rhetoric towards American Muslims in general, participants may have also worried about exposing their religious and spiritual ideas, thereby posing further threat to increased participation or generalizability.

Several constructs not explored in this study, which could influence mental health help seeking patterns for South Asian Americans, are recommended for future studies. Current literature with Muslim Americans notes that Muslim cultural values and traditions often are in a sharp contrast to mainstream U.S. norms (Rahman & Witenstein, 2013). As immigrants, Muslims stand out due to significant differences in cultural customs and religious beliefs, compared to Western societies (Halim, 2006). Therefore, the struggle to integrate and be accepted remains for Muslim Americans, who may face

discrimination and hostility, often in the shape of Islamophobia (Esposito, 2011). Researchers have documented the influence of acculturation on the intention to seek psychological support among South Asian Americans (Kim & Omizo, 2003) and Asian American students (Zhang & Dixon, 2003). High acculturation levels have been associated with increased utilization of formal mental health services (Kung, 2003). Future studies should consider examining the effects of acculturation and discrimination on help seeking patterns for these three South Asian American Muslim groups.

This study did not address the cultural barriers that may prevent mental health help seeking within the three South Asian Muslim groups. While this study indirectly examined the role of stigma through the measurement of attitudes, it did not address directly how stigma affects the help seeking behaviors of these three South Asian American groups and therefore more examination is recommended. Stigma is noted consistently in the psychological literature to be one of the strongest hidden factors that contribute to not seeking formal health services in people struggling with mental health concerns (Corrigan, 2004; U.S. Department of Health and Human Services, 2001). Regardless of generational differences, stigma and shame associated with seeking mental health help have been endorsed as the greatest barrier to help-seeking behaviors among ethnic minorities (Lee et al., 2009). In addition, lack of financial means and lower socioeconomic status has been consistently cited as deterrents for seeking formal mental health help (Kulwicki et al., 2000; Sareen et al., 2007; U.S. Department of Health and Human Services, 2001). Psychological literature with Asian Americans has reported participants experiencing more barriers to mental health services if they are from economically-disadvantaged communities (Chow, Jaffee, & Snowden 2003). Such

economic barriers also include lack of health insurance, as a reported 12% of South Asians in the U.S. do not carry health insurance (Huang & Carrasquillo, 2008). Consequently, general health services are increasingly being used for mental health problems among the uninsured population (Wang et al., 2006). Abe-Kim et al. (2002) found an increased likelihood of formal mental health usage when participants indicated having health insurance. While the present study asked participants about their insurance coverage, finding that only 8% indicated having no health insurance, its association with help seeking patterns was not examined. Next, inability to speak English has been associated with lower utilization of formal services (Spencer & Chen, 2004). Thus, further examination on the association of language proficiency and seeking formal mental health services within the South Asian American groups is recommended. Aloud and Rathur (2009) suggested that often the limited number of available Muslim mental health professionals or community volunteers tend to enable Muslims to delay, postpone, or seek informal help within the Muslim community. Examining the satisfaction level of Asian Americans, Gamst et al. (2003) found a higher satisfaction levels with racially-matched therapists, compared to Caucasian participants. Future studies with South Asian American Muslims should consider examining service utilization and satisfaction, based on racial and ethnic match of the providers.

Lastly, this study explored cultural beliefs, attitudes, knowledge and familiarity, and preferences towards mental health help seeking rather than actual help-seeking *behaviors*. Previous studies have found that South Asians are more likely to present their mental distress in the form of somatic complaints; ailments are often seen as moral problems and South Asians often do not seek professional treatment as their first choice

(Cooper et al., 2006; Husain et al., 2006). It would be meaningful to explore the actual help seeking behaviors by examining how many South Asian American Muslims utilize primary healthcare services to address their mental health needs. Furthermore, Elhai, Simons, and Deleon (2007) explain that attitudes towards mental health help seeking tend to significantly predict service usage in college students. Future studies may therefore consider examining the relation of attitudes and actual help seeking behaviors within these three South Asian American Muslim groups. Despite these limitations, this study highlights the unique aspects of South Asian American Muslims and underscores the importance of considering this group—and its subgroups—distinctly.

Table 1.

Demographic Characteristics (N = 252)

Variable	*n*	%
Type of Muslim		
Shia Muslim	74	29
Sunni Muslim	91	36
Ismaili Muslim	87	35
Gender		
Male	70	28
Female	178	71
Non-Binary	4	1
Age at time of survey (years)		
18-24	19	7
25-39	104	41
40 and older	129	52
Education		
Did not attend	19	7
High School graduate	22	9
4-yr college and higher	211	84
Generational Status		
First (born outside of U.S.)	195	77
Second (parents born outside of U.S.)	55	22
Third (grandparents born outside of U.S.)	2	1
Employment Status		
Not employed (homemaker, retired, or disabled)	57	23
Student	17	6
Employed (full-time or part-time)	178	71
Relationship Status		
Married/Partnership/Union	188	75
Separated/Divorced	26	10
Single	38	15

Table 2.

Mental Health Help-Seeking Patterns (N = 252)

	n	%
Visited medical doctor (last 12 months)		
Never	46	18
1-2 times	130	52
3 or more times	76	30
Visited mental health professional (last 12 months)		
Never	201	80
1-2 times	16	6
3 or more times	35	14
Visited mental health professional (ever)		
Never	140	56
Yes (IT, CT, FT, and/or medication)	112	44
If visited ever, was the visit helpful		
Yes	78	31
No	26	10
N/A (did not visit)	138	55
Don’t know/Not sure	10	4

Table 3.

Correlations among Covariates and Dependent Variables (N = 252)

		1	2	3	4	5	*M*	*SD*
1.	Age	--					2.60	0.862
2.	Generational Status	-.398**	--				1.23	0.443
3.	Cultural Beliefs	-.074	.152*	--			2.60	0.493
4.	Attitudes	-.428**	.195**	-.159*	--		2.55	0.369
5.	Knowledge and Familiarity	-.273**	.206**	.104	.420**	--	2.60	0.693

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

Table 4.

MANCOVA for Main Effects, Controlling for Age and Generational Status (N = 252)

Variable	*N*	*M*	*SD*	*F*	*p*	η_p^2
Age	252	2.60	.862	8.877	.000*	.098
Generational Status	252	1.23	.443	.602	.614	.007
Religious Affiliation	252			19.906	.000*	.195

*Note. *p < 0.017*

Table 5.

Religious Group Differences in Beliefs, Attitudes, and Knowledge and Familiarity of Mental Health Services (N = 252)

	Ismaili Muslims			Shia Muslims			Sunni Muslims					
	n	*M*	*SD*	*n*	*M*	*SD*	*n*	*M*	*SD*	*F*	*p*	η_p^2
Cultural Beliefs	87	2.39_b	.429	74	2.56_b	.416	91	2.83_a	.514	17.61	.000*	.125
Attitudes	87	2.71_b	.326	74	2.24_a	.341	91	2.65_b	.262	39.19	.000*	.241
Knowledge and Familiarity	87	2.64_b	.668	74	2.23_a	.504	91	2.88_b	.717	12.18	.000*	.090

*Note. *p < 0.017*

Table 6.

Sex Differences in Beliefs, Attitudes, and Knowledge and Familiarity of Mental Health Services (N = 252)

	Female			Male					
	n	*M*	*SD*	*n*	*M*	*SD*	*F*	*p*	η_p^2
Cultural Beliefs	105	2.52	.487	70	2.53	.479	0.003	.959	.000
Attitudes	105	2.69	.278	70	2.36	.427	37.08	.000*	.177
Knowledge and Familiarity	105	2.79	.650	70	2.31	.585	24.69	.000*	.125

Note. $*p < 0.017$

Table 7.

Preferences for Formal versus Informal Mental Health Resources (N = 252)

	Ismaili		Shia		Sunni		Total
		Expected		Expected		Expected	
	n	*n*	*n*	*n*	*n*	*n*	*N*
Informal Support	39	46	51	39	43	48	133
Physicians	16	11	10	10	7	12	33
Mental Health Professionals	32	30	13	25	41	31	86
Total	87		74		91		252

References

Abdullah, T., & Brown, T. L. (2011). Mental illness stigma and ethnocultural beliefs, values, and norms: An integrative review. *Clinical Psychology Review, 31*, 934-948.

Abe-Kim, J., Takeuchi, D., Hwang, W., & Kendall, Philip C. (2002). Predictors of help seeking for emotional distress among Chinese Americans: Family matters. *Journal of Consulting and Clinical Psychology, 70*, 1186-1190.

Abe-Kim, J., Takeuchi, D. T., Hong, S., Zane, N., Sue, S., Spencer, M. S., et al. (2007). Use of mental health-related services among immigrant and US-born Asian Americans: Results from the National Latino and Asian American Study. *American Journal of Public Health, 97,* 1–8.

Abu Raiya, H., Pargament, K. I., Stein, C., & Mahoney, A. (2007). Lessons learned and challenges faced in developing the psychological measure of Islamic religiousness. *Journal of Muslim Mental Health, 2,* 133–154. Abu-Ras, W. (2003). Barriers to services for Arab immigrant battered women in a Detroit suburb. *Journal of Social Work Research and Evaluation, 4*, 49–65.

Abu-Ras, W., & Abu-Bader, S. (2008). The impact of the September 11, 2001, attacks on the well-being of Arab Americans in New York City. *Journal of Muslim Mental Health, 3*, 217-239.

Abu-Ras, W., Gheith, A., & Cournos, F. (2008). The imam's role in mental health promotion: A study at 22 mosques in New York City's Muslim community. *Journal Of Muslim Mental Health*, *3*, 155-176.

Abu-Ras, W., & Abu-Bader, S. H. (2009). Risk factors for depression and posttraumatic stress disorder (PTSD): The case of Arab and Muslim Americans post-9/11. *Journal of Immigrant & Refugee Studies, 7,* 393-418.

Ahmad, F., Driver, N., Mcnally, M. J., & Stewart, D. E. (2009). "Why doesn't she seek help for partner abuse?" An exploratory study with South Asian immigrant women. *Social Science & Medicine, 69*, 613-622.

Ahmed, S., & Reddy, L. (2007). Understanding the mental health needs of American Muslims: Recommendations and considerations for practice. *Journal of Multicultural Counseling and Development, 35*, 207-218.

Akhtar, I. (2011). Race and religion in the political problematization of the American Muslim. *PS: Political Science & Politics, 44*, 768-774. doi:10.1017/S1049096511001272

Al-Adawi, S., Dorvlo, A., Al-Ismaily, S., Al-Ghafry, D., Al-Noobi, B., Al-Salmi, A., et al (2002). Perception of and attitude toward mental illness in Oman. *International Journal of Social Psychiatry, 48*, 305–317.

Al-Ashqar (2003). *The World of the jinn and devils in the Light of the Qur'an and Sunnah.* Riyadh, Saudi Arabia: International Islamic Publishing House.

Al-Habeeb, T. A. (2003). A pilot study of faith healers' views on evil eye, jinn possession, and magic, Al-Qassim region, Saudi Arabia. *Saudi Society Family and Community Medicine, 10,* 31–38.

Al-Issa, I. (Ed.). (2000). *Al-Junun: Mental illness in the Islamic world*. Madison, CT: International Universities Press.

Ali, S. (2008). *Second and third generation Muslims in Britain: A socially excluded group.* Unpublished doctoral dissertation. Nuffield College, University of Oxford.

Al-Krenawi, A., & Graham, J. (2000). Culturally sensitive social work practice with Arab clients in mental health settings. *Health & Social Work, 25*, 9-22.

Al-Krenawi, A. (2002). Mental health service utilization among the Arabs in Israel. *Social Work in Health Care, 35*, 577-589.

Al-Krenawi, A., & Graham, J. R. (2003). Social work with Canadians of Arab background: Insight into direct practice. In A. Al-Krenawi & J. R. Graham (Eds.), *Multicultural social work in Canada*. Ontario, Canada: Oxford University Press.

Aloud, N., & Rathur, A. (2009). Factors affecting attitudes toward seeking and using formal mental health and psychological services among Arab Muslim populations. *Journal of Muslim Mental Health, 4*, 79-103.

Al-Subaie, A., & Alhamad, A. (2000). Psychiatry in Saudi Arabia. In I. Al-Issc (Ed.), *Al-Junun: Mental illness in the Islamic world.* Madison, CT: International Universities Press.

Ally, Y., & Laher, S. (2008). South African Muslim faith healers perceptions of mental illness: Understanding, etiology and treatment. *Journal of Religion and Health, 47*, 45-56. doi:10.1007/s10943-007-9133-2.

Amer, M. M., & Bagasra, A. (2013). Psychological research with Muslim Americans in the age of Islamophobia: Trends, challenges, and recommendations. *American Psychologist, 68*, 134-144. http://dx.doi.org/10.1037/a0032167

Asher, N. (2008). Listening to hyphenated Americans: Hybrid identities of youth from immigrant families. *Theory into Practice, 47,* 12-9.

Asvat, Y., & Malcarne, V. L. (2008). Acculturation and depressive symptoms in Muslim university students: Personal–family acculturation match. *International Journal of Psychology, 43,* 114–124. doi:10.1080/00207590601126668

Bagasra, A., & Mackinem, M. (2014). An exploratory study of American Muslim conceptions of mental illness. *Journal of Muslim Mental Health, 8,* 57-76.

Basit, A., & Hamid, M. (2010). Mental health issues of Muslim Americans. *The Journal of IMA, 42*, 106-10.

BBC Quick guide, (2011) *Sunnis and Shias: Islam's ancient schism.* Retrieved from http://www.bbc.com/news/world-middle-east-16047709.

CFR Council on Foreign Relations. (2012). *Muslims in the United States.* Retrieved from http://www.cfr.org/united-states/muslims-united-states/p25927

Chow, J., Jaffee, K., & Snowden, L. (2003). Racial/ethnic disparities in the use of mental health services in poverty areas. *American Journal of Public Health, 93*, 792-7.

Cooper, J., Husain, N., Webb, R., Waheed, W., Kapur, N., Guthrie, E., & Appleby, L. (2006). Self-harm in the UK: Differences between South Asians and Whites in rates, characteristics, provision of service and repetition. *Social Psychiatry and Psychiatric Epidemiology, 41*, 782-8.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences (2nd ed.).* Hillsdale, NJ: Lawrence Earlbaum Associates.

Corrigan, P., & Anderson, N. B. (2004). How stigma interferes with mental health care. *American Psychologist, 59*, 614-625.

Daneshpour, M. (2009). Couple therapy with Muslims: Challenges and opportunities. In M. Rastogi & T. Volker (Eds.), *Multicultural therapy* (pp. 103–120). Thousand Oaks, CA: Sage.

De Muth, J. (2006). Basic statistics and pharmaceutical statistical applications. 2nd Edition. Boca Raton, FL: CRC Press.

Dunning, J. (2011). Using faith to help Muslims face mental health problems. Community care (http://www.communitycare.co.uk/2011/02/24/using-faith-to-help-muslims- face-mental-health-problems/, date accessed 4 October 2014).

Elhai, J., Simons, J., & Deleon, P. H. (2007). Trauma exposure and posttraumatic stress disorder predictors of mental health treatment use in college students. *Psychological Services, 4*, 38-45.

Erickson, C., & Al-Timimi, N. (2001). Providing mental health services to Arab Americans: Recommendations and considerations. *Cultural Diversity and Ethnic Minority Psychology, 7*, 308-327.

Esposito, J. L. (2011). *What everyone needs to know about Islam* (2nd Edition). Cary, NC: Oxford University Press, USA.

Fischer, E. H., & Turner, J. L. (1970). Attitudes Toward Seeking Professional Help Scale. *Psyctests*, doi:10.1037/t04321-000.

Fox, S. (2012). *Health topics: 80% of Internet users look for health information online*. Washington, DC: Pew Internet & American Life Project. Retrieved from http://www.pewinternet.org/files/old-media/Files/Reports/2011/PIP_Health_Topics.pdf

Gamst, G., Aguilar-Kitibutr, A., Herdina, A., Hibbs, S., Krishtal, E., Lee, R., . . . Martenson, L. (2003). Effects of racial match on Asian American mental health consumer satisfaction. *Mental Health Services Research, 5*, 197-208.

Gordon, M. S. (2002). *Islam: Origins, practices, hoy texts, sacred persona, and sacred places.* New York, NY: Oxford University Press.

Halim, F. (2006). Pluralism of American Muslims and the challenge of assimilation. *Journal of Muslim Minority Affairs, 26,* 235-245. Doi: 10.1080=13602000600937747

Hammoud, M. M., White C. B., & Fetters, M. D. (2005). Opening cultural doors: Providing culturally sensitive healthcare to Arab American and American Muslim patients. *American Journal of Obstetrics and Gynecology, 193,* 1307-1311.

Haque, A. (2004). Religion and mental health: The case of American Muslims. *Journal of Religion and Health, 43*, 45–58.

Husain, M. I., Waheed, W., & Husain, N. (2006). Self-harm in British South Asian women: Psychosocial correlates and strategies for prevention. *Annals of General Psychiatry,* 5-7.

Huang, K., & Carrasquillo, O. (2008). The role of citizenship, employment, and socioeconomic characteristics in health insurance coverage among Asian subgroups in the United States. *Medical Care, 4,* 1093-1098.

Inman, A., Devdas, L., Spektor, V., Pendse, A. L., Frederick T. L., & Kim, S. K. (2014). Psychological research on South Asian Americans: A three-decade content analysis. *Asian American Journal of Psychology, 5*, 364-372.

Jobanputra, R., & Furnham, A. (2005). British Gujarati Indian immigrants' and British Caucasians' beliefs about health and illness. *International Journal of Social Psychiatry, 51,* 356–364.

Jorm, A. F., & Reavley, N. J. (2013). Depression and stigma: From attitudes to discrimination. *The Lancet, 381*, 10-11.

Kadiwal, L. (2015). *Religious pluralism in Ismaili Muslim religious education: From difference to diversity* (Order No. 10084685). Available from ProQuest Dissertations & Theses Global. (1784059035). Retrieved from http://search.proquest.com.ezproxy.lib.uh.edu/docview/1784059035?accountid=7107

Kalek, S., Mak, A. S., & Khawaja, N. G. (2010) Intergroup elations and Muslims' mental health in western societies: Australia as a Case Study, *Journal of Muslim Mental Health, 5,* 160-193, DOI: 10.1080/15564908.2010.487722

Khan, Z. (2006). Attitudes toward counseling and alternative support among Muslims in Toledo, Ohio. *Journal of Muslim Mental Health, 1*, 21-42.

Kim, B. S. K., & Omizo, M. M. (2003). Asian cultural values, attitudes toward seeking professional psychological help, and willingness to see a counsellor. *The Counseling Psychologist, 31,* 343–361.

Kira, I. A., Lewandowski, L., Templin, T., Ramaswamy, V., Ozkan, B., & Mohanesh, J. (2010).The effects of perceived discrimination and backlash on Iraqi refugees' mental and physical health. *Journal of Muslim Mental Health, 5,* 59–81.

Kulwicki, A., Miller, A., & Schim, A. (2000). Collaborative partnership for culture care: Enhancing health services for the Arab community. *Journal of Transcultural Nursing, 11*, 31–39.

Kung, W. (2003). Chinese Americans help seeking for emotional distress. *Social Service Review, 77*, 110-134.

Kung, W. W. (2004). Cultural and practical barriers to seeking mental health treatment for Chinese Americans. *Journal of Community Psychology, 32*, 27-43.

Laird, L. D., de Marrais, J., & Barnes, L. L. (2007). Portraying Islam and Muslims in MEDLINE: A content analysis. *Social Science and Medicine, 65,* 2425-2439.

Lee, S., Juon, H., Martinez, G., Hsu, C., Robinson, E., Bawa, S., & Ma, J. (2009). Model minority at risk: Expressed needs of mental health by Asian American young adults. *Journal of Community Health, 34*, 144-152.

Lindesay, J., Jagger, C., Hibbett, M., Peet, S., & Moledina, F. (1997). Knowledge, uptake and availability of health and social services among Asian Gujarati and white elderly persons. *Ethnicity & Health, 2*, 59-69.

Lumumba, H. (2003). The impact of Al-Islam on the African American population. *Counseling and Values, 47,* 210–219.

Lynch, E., & Medin, D. (2006). Explanatory models of illness: A study of within-culture variation. *Cognitive Psychology, 53,* 285–309.

Masood, N., Okazaki, S., & Takeuchi, D. T. (2009). Gender, family, and community correlates of mental health in South Asian Americans. *Cultural Diversity and Ethnic Minority Psychology, 15,* 265-274.

Mehrotra, M., & Calasanti, T. M. (2010). The family as a site for gendered ethnic identity work among Asian Indian immigrants. *Journal of Family Issues, 31,* 778-807.

Mertler, C. A., & Vannatta, R. A. (2001). *Advanced and multivariate statistical methods: Practical application and interpretation.* Los Angeles: Pyrczak Publishing.

Meyers, L. S., Gamst, G., & Guarino, A. J. (2013). *Applied multivariate research: Design and interpretation.* Los Angeles: SAGE.

Mitha, K., & Adatia, S. (2016). The faith community and mental health resilience amongst Australian Ismaili Muslim youth. *Mental Health, Religion & Culture,* 1-16.

Moreira-Almeida, A., Neto, F. L., & Koenig, H. G. (2006). Religiousness and mental health: A review. *Revista Brasileira de Psiquiatria, 28(3),* 242–250. doi:10.1590/S1516-44462006005000006

Mo, P. K., & Coulson, N. S. (2010). Living with HIV/AIDS and use of online support groups. *Journal of Health Psychology, 15*, 339-350.

Padela, A. I., & Heisler, M. (2010). The association between perceived post-9/11 abuse and discrimination and psychological distress, level of happiness, and health status in Detroit-area Arab Americans. *American Journal of Public Health, 100,* 284-291.

Padela, A. I., Killawai, A., Heisler, M., Demonner, S., & Fetters, M. D. (2011). The role of imams in American Muslim health: Perspectives of Muslim community leaders in Southwest Michigan. *Journal of Religion and Health, 50,* 359-373.

Padela, A., & Curlin, I. (2013). Religion and disparities: Considering the influences of Islam on the health of American Muslims. *Journal of Religion and Health, 52*, 1333-1345.

Pew Research Center for the People & the Press. (2011). Demographic portrait of Muslim Americans. http://www.people-press.org/2011/08/30/section-1-a-demographic-portrait-of-muslim-americans/

Pew Research Center for the People & the Press. (2013). World's Muslim population more widespread than you might think. Retrieved from http://www.pewresearch.org/fact-tank/2013/06/07/worlds-muslim-population-more-widespread-than-you-might-think/

Rahman, Z., & Witenstein, M. A. (2013). A quantitative study of cultural conflict and gender differences in South Asian American college students. *Ethnic and Racial Studies, 37,* 1121-1137. http://dx.doi.org/10.1080/01419870.2012.753152.

Rassool, G. (2015). Cultural competence in counseling the Muslim patient: Implications for mental health. *Archives of Psychiatric Nursing, 29*, 321-325.

Rassool, G. H., & Gemaey, E. M. (2014). Mental health: Cultural & religious influences. In G. Hussein Rassool (Ed.), *Cultural competence in caring for Muslim patients* (pp. 178-204). Basingstoke, NH: Palgrave McMillan.

Rippy, A., & Newman, E. (2006). Perceived religious discrimination and its relationship to anxiety and paranoia among Muslim Americans. *Journal of Muslim Mental Health, 1*, 5-20.

Rusticus, S. A., & Lovato, C. Y. (2014). Impact of sample size and variability on the power and type I error rates of equivalence tests: A simulation study. *Practical Assessment, Research & Evaluation, 19*(11), 1-10.

SAALT (South Asian Americans Leading Together): Demographic Information. (2014, June 11). Retrieved from http://saalt.org/south-asians-in-the-us/demographic-information/

Sandhu, J., Curtis-Boles, H., Dixit-Brunet, A., & Singh, N. (2013). *What is the relationship between acculturation and professional help-seeking attitudes in 2nd generation South Asian women?,* ProQuest Dissertations and Theses.

Sareen, J., Jagdeo, A., Cox, B. J., Clara, I., Have, M. T., Belik, S., et al. (2007). Perceived barriers to mental health service utilization in the United States, Ontario, and the Netherlands. *Psychiatric Services, 58,* 357-364.

Sauerherber, J. D., Nims, D., & Carter, D. J. (2013). Counseling Muslim couples from a Bowen family systems perspective. *The Family Journal, 22*, 231-239. Doi: 10.1177/1066480713514937.

Sechzer, J. A. (2004). Islam and women-Where tradition meets modernity: History and interpretations of Islamic women's status. *Sex Roles, 51,* 263-272.

Sheikh, S., & Furnham, A. (2000). A cross-cultural study of mental health beliefs and attitudes towards seeking professional help. *Social Psychiatry and Psychiatric Epidemiology, 35*, 326–34.

Simpson, J. L., & Carter, K. (2008). Muslim women's experiences with health care providers in the rural area of the United States. *Journal of Transcultural Nursing, 19,* 16-23. doi: 10.1177/1043659607309146.

Soorkia, R., Snelgar, R., & Swami, V. (2011). Factors influencing attitudes towards seeking professional psychological help among South Asian students in Britain. *Mental Health, Religion & Culture, 14*, 613-623.

Springer, P. R., Abbott, D. A., & Reisbig, A. M. J. (2009). Therapy with Muslim couples and families: Basic guidelines for effective practice. *The Family Journal: Counseling and Therapy for Couples and Families, 17,* 229–235.

Swami, V., Arteche, A., Chamorro-Premuzic, T., Maakip, I., Stanistreet, D., & Furnham, A. (2009). Lay perceptions of current and future health, the causes of illness, and the nature of recovery: Explaining health and illness in Malaysia. *British Journal of Health Psychology, 14,* 519–540.

Tabachnick, B. G., Fidell, L. S. (2012). *Using multivariate statistics.* Pearson Education. Kindle Edition.

The Ismaili: The Ismaili Community (2016, September 1). Retrieved from https://www.theismaili.org/community

U.S. Census Bureau. (2010). *Profile of general population and housing characteristics: 2010 Demographic Profile Data.* Retrieved from: http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml

U.S. Department of Health and Human Services, Center for Mental Health Services. (2001). *Mental health: A report of the surgeon general*. Rockville, MD: Author.

Wang, P. S., Demler, O., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. (2006). Changing profiles of service sectors used for mental health care in the United States. *American Journal of Psychiatry, 163,* 1187-1197.

Youssef, J., & Deane, F. (2006). Factors influencing mental-health help-seeking in Arabic-speaking communities in Sydney, Australia. *Mental Health, Religion & Culture, 9*, 43-66.

Zhang, N., & Dixon, D. (2003). Acculturation and attitudes of Asian international students toward seeking psychological help. *Journal of Multicultural Counseling and Development, 31,* 205–222.