

Muslims and mental health concerns: A social ecological model perspective

By: [Ahment Tanhan](#) and [Vincent T. Francisco](#)

This is the peer reviewed version of the following article:

Tanhan, A. & Francisco, V.T. (2019). Muslims and mental health concerns: A social ecological model perspective. *Journal of Community Psychology*, 47, 964-978.

which has been published in final form at <https://doi.org/10.1002/jcop.22166>. This article may be used for non-commercial purposes in accordance with Wiley Terms and Conditions for Use of Self-Archived Versions.

Abstract:

Muslims in the United States experience many psychosocial issues and underutilize mental health services. This study sought to systematically identify the common issues and strengths of the Muslims affiliated with a college in the Southeast region of the United States and address them accordingly. A survey comprising 33 items and 2 open-ended questions regarding common issues and strengths was constructed. A total of 116 participants completed the survey. The overall rating for items was quite high, whereas the satisfaction rating was very low. The most important item was, “You have prayer places/rugs, ablution stations, and water in restrooms,” with an importance rating of 94.52% and a satisfaction rating of 20.50%. Four items regarding mental health were rated as the least important, and participants reported lack of knowledge regarding mental health services. This is the first study that includes a list of common concerns and strengths of the Muslim communities affiliated with colleges in the United States.

Keywords: community collaboration | counseling | Muslims in the United States | Muslims’ mental health | psychosocial issues and strengths | social ecological model

Article:

Muslim populations have received increased attention worldwide over the last 15 years, and resources indicate that Islam is the fastest growing religion in the United States (Pew Research Center, 2016). According to the Council on American–Islamic Relations (Council on American–Islamic Relations, 2015), there are between 6 and 7 million Muslims in the United States. Researchers studying Muslim mental health have found that Muslims face many psychosocial issues across five domains including global, larger and local community, interpersonal, and intrapersonal contexts (Ahmed, Abu-Ras, & Arfken, 2014; Aloud & Rathur, 2009; Goforth, Oka, Leong, & Denis, 2014; Nadal et al., 2012; Tummala-Narra & Claudius, 2013).

Researchers have found that it is crucial to pay special attention to minority groups in the United States to secure effective mental health services (e.g., Abe et al., 2018; Held & Lee, 2017). Chaudhry and Li (2011) stated that Muslims in the United States are more likely to have mental health issues than are any other minority groups because of the challenging psychosocial issues that they encounter. Terry, Townley, Brusilovskiy, and Salzer (2018) found that sense of

community is an important mediator for community participation and psychological distress, which means mental health functioning.

We became interested in this study because some Muslim students from an executive board of the Muslim Student's Association (MSA) at a college in the Southeast region of the United States contacted the first author, who is Muslim, about some issues that the Muslim student community faces. Based on this, the first author contacted the second author, a Christian professor, and they attended a meeting during which the executive board of the association voiced the challenges that they and the student Muslim community face. The executive board stated about 75 issues related to the five domains.

Based on a thorough literature review, Tanhan and Young (2018) outlined a concept map regarding how Muslims approach mental health issues and services. As shown in Figure 1, there are many factors affecting Muslims' use of mental health services.

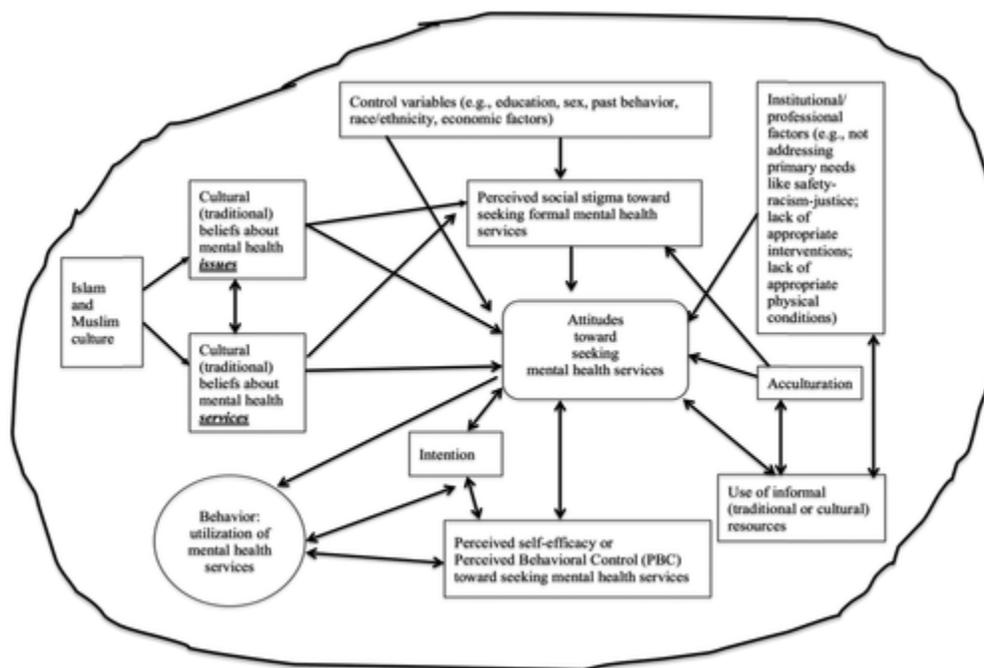


Figure 1. Concept Map. Note 1. The most common concepts and the relationships among them are drawn based on a thorough literature review. The flexible line encircling the concepts represents a contextual perspective as the SEM stresses for a contextual and functional mental health research and services. Note 2. The map has been taken from “Muslims and Mental Health Services: A Concept Map and A Theoretical Framework,” by A. Tanhan and J. S. Young, 2018, Manuscript in preparation. Copyright 2018 by Copyright Holder. Reprinted with permission

Based on the literature, the map includes the following 11 main factors: cultural beliefs about mental health issues and their causes and treatments (Al-krenawi, Graham, Al-bedah, Kadri, & Sehwal, 2009; Bagasra, 2010; Bagasra & Mackinem, 2014; Thomas, Al-Qarni, & Furber, 2015); knowledge about formal mental health services (Abu-Ras, 2003; Aloud, 2004); perceived social stigma toward seeking formal mental health services (Ajzen, 1991; Ajzen, 2006; Ali & Milstein,

2012; Amri & Bemak, 2013; Ciftci, Jones, & Corrigan, 2013; Corrigan et al., 2017; Fischer & Turner, 1970; Fishbein & Ajzen, 2010; Herzig, Roysircar, Kosyluk, & Corrigan, 2013; Khan, 2006; Soheilian & Inman, 2009); perceived self-efficacy or behavioral control (Ajzen, Joyce, Sheikh, & Cote, 2011; Mackenzie et al., 2004; Romano & Netland, 2008); institutional (professional) factors (Cook-Masaud & Wiggins, 2011; Tanhan, 2017); use of other informal/traditional resources (Chen, Liu, Tsai, & Chen, 2015; Padela, Killawi, Forman, DeMonner, & Heisler, 2012); acculturation (Aprahamian, Kaplan, Windham, Sutter, & Visser, 2011; Bektas, Demir, & Bowden, 2009); control variables (e.g., education, sex); attitudes toward seeking formal mental health services (Khan, 2006; Soheilian & Inman, 2009; Tummala-Narra & Claudius, 2013; Yousef & Deane, 2006); intention (Kelly, Aridi, & Bakhtiar, 1996; Tanhan, 2017); and behavior (use of formal mental health services; Bagasra, 2010; Tanhan & Strack, 2018).

As shown in the map, the institutional and professional factors are among the most important factors that affect a Muslim's approach to mental health services (Ahmed & Reddy, 2007; Cook-Masaud & Wiggins, 2011). Muslims might not acknowledge and trust mental health providers because they do not address primary issues; for example, Muslim people might have urgent and primary needs such as safety, food, and prayer facilities.

Therefore, many researchers have emphasized focusing on collaboration with the community to identify the most common primary concerns (e.g., Abe et al., 2018; Becker, Reiser, Lambert, & Covello, 2014; Francisco, 2013; Francisco & Butterfoss, 2007; McMillan & Chavis, 1986; Terry et al., 2018). This would ensure that Muslims' needs are met and that they get familiarized with formal mental health services in an effective way so that their issues are addressed and their quality of life is enhanced, as mental health services include both (Kaplan, Tarvydas, & Gladding, 2014). Such prioritization would ensure the effectiveness of mental health providers and their culturally sensitive services. Much research on Muslims' mental health has suggested collaboration with communities (e.g., Bagasra & Mackinem, 2014; Cook-Masaud & Wiggins, 2011; Khan, 2006; Youssef & Deane, 2006) to produce more effective research and services.

1 Understanding Islam and Muslims

To understand the effects of mental health on the lives of Muslims, first, we need to understand the influence of the terms, Islam and Muslim. The probability of mental health providers working with Muslims has increased in the last few decades, considering the local and global sociopolitical contexts (Council on American-Islamic Relations, 2015; Pew Research Center, 2016). The American Counseling Association (American Counseling Association, 2014) code of ethics, the Association for Spiritual, Ethical, and Religious Values in Counseling competencies (Young & Cashwell, 2011), and many other researchers (e.g., Ackerman, Ali, Dewey, & Schlosser, 2009; Cashwell et al., 2013; Wiggins, 2011) state the importance of familiarity with clients' belief systems.

1.1 Islam and Muslim defined

“Islam” means submission or surrender of one's will to Allah; anyone who does so is identified as a Muslim. Table 1 outlines the foundations of Islam that affect the Muslim's daily life. Based

on research, there seems to be significant underutilization of mental health services and overreliance on spiritual and cultural treatments (e.g., prayers, recitation of Quran, consulting a spiritual leader and/or traditional healers; Aloud & Rathur, 2009; Tanhan & Young, 2018). Therefore, familiarization with the most common spiritual and cultural treatments is important.

Table 1. Foundations of Islam

Primary sources	Five pillars of Islam
Quran (the holy book of Islam)	<i>(Based on the primary sources)</i>
Sunnah (what Prophet Muhammad said and did, PBUT)	<ol style="list-style-type: none"> 1. Declaration of faith (<i>Shada</i>) 2. Prayer (<i>salah</i>) 3. Obligatory charity (<i>zakah</i>) 4. Fasting (<i>sawm</i>) 5. Pilgrimage (<i>hajj</i>)
Secondary sources	Six principles of faith
<p><i>Ijma</i> (consultation/agreement) <i>Qiyas/aql</i> (Comparison/Mind) The Quran is seen as the last Holy Book and Muhammad is seen as the last Prophet to complete Islam from Allah; the two do not represent the advent of a new religion.</p>	<p><i>(Based on the 1st Pillar of Islam: Shada)</i>Faith in</p> <ol style="list-style-type: none"> a) Allah b) Allah’s angels c) Allah’s books d) Allah’s prophets e) The hereafter f) The divine decree and destiny

If one believes in all the components of Islam, they are called Muslim, meaning one who submits to Allah.

Note. The table shows the primary and secondary sources of Islam and how the five pillars of Islam are based on the primary sources and the six principles of faith, the first pillar of Islam. The table has been taken from “Muslims and Mental Health Services: A Concept Map and a Theoretical Framework,” by A. Tanhan and J. S. Young, 2018, manuscript in preparation. Reprinted with permission.

2 Theoretical Foundations – Individual and Contextual Influences

Mental health providers’ knowledge of cultural aspects of Muslims is crucial for effective service provision (Ahmed & Amer, 2012; Tanhan, 2014). The recognition and incorporation of these cultural aspects into the provision of mental health services are crucial for mental health providers, who are generally aligned to individual and biomedical perspectives of mental illnesses and their treatments. Many researchers have called for the use of concept maps, theories and models, and/or theoretical frameworks to achieve more effective evidence-based research and practice (Ali & Milstein, 2012; Flanagan & Kaufman, 2004; McMillan & Chavis, 1986; Ravitch & Riggan, 2012), which are missing from Muslim mental health literature. Therefore, concept maps and well-established theories and models are important for shaping the theoretical framework of the intended study. In light of all the discussions above, we used Muslim mental health literature, the social ecological model (SEM), and allyship development perspectives to conduct the study, which integrates the community, literature, practice, and theories.

3 SEM

Inclusion of the SEM is important because almost all the researchers in the Muslim mental health literature stressed the importance of contextual factors, although only a few explained the SEM (Ahmed, 2012; Martin, 2015). The SEM was proposed by Urie Bronfenbrenner in 1970 as a conceptual model for taking environmental conditions into account, as opposed to only intrapersonal/individual and genetic factors (Bronfenbrenner, 1977; McLeroy, Bibeau, Steckler, & Glanz, 1988). The model has affected many professions (ACA, 2014; Arredondo, Tovar-Blank, & Parham, 2008). The SEM consists of four levels, microsystem, mesosystem, exosystem, and macrosystem, which are interrelated and should be considered together to avoid inefficiency and misplacing causes on innocent people or victims (Freire, 1972; Holmes, 2013; Prilleltensky, 2012). They addressed how people, including health professionals, are subject to the workings of the system that disregard contextual factors and deliver services in a way that is harmful to recipients. Therefore, the use of the SEM as a lens to shape the theoretical framework of our study is appropriate.

3.1 Allyship development conceptual framework

Bhattacharyya, Ashby, and Goodman (2014) used the allyship development conceptual framework as mental health providers, to address social justice issues faced by Muslims in the United States, in collaboration with the community. The researchers encouraged mental health providers to use the framework from a contextual perspective, coupled with the utilization of counseling skills at the community level. The framework has six components for the participants and researchers, namely: experiencing oppression and conflict, increasing awareness of social injustice, developing a sense of efficacy that as participants and researchers they can contribute for more meaningful and livable conditions, seeing one's position in all these processes, developing a comprehensive and contextual perspective for psychosocial issues, and using advocacy to implement meaningful initiatives in the community.

To enable a clear and effective process for developing and following an allyship framework, we followed the steps from the Community Tool Box website (see <https://ctb.ku.edu/en>) to organize the study. Chapter 3, entitled Addressing Community Needs and Resources, gives a step-by-step overview on how to collaborate with a community to identify its concerns and strengths, so as to enhance the quality of individuals at a community level. We followed the first 14 sections in the chapter step by step, in addition to the consideration of the literature, SEM, and allyship development perspectives.

4 Method

4.1 Participants

In total, 116 participants from a college in the Southeast region of the United States completed their surveys, 114 of which had been fully completed. Of the participants, 63 were male and 51 were female; nine were freshmen, 18 were sophomores, 10 were juniors, 16 were seniors, and seven were graduates. A total of 24 students were enrolled in the English preparation class and 30 were classified as other (faculty, management staff, parents) in terms of affiliation with the college. We put faculty, management staff, and parents under the same category so that the few

Muslim faculty and staff at the college would not be identifiable, as suggested by the Muslim faculty who supported the study.

4.2 Measures

We conducted a thorough literature review on Muslim mental health, paying attention to Muslims' concerns in this regard. The literature review and concerns stated by the MSA yielded more than 100 concerns. We refined the concerns and generated fewer items to focus on the most common and urgent ones. After integrating the list of primary concerns, we consulted six professors (three Muslims and three non-Muslims) and the MSA board to check if the list was thorough. Based on their feedback, final changes were made to the list, leading to the construction of a 33-item survey questionnaire.

Additionally, there were two open-ended questions in the survey, with the first question asking whether participants had any other concerns that they wished to state, and the second question asking any other form of support that they wished to receive. The questionnaire also included several demographic questions on faith, sex, and education. It is important to explicitly state that this 33-item list was not meant to measure a psychological construct, but rather to understand how important each item was to the participants and how satisfied they were with it considering their campus experience.

Participants were asked to consider the survey in the context of their campus, rather than the broader contexts, so that the concerns and their solutions could be addressed effectively. Participants rated how important each item was on a 4-point scale ranging from 0 (not important) to 4 (very important) in one column, as well as how satisfied they were with the item using a 4-point scale ranging from 0 (not satisfied) to 4 (very satisfied) in the other column.

4.3 Procedure

The university's institutional review board (IRB) reviewed the study and decided that the research (reference id. 103075 and IRB number 15-0078) did not require IRB oversight. The IRB has determined that the submission does not constitute human subjects research as defined under federal regulations (45 CFR 46.102 [d or f]) and does not require IRB approval.

The participants were not asked for signed consent forms for confidentiality reasons, considering many Muslims did not want to sign any forms, and the IRB also did not require signed consent. The participants were told that the data would be used for publication through different avenues (e.g., media, articles through peer-reviewed journals) and if, as the participant, they agreed with that and met the other requirements for the participation (e.g., being adult Muslim, being affiliated with the ... college), then they were told they could participate. They were additionally told that if they did not meet and/or did not agree with all the requirements, then they should not participate.

The survey was available online through the university's Qualtrics system. The survey link was disseminated through different avenues, but mainly through the MSA's email list and social media, reaching more than 1,000 Muslims. At the college, based on information from the

Muslim organization at the college, there were more than 2,000 Muslims. However, this information was not formal because the college does not ask about religion affiliation and the socioecological conditions (e.g., hateful political climate, regional physical attacks on Muslims) might have prevented many participants from participating to the research. Therefore, it is very difficult to reach out to Muslims to engage in research that is about their religion and issues they face.

Some prospective participants asked for printed surveys for various reasons, and about 100 printed surveys were disseminated. Participants' anonymity was ensured in the questionnaire items. The association also created a Facebook event page to announce the community dinner, during which the study results would be shared, discussed, and deliberated on whether they made sense to them. The community dinner and the accompanying discussion were open to all interested in the study. The participants had 2 weeks after commencement to complete the questionnaires.

4.4 Data analysis

The data were collected through Qualtrics and analyzed as per the detailed explanation on the Community Tool Box website (see Section 10 in Chapter 3: <https://ctb.ku.edu/en/table-of-contents/assessment/assessing-community-needs-and-resources>). Then, we used an Excel sheet to compute averages of importance and satisfaction regarding each item, to obtain the relevant percentages and make comparisons. Based on the Community Tool Box, concerns are represented by items high in importance, but low in terms of satisfaction; strengths are represented by items with high ratings on both importance and satisfaction. Table 2 shows related details for each item. Data from the two open-ended questions and the community dinner and discussion were examined and are reported in Table 3.

Table 2 Common concerns and statistical results for the 33 items

Item	Relative importance %	Ranking of importance (from high to low)	Relative satisfaction %	Ranking of satisfaction (from high to low)
1. You can practice your faith.	91.38	5	48.61	11
2. Halal food is available on campus.	75	25	31.00	31
3. Appropriate times are available for dining on campus during Ramadan.	72.57	27	33.91	28
4. You have prayer venues/rugs, ablution stations, and water in restrooms.	94.52	1	20.50	32
5. You have access to a Muslim chaplain.	83.78	14	15.33	33

6. [Your college] community members prevent misconceptions or stereotypes about Islam.	86.40	12	48.66	10
7. You are involved with the Muslim Student Association (MSA).	71.57	28	51.04	7
8. You have time on campus and access to all of the facilities (e.g., recreation, social, and academic).	74.30	26	52.64	5
9. Your professors understand and respect time for prayers and make adjustments to classes.	79.25	20	48.06	12
10. Students, faculty, and university management staff improve relationships with others of different ethnic and faith backgrounds.	81.88	16	57.04	2
11. I (as a Muslim of [my college]) get support from other community organizations and the university.	78.65	21	52.91	4
12. You have good connections with the Muslim community on campus.	75.69	24	49.29	9
13. I (as a Muslim of [my college]) am able to attend different activities.	81.88	17	51.42	6
14. I (as a Muslim of [my college]) feel safe.	92.54	3	39.06	25
15. You can spend time with people similar to yourself, in terms of ethnic/religious/cultural background.	75.70	23	50.00	8
16. You are able to improve your	80.45	18	39.25	24

relationships with other Americans.				
17. You consider MSA an important resource for support.	77.21	22	47.96	13
18. You are able to direct your friends who ask about Islam to resources on campus.	82.50	15	32.94	30
19. You are able to cope with difficult situations and pay attention to your academic studies.	87.39	10	44.76	17
20. You feel safe to call the police/security when faced with some disturbance (e.g., insults, threats).	86.95	11	35.68	27
21. You do not experience social difficulties in the USA during your studies.	79.69	19	42.36	20
22. You can accomplish your academic goals in the USA.	88.62	8	56.02	3
23. You do not experience verbal or physical insults, or abuse.	92.12	4	45.33	16
24. You have the support needed to handle sad news.	84.63	13	44.10	18
25. You are able to use recreation facilities (gym, swimming pool, etc.).	66.59	31	42.08	21
26. You are pleased with your experience at [your college].	87.72	9	58.94	1
27. Counseling could be helpful for yourself or your community to address issues.	64.72	33	43.13	19
28. Counselor(s) or psychologist(s) work with individuals or your	64.78	32	39.74	23

community to address difficulties and increase quality of life.				
29. You do not have to be concerned about your physical appearance.	89.06	6	36.36	26
30. Your belief/religion/spirituality is seen in a positive light/perspective by others.	88.74	7	33.80	29
31. I (as a Muslim of [my college]) am safe.	93.97	2	40.37	22
32. You have access to counseling services.	66.67	30	45.42	15
33. You feel safe using counseling services that are available.	70.37	29	45.63	14

Note. Top 10 concerns items: 4, 14, 31, 23, 29, 30, 19, 20, 6, 24. Relative strength items: 1, 26, 22, 10, 11. Four mental health-related items: 27, 28, 32, 33. The items were the most skipped, meaning that participants did not respond to them as much as they did to other items. These four items were skipped by 27 participants, on average, whereas the rest were skipped by only about two participants.

5 Results

5.1 Basic statistics related to participants

Of the 114 completed surveys, 80 had been completed online and 36 in print. The participants were not required to state their countries of origin because of contextual factors (political issues and perceived threat of being targeted): The Muslim student body at the college originates from more than 45 states and/or countries, based on the MSA's activities, in which Muslim participants would be asked to put a flag on the state and/or country they are from. Table 4 shows the extent of the role played by Islam in participants' daily lives.

Table 3. Responses to the two open-ended questions and community dinner and discussion

Question 1: Are there any other concerns that are important and not presented in this survey?
 51 participants responded, yet most repeated and/or elaborated on the 33 items in Table 2; responses that differ from 33 the items included the following needs:

- A graduate Muslim association
- Gender-segregated spaces at university events, especially those organized by Muslims
- Separate hours for men and women at the recreation center
- Support to address complex feelings such as anger regarding political issues like the occupation of Palestine
- More information about counseling
- A more inclusive and sensitive, rather than judgmental, Muslim community
- Muslim organizations must organize more appropriate activities
- 15-20-min prayer breaks between classes that take more than 90 min
- Help with improvement of English, especially for those enrolled in English courses
- Request that photos not to be taken at events, especially without permission

Question 2: Are there any other forms of support that you wish were available and that are not presented in this survey?

43 participants responded; responses that differ from those in Table 2 include:

- Participation in more studies such as the current one
- Desire to see improvements in their home country, as well
- Clean house/places where people do not use shoes inside
- Support for families and children at activities
- More organized Friday prayers
- Orientation on reaching Muslim organizations in the first few days of starting college
- Education of people so they do not describe Muslims in disparaging ways
- Request for more collaboration with counselors

Results from the community discussion

All participants elaborated on the items in Table 2; differing responses are as follows:

- More time to discuss the results with non-Muslim participants, especially with key people such as university and media representatives regarding addressing the issues
- Overall emphasis on the importance of all issues, but especially the need to start addressing the primary concerns as they are a regular feature in participants' daily lives
- Statements that Muslim student organizations could not afford doing everything for Muslims and that such organizations need professional support from other departments and offices such as counseling, public health, and cultural diversity departments
- MSA board members expressing how the research differs from all the other previously organized activities and how beneficial it was to them, and requests for more support
- Non-Muslims offering some resources, strategies, and collaboration to address issues
- Asking college professors to be more inclusive, rather than using slurs against Muslims
- Expressing a need to contact the graduate student association and establishing a Muslim organization for graduates on campus
- Few key people (e.g., imams, spiritual leaders, priests) of the larger community expressing appreciation at seeing official departments working with the community

Table 4 Questions related to practicing one's religion and spirituality

Question	Answer	Count	%
Do you identify as a Muslim whether you try to practice Islam as your religion or not?	Yes	108	96
	No	5	4
	Total	113	100
How often do you practice your faith?	Daily	81	71
	with some regularity	23	20
	when it is convenient	6	5
	Occasionally	3	3
	Not at all	1	1
	Total	114	100

5.2 Results for the 33 items and two open-ended questions

The community had many concerns and few strengths. Table 2 shows in detail the average percentage for importance and satisfaction for each item and how participants rated the importance of the four mental health-related items very low and skipped these items the most, compared with other items. Table 3 shows the responses to the open-ended questions at the end of the survey.

5.3 Results of the community dinner and discussion

About 55 Muslim and non-Muslims attended the community dinner and discussion. Attendees included representatives from the MSA organizations in the area, students, academic faculty, university management staff, representatives of different student organizations, local media representatives, and representatives from other local communities and organizations. Prayer facilities and cultural food were available to ensure that the Muslim participants felt at home and could voluntarily stay. More than 20 local and national organizations sponsored the dinner. Results regarding the 33 items were handed out when the event commenced, to give the participants a chance to peruse them during dinner while awaiting the discussion.

After the dinner, to facilitate an active and meaningful discussion, we asked some structured open-ended questions: “Do the results make sense to you as a Muslim and/or the Muslim community?”; “What do these items mean?”; “What do you think people meant by their responses choices?”; “How do we build on the strengths identified?”; “What is needed to address the concerns?”; and “What policies or programs will help address these issues?” The attendees participated in the conversation and mostly focused on the top 10 concerns and how the issues could be addressed. They also expressed other concerns, which are shown in Table 3.

6 Discussion

The results showed that Muslims had many psychosocial issues that went unacknowledged. Participants also identified some strengths originating from their spiritual and religious and community resources; however, the strengths could hardly be considered real strengths because of the low satisfaction with them, as is shown in Table 2.

The participants mostly skipped the mental health items, compared with other items, and also ranked the mental health-related items as the least important. After the research, many participants reported not knowing of counseling and other available mental health services on their campus. Some of the participants also reported that they perceived mental health providers as professionals who focus only on individual but not community issues. The participants expressed how such an individualistic approach did not fit their worldview and was not effective for them and their community. All these showed that the issues of concern are multidimensional; therefore, the resolution requires collaboration by many stakeholders.

Participants had many primary issues of concern such as prayer requirements that constantly affect their daily lives. These issues must be addressed first, so that the remaining ones, such as use of mental health services, can be addressed more effectively. This would ultimately ensure that Muslims are better integrated into mainstream society. The results are consistent with those

of previous qualitative studies, although the current study provides a more comprehensive and systematic clarification of the issues affecting the Muslim community.

Many non-Muslims attended the discussion and took part in addressing the issues. The study showed that Muslims are quite diverse and that issues affecting the community also affected non-Muslims. After the research, many crucial and concrete improvements were implemented, as explained in the following section. The literature review implies that Muslims have needs that are different than other minority groups; however, this distinction cannot be confirmed through this study because of a lack of participants from non-Muslim minority groups. This could be considered in future studies.

6.1 Implications for future research

Importantly, future survey items must include primary issues (see Table 3) not included in the current questionnaire. Studies must also be conducted on a larger sample size from more colleges. In addition, qualitative studies would enable a better understanding of each item, for example, Photovoice studies to understand the top 10 concerns and how Muslims perceive mental health services, in more depth.

6.2 Implications for mental health practice

The first and most crucial implication is paying attention to all 33 items and striving to address each, starting with the top issues. For example, after the study, we kept collaborating with Muslim organizations, and the university provided prayer facilities (e.g., water in restrooms, prayer rugs). Second, mental health providers working in Muslim communities must first acknowledge prevalent and primary issues in communities, and then work with the communities to systematically address those. This is crucial because of the stigmatization of not only mental health issues and use of the services but also mental health providers (Ebsworth & Foster, 2017; Waugh, Lethem, Sherring, & Henderson, 2017). Therefore, mental health providers working with Muslim communities will give a great chance to the community to get familiarized with the providers and how they could be effective. Otherwise, the providers might risk of facing getting stigmatized that could push Muslims away from approaching the mental health services. In relation to this, coupled with the fact that many participants skipped most of the mental health-related items, mental health professionals must be mindful of the critical role of education about mental health issues and services (Wickstead & Furnham, 2017).

The third implication is the use of media to advocate for social justice and reach out to key figures (e.g., city and university administrators, professors at the college, spiritual leaders from different groups, student organization representatives) from different groups to share the study, the results, and what could be done to address issues. In this study, we invited and informed the media and key figures about the study and the importance of the issues identified, to facilitate their understanding and collaboration in addressing the issues. The mental health professionals in this study actively collaborated with the Muslim and larger communities, key officials, and representatives from institutions, as opposed to awaiting Muslims seeking mental health services by visiting mental health clinics.

Moreover, the extent to which spiritual and religious and cultural factors affect Muslims must be considered while working with Muslims, as well as improvement of mental health providers' cultural competency. Comprehensive and contextual models must also be considered in the provision of services, as opposed to the use of only individual and/or medical models. For instance, mental health providers must be mindful of and give a voice to local and global issues pertaining to discrimination and harassment and the verbal and physical violence against Muslims.

6.3 Implications for mental health educators

Mental health educators shape the services provided by mental health professionals (Borders & Brown, 2005; Tanhan, 2018). Therefore, first, educators must focus on addressing Muslims' most prevalent primary issues and how these could be addressed, to enhance providers' cultural competency. Another implication is educating the providers by using not only individual and/or medical models but also contextual models to ensure providers' effectiveness. Moreover, providers must be educated on awareness of social justice and advocacy issues at the public policy level and use of local, national, and social media to render contextual factors such as institutions and laws more inclusive on a broader scale.

7 Limitations

The study has some limitations regarding the generalization of results. First, the study was conducted at one southeastern college with only 114 participants over a 2-week period, and many Muslim students reported after the study that they would have participated if they had heard about the study. Second, collaboration with the MSA throughout the study (e.g., disseminating the survey, organizing the community dinner) could have led to the recruitment of Muslims affiliated with this group. Third, the lack of the participation of other minority groups limits how the Muslim community's needs could be different from other minority groups.

The final limitation is that the survey was primarily disseminated through the Internet, with only about 100 questionnaires printed and handed out at some MSA events. Many Muslims are very hesitant to participate online by using their devices because of different reasons (e.g., feel concerned that their private information is gathered and then they are blamed for something they have never done). Therefore, more effort could have been put toward advertising the study physically on advertisement panels in departments and more printed surveys could have been disseminated.

8 Conclusion

The comprehensive and systematically developed list of common concerns emanated from a review of literature on Muslim mental health and collaboration with the Muslim community and key individuals in the broader context. The results showed that the Muslim community in this study had many concerns, with only a few strengths that were hardly considered as such. Participants skipped items related to mental health most often, compared with other items. The results were shared with others (e.g., communities, media, key people). We collaborated with the

community to address issues of concern, starting with the primary ones. Many concrete improvements were subsequently implemented, as follows:

- Provided prayer facilities, including the venue, rugs, and water, in restrooms in various buildings on campus, starting with high-traffic areas such as the student engagement center, library, recreation center, and mental health centers
- Emphasized social advocacy pertaining to important issues (e.g., harassment and discrimination against Muslims, prayer needs) at social and orientation events at the college, attended by thousands of students
- Provided support by college departments, police departments, student organizations, and local and national organizations
- Founded new Muslim student organizations, especially those inclined toward research, such as the Research Association of Muslims
- Organized annual peace festivals at the city level, attended by more than 1,000 people and 30 organizations
- Conducted more research at the university and in the area related to Muslims' psychosocial experiences

As mental health professionals, we found that members of the Muslim community became increasingly involved in on-campus and off-campus activities because they used the study results to give a voice to the issues raised and solutions. As a result, the community proved more inclined to collaborating with mental health professionals by increasingly seeking counseling services to address their issues (e.g., individual, family, community) and inviting mental health providers to speak at their activities. Overall, many concerns were addressed and the quality of life was enhanced for all.

Orcid

Ahmet Tanhan  <https://orcid.org/0000-0002-4972-8591>

Vincent T. Fransisco  <https://orcid.org/0000-0002-0124-5275>

References

- Abe, J., Grills, C., Ghavami, N., Xiong, G., Davis, C., & Johnson, C. (2018). Making the invisible visible: Identifying and articulating culture in practice-based evidence. *American Journal of Community Psychology*, 62, 121–134. <https://doi.org/10.1002/ajcp.12266>
- Abu-Ras, W. (2003). Barriers to services for Arab Immigrant bartered women in a Detroit suburb. *Journal of Social Work Research and Evaluation*, 1(4), 49–65.
- Ackerman, S. R., Ali, S. R., Dewey, J. J. H., & Schlosser, L. Z. (2009). Religion, ethnicity, culture, way of life: Jews, Muslims, and multicultural counseling. *Counseling and Values*, 54(1), 48–64.
- Ahmed, S. (2012). Adolescents and emerging adults. In Ahmed, S., & Amer, M. M. (Eds.), *Counseling Muslims: Handbook of mental health issues and Interventions* (pp. 161–180). New York: Routledge.

- Ahmed, S., Abu-Ras, W., & Arfken, C. L. (2014). Prevalence of risk behaviors among US Muslim college students. *Journal of Muslim Mental Health*, 8(1).
<https://doi.org/10.3998/jmmh.10381607.0008.101>
- Ahmed, S., & Amer, M. M. (2012). *Counseling Muslims: Handbook of mental health issues and interventions*. New York: Routledge.
- Ahmed, S., & Reddy, L. A. (2007). Understanding the mental health needs of American Muslims: Recommendations and considerations for practice. *Journal of multicultural counseling and development*, 35(4), 207–218.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179–211.
- Ajzen, I. (2006). Theory of planned behavior. Retrieved from
<http://www.people.umass.edu/aizen/tpb.html>
- Ajzen, I., Joyce, N., Sheikh, S., & Cote, N. G. (2011). Knowledge and the prediction of behavior: The role of information accuracy in the theory of planned behavior. *Basic and Applied Social Psychology*, 33(2), 101–117.
- Ali, O. M., & Milstein, G. (2012). Mental illness recognition and referral practices among Imams in the United States. *Journal of Muslim Mental Health*, 6(2), 3–13.
<https://doi.org/10.3998/jmmh.10381607.0006.202>
- Al-krenawi, A., Graham, J. R., Al-bedah, E. A., Kadri, H. M., & Sehwal, M. A. (2009). Cross-national comparison of Middle Eastern university students: Help-seeking behaviors, attitudes toward helping professionals, and cultural beliefs about mental health problems. *Community Mental Health Journal*, 45(1), 26–36.
- Aloud, N. (2004). Factors affecting attitudes toward seeking and using formal mental health and psychological services among Arab-Muslims population. Retrieved from
https://etd.ohiolink.edu/pg_10?0::NO:10:P10_ACCESSION_NUM:osu1078935499.
(Order No. 1078935499)
- 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(2), 79–103.
- American Counseling Association (2014). *ACA code of ethics*, Author. Alexandria, VA.
- Amri, S., & Bemak, F. (2013). Mental health help-seeking behaviors of Muslim immigrants in the United States: Overcoming social stigma and cultural mistrust. *Journal of Muslim Mental Health*, 7(1).
<https://doi.org/10.3998/jmmh.10381607.0007.104976|TANHANANDFRANCISCO>
- Aprahamian, M., Kaplan, D., Windham, A., Sutter, J., & Visser, J. (2011). The relationship between acculturation and mental health of Arab Americans. *Journal of Mental Health Counseling*, 33(1), 80–92.
- Arredondo, P., Tovar-Blank, Z. G., & Parham, T. A. (2008). Challenges and promises of becoming a culturally competent counselor in a sociopolitical era of change and empowerment. *Journal of Counseling & Development*, 86, 261–268.
- Bagasra, A., & Mackinem, M. (2014). An exploratory study of American Muslim conceptions of mental illness. *Journal of Muslim Mental Health*, 8(1).
<https://doi.org/10.3998/jmmh.10381607.0008.104>
- Bagasra, A. B. (2010). Acculturation, religious commitment, and conceptualization of mental illness in the Muslim American community. Retrieved from
<https://search.proquest.com/docview/868570354?accountid=15329> (Order No. 3454059)

- Becker, K., Reiser, M., Lambert, S., & Covello, C. (2014). Photovoice: Conducting community-based participatory research and advocacy in mental Health. *Journal of Creativity in Mental Health*, 9(2), 188–209.
- Bektaş, Y., Demir, A., & Bowden, R. (2009). Psychological adaptation of Turkish students at U.S. campuses. *International Journal for the Advancement of Counselling*, 31, 130–143. <https://doi.org/10.1007/s10447-009-9073-5>
- Bhattacharyya, S., Ashby, K. M., & Goodman, L. A. (2014). Social justice beyond the classroom: Responding to the marathon bombing's Islamophobic aftermath. *The Counseling Psychologist*, 42(8), 1136–1158.
- Borders, L. D., & Brown, L. L. (2005). *The new handbook of counseling supervision*. Mahwah, NJ: Lawrence Erlbaum.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32(7), 513–531.
- Cashwell, C. S., Young, J. S., Fulton, C. L., Willis, B. T., Giordano, A., Daniel, L. W.,... Welch, M. L. (2013). Clinical behaviors for addressing religious/spiritual issues: Do we “practice what we preach”? *Counseling and Values*, 58, 45–58.
- Chaudhry, S., & Li, C. (2011). Is solution-focused brief therapy culturally appropriate for Muslim American counselees? *Journal of Contemporary Psychotherapy*, 41(2), 109–113. <https://doi.org/10.1007/s10879-010-9153-1>
- Chen, Y. L., Liu, M. C., Tsai, T. W., & Chen, Y. H. (2015). Religious practices in cross-cultural contexts: Indonesian male science students' adjustment in Taiwan. *Journal of Counseling Psychology*, 62(3), 464–475. <https://doi.org/10.1037/cou0000076>
- Ciftci, A., Jones, N., & Corrigan, P. W. (2013). Mental health stigma in the Muslim community. *Journal of Muslim Mental Health*, 7(1), 17–32.
- Cook-Masaud, C., & Wiggins, M. I. (2011). Counseling Muslim women: Navigating cultural and religious challenges. *Counseling and Values*, 55, 247–256. <https://doi.org/10.1002/j.2161-007X.2011.tb00035.x>
- Corrigan, P. W., Schmidt, A., Bink, A. B., Nieweglowski, K., Al-Khouja, M. A., Qin, S., & Discont, S. (2017). Changing public stigma with continuum beliefs. *Journal of Mental Health*, 26(5), 411–418.
- Council on American-Islamic Relations. (2015). Islam basics. Retrieved from <http://www.cair.com/publications/about-islam.html>
- Ebsworth, S. J., & Foster, J. L. H. (2017). Public perceptions of mental health professionals: Stigma by association? *Journal of Mental Health*, 26(5), 431–441.
- Fischer, E. H., & Turner, J. I. (1970). Orientations to seeking professional help: Development and research utility of an attitude scale. *Journal of Consulting and Clinical Psychology*, 35, 79–90.
- Fishbein, M., & Ajzen, I. (2010). *Predicting and changing behavior: The reasoned action approach*. New York: Psychology Press, Taylor & Francis Group.
- Flanagan, D. P., & Kaufman, A. S. (2004). *Essentials of WISC-IV assessment*. Hoboken, NJ: John Wiley & Sons.
- Francisco, V. T. (2013). Participatory research and capacity building for community health and development. *Journal of prevention & intervention in the community*, 41(3), 137–138.
- Francisco, V. T., & Butterfoss, F. D. (2007). Social validation of goals, procedures, and effects in public health. *Health promotion practice*, 8(2), 128–133.
- Freire, P. (1972). *Pedagogy of the oppressed*. New York: Herder and Herder.

- Goforth, A. N., Oka, E. R., Leong, F. T. L., & Denis, D. J. (2014). Acculturation, acculturative stress, religiosity and psychological adjustment among Muslim Arab American adolescents. *Journal of Muslim Mental Health*, 8(2). <https://doi.org/10.3998/jmmh.10381607.0008.202>
- Held, M. L., & Lee, S. (2017). Discrimination and mental health among Latinos: Variation by place of origin. *Journal of Mental Health*, 26(5), 405–410.
- Herzig, B. A., Roysircar, G., Kosyluk, K. A., & Corrigan, P. W. (2013). American Muslim college students: The impact of religiousness and stigma on active coping. *Journal of Muslim Mental Health*, 7(1). <https://doi.org/10.3998/jmmh.10381607.0007.103>
- Holmes, S. M. (2013). *Fresh fruit, broken bodies: Migrant farmworkers in the United States*. Berkeley and Los Angeles: University of California Press.
- Kaplan, D. M., Tarvydas, V. M., & Gladding, S. T. (2014). 20/20: A vision for the future of counseling: The new consensus definition of counseling. *Journal of Counseling & Development*, 92(3), 366–372.
- Kelly, E., Jr., Aridi, A., & Bakhtiar, L. (1996). Muslims in the United States: An exploratory study of universal and mental health values. *Counseling & Values*, 40(3), 206.
- Khan, Z. (2006). Attitudes toward counseling and alternative support among Muslims in Toledo, Ohio. *Journal of Muslim Mental Health*, 1(1), 21–42.
- Martin, M. B. (2015). Perceived discrimination of Muslims in health care. *Journal of Muslim Mental Health*, 9(2). <https://doi.org/10.3998/jmmh.10381607.0009.203>
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly*, 15(4), 351–377.
- McMillan, D. W., & Chavis, D. M. (1986). Sense of community: A definition and theory. *Journal of Community Psychology*, 14(1), 6–23. [https://doi.org/10.1002/1520-6629\(198601\)14:13.0.CO:2-I](https://doi.org/10.1002/1520-6629(198601)14:13.0.CO:2-I)
- Nadal, K. L., Griffin, K. E., Hamit, S., Leon, J., Tobio, M., & Rivera, D. P. (2012). Subtle and overt forms of Islamophobia: Microaggressions toward Muslim Americans. *Journal of Muslim Mental Health*, 6(2), 15–37. <https://doi.org/10.3998/jmmh.10381607.0006.203>
- Padela, A. I., Killawi, A., Forman, J., DeMonner, S., & Heisler, M. (2012). American Muslim perceptions of healing: Key agents in healing, and their roles. *Qualitative Health Research*, 22(6), 846–858.
- Pew Research Center. (2016). A new estimate of the U.S. Muslim population. Retrieved from <http://www.pewresearch.org/fact-tank/2016/01/06/a-new-estimate-of-the-us-muslim-population/>
- Prilleltensky, I. (2012). Wellness as fairness. *American Journal of Community Psychology*, 49, 1–21.
- Ravitch, S. M., & Riggan, M. (2012). *Reason & rigor: How conceptual frameworks guide research*. Thousand Oaks, CA: Sage.
- Romano, J. L., & Netland, J. D. (2008). The application of the theory of reasoned action and planned behavior to prevention science in counseling psychology. *Counseling Psychologist*, 36(5), 777–806.
- Soheilian, S. S., & Inman, A. G. (2009). Middle Eastern Americans: The effects of stigma on attitudes toward counseling. *Journal of Muslim Mental Health*, 4, 139–158. <https://doi.org/10.1080/15564900903245766>
- Tanhan, A. (2014). *Spiritual strength: The use of acceptance and commitment therapy (ACT) with Muslim clients* (Unpublished master's thesis). University of Rochester, Rochester.

- Tanhan, A. (2017). Mental health issues and seeking of formal mental health services among Muslims in the southeastern U.S.: Preliminary investigation of a contextual theoretical framework based on the theory of planned behavior/theory of reasoned action and the social ecological model. Retrieved from <https://search.proquest.com/docview/1927630253?accountid=15329>
- Tanhan, A. (2018). Beginning counselors' supervision in counseling and challenges and supports they experience: Based on developmental models. *Adıyaman Üniversitesi Eğitim Bilimleri Dergisi*, 8(1), 49–71. <https://doi.org/10.17984/adyuebd.336222>
- Tanhan, A., & Strack, R.W. (2018). Understanding Muslims' psychosocial issues and strengths through photovoice and social ecological model. Manuscript submitted for publication.
- Tanhan, A., & Young, J. S. (2018). Muslims and mental health services: A concept map and a theoretical framework. Manuscript submitted for publication.
- Terry, R., Townley, G., Brusilovskiy, E., & Salzer, M. S. (2018). The influence of sense of community on the relationship between community participation and mental health for individuals with serious mental illnesses. *Journal of Community Psychology*, 47, 163–175. <https://doi.org/10.1002/jcop.22115>
- Thomas, J., Al-Qarni, N., & Furber, S. W. (2015). Conceptualising mental health in the United Arab Emirates: The perspective of traditional healers. *Mental Health, Religion & Culture*, 18(2), 134–145. <https://doi.org/10.1080/13674676.2015.1010196>
- Tummala-Narra, P., & Claudius, M. (2013). A qualitative examination of Muslim graduate international students' experiences in the United States. *International Perspectives in Psychology: Research, Practice, Consultation*, 2(2), 132–147.
- Waugh, W., Lethem, C., Sherring, S., & Henderson, C. (2017). Exploring experiences of and attitudes towards mental illness and disclosure amongst health care professionals: A qualitative study. *Journal of Mental Health*, 26(5), 457–463.
- Wickstead, R., & Furnham, A. (2017). Comparing mental health literacy and physical health literacy: An exploratory study. *Journal of Mental Health*, 26(5), 449–456.
- Wiggins, M. I. (2011). Culture and worldview. In Cashwell, C. S., & Young, J. S. (Eds.), *Integrating spirituality and religion into counseling: A guide to competent practice* (pp. 225–242). Alexandria, VA: American Counseling Association.
- Youssef, J., & Deane, F. P. (2006). Factors influencing mental-health help-seeking in Arabic-speaking communities in Sydney, Australia. *Mental Health, Religion & Culture*, 9, 43–66. <https://doi.org/10.1080/13674670512331335686>