

UCSF

UC San Francisco Previously Published Works

Title

A Qualitative Examination of Perceptions of Mindfulness Among Arab, Middle Eastern, and North African Americans: Implications for Cultural Adaptation of Mindfulness-Based Interventions.

Permalink

<https://escholarship.org/uc/item/1sz7t94z>

Authors

Burnett-Zeigler, Inger

Haidar, Andrea

Kalantzis, Maria

et al.

Publication Date

2024

DOI

10.1177/27536130241247074

Peer reviewed

A Qualitative Examination of Perceptions of Mindfulness Among Arab, Middle Eastern, and North African Americans: Implications for Cultural Adaptation of Mindfulness-Based Interventions

Global Advances in Integrative Medicine and Health

Volume 13: 1–13

© The Author(s) 2024

Article reuse guidelines:

sagepub.com/journals-permissions

DOI: 10.1177/27536130241247074

journals.sagepub.com/home/gam



Andrea Haidar, MS, MA¹ , Maria Kalantzis, MA² , Meghana Nallajerla, BA³ , Alyssa Vela, PhD⁴ , Shelley R. Adler, PhD⁵ , and Inger Burnett-Zeigler, PhD¹

Abstract

Background: Mindfulness-based interventions (MBIs) are well-positioned to address health disparities among racial-ethnic minority communities, given their focus on stress reduction and potential for greater accessibility and acceptability than conventional mental health treatments. Yet, there are currently no peer-reviewed studies of MBIs in an Arab, Middle Eastern, or North African (MENA) American sample. Addressing this gap in the literature is critical for advancing integrative health equity, given the high burden of stress and high prevalence of stress-related health conditions among Arab/MENA Americans.

Objective: The present study sought to explore perceptions of mindfulness among Arab/MENA Americans and identify potential cultural adaptations to MBIs for this population.

Methods: 4 focus groups were conducted with 26 Arab/MENA American adults who had participated in an introductory mindfulness workshop. Participants were asked about their experience learning mindfulness skills, the usefulness of mindfulness for problems they face, the alignment of mindfulness with their cultural values and practices, and suggestions for adapting mindfulness programs. Qualitative coding of focus group session transcriptions was conducted to identify themes in the data.

Conclusion: The participants in this study described experiencing high levels of stress and identified micro- and macro-level stressors related to their Arab/MENA American identity, including discrimination, exclusion, historical and intergenerational trauma, and protracted sociopolitical crises in their heritage countries. They viewed mindfulness as a potentially useful approach to coping with stress. At the same time, participants identified aspects of mindfulness that could be adjusted to better align with their cultural values and experiences. Potential adaptations to MBIs for Arab/MENA Americans were identified based on suggestions from participants and issues they raised while discussing cultural strengths, stressors they face, and perceived barriers and facilitators to engaging in mindfulness practice.

¹Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

²Department of Psychology, Bowling Green State University, Bowling Green, OH, USA

³USC Suzanne Dworak-Peck School of Social Work, University of Southern California, Los Angeles, CA, USA

⁴Department of Surgery, Northwestern University Feinberg School of Medicine, Chicago, IL, USA

⁵UCSF Osher Center for Integrative Health, University of California San Francisco, San Francisco, CA, USA

Corresponding Author:

Andrea Haidar, Department of Psychiatry and Behavioral Sciences, Northwestern University Feinberg School of Medicine, 676 N. Saint Clair Street, Chicago, IL 60611-3008, USA.

Email: andrea.haidar@northwestern.edu



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-NonCommercial 4.0 License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission provided the original work is attributed as specified on the SAGE and

Open Access pages (<https://us.sagepub.com/en-us/nam/open-access-at-sage>).

Keywords

mindfulness, mindfulness-based interventions, cultural adaptations, Arab Americans, Middle Eastern and North African, racial-ethnic health disparities, stress, behavioral health

Received December 31, 2023; Revised March 22, 2024. Accepted for publication March 27, 2024

Introduction

Mindfulness-based interventions (MBIs) have been shown to improve well-being and reduce stress in the general population,¹⁻⁴ but representation of racial-ethnic minorities in research has been limited.⁵⁻⁷ Despite recent increases in the representation of Black, Hispanic/Latinx, Asian, and Native Americans in MBI studies, there are currently no peer-reviewed studies of MBIs in an Arab, Middle Eastern, or North African (MENA) American sample. Addressing this gap in the literature is critical for advancing integrative health equity, given the high burden of stress and high prevalence of stress-related health conditions among Arab/MENA Americans.

An estimated 3.7 million Arab Americans live in the United States, with many having ancestry in Lebanon, Egypt, Syria, Somalia, Iraq, Palestine, Morocco, and Yemen.⁸ The MENA-identity designation is broader, including those with ancestry from Arab League countries, non-Arab countries in the region spanning from Southwest Asia to North Africa (ie, Iran, Turkey), and ethnic groups therein that do not typically identify as Arab.⁹ We utilize both terms to reflect the overlap between these identities in terms of shared cultural and racialization experiences.

Due to a lack of an Arab/MENA category in the U.S. Census, many Arab/MENA Americans are currently classified as White. Others, such as Sudanese and Somali Americans, may experience both anti-Blackness and anti-Arab racism, but the current U.S. Census categories fail to capture their Arab/MENA identity alongside their classification as Black.¹⁰ Arab/MENA Americans are often racialized and perceived as non-White, experiencing discrimination and exclusion at interpersonal, societal, and institutional levels.¹¹

While the movement to include an Arab/MENA category in the U.S. Census has gained traction in recent years, historical and ongoing exclusion from minority status has created immense challenges for studying health disparities at the population level.^{12,13} However, studies conducted with convenience samples of Arab/MENA Americans indicate elevated vulnerability to stress and high rates of mental health concerns, including anxiety, depression, and trauma.^{11,12,14} Higher prevalence of metabolic disorders, cardiovascular disease, and low birth weight have also been found in Arab/MENA Americans compared to White Americans.¹³ These poorer health profiles are hypothesized to result from stress related to racial-ethnic discrimination, historical trauma, and other social determinants of health.^{11,12}

As with other racial-ethnic minority groups, the focus on stress management in MBIs may be beneficial to Arab/MENA

Americans, given the high burden of stress they experience.^{11,15} Further, MBIs have the potential for greater acceptability and accessibility among racial-ethnic minorities than conventional mental health treatments, such as pharmacotherapy and psychotherapy.¹⁶ Yet, qualitative studies have shown that racial-ethnic minority participants may find some aspects of MBIs to be discordant with cultural values and practices,^{17,18} pointing to the need for cultural adaptations to improve engagement and outcomes.¹⁹ The present study sought to explore perceptions of mindfulness among Arab/MENA Americans and identify potential cultural adaptations to MBIs.

Materials and Methods

Arab/MENA Americans participated in a two-hour session involving a one-hour introductory mindfulness workshop followed immediately by a one-hour focus group. The workshop consisted of exercises and information from the Mindfulness-Based Stress Reduction (MBSR) curriculum.²⁰ Participants were guided to complete a seated meditation and a sight-sound meditation, followed by inquiry to probe their experiences with these exercises. Information was presented on the following topics: defining mindfulness, formal vs informal mindfulness, attitudes of mindfulness (including non-judgment, patience, beginner's mind, trust, letting go, non-clinging, and acceptance), and stress psychoeducation.

The focus group was guided by a set list of questions adapted from other studies examining perceptions of mindfulness among racial-ethnic minority participants.²¹⁻²³ While a flexible, semi-structured approach was utilized to respond to participants and probe for additional detail as needed,²⁴ all protocol questions were asked in order at each focus group. Participants were asked about their experience learning mindfulness skills, the usefulness of mindfulness for problems they face, the alignment of mindfulness with their cultural values and practices, and suggestions for adapting mindfulness programs. [Appendix A](#) details the focus group questions from the study protocol.

The first mindfulness workshop/focus group session was conducted onsite at a community-based organization that serves Arab/MENA Americans. The subsequent 3 workshops/focus group sessions were conducted online via Zoom to increase opportunities for Arab/MENA Americans nationwide to participate. All sessions were conducted from April through October 2022. Additionally, participants completed online surveys using Research Electronic Data Capture (REDCap)²⁵ regarding their demographic

information and prior experiences with mindfulness. The Institutional Review Board at Northwestern University approved all study procedures.

The introductory mindfulness workshop and focus group sessions were facilitated in English by a research team member (AH), who is an Arab American woman, certified yoga teacher, and licensed clinical social worker. Another team member (MK), also an MENA American woman, was present during the 3 online sessions to provide logistical assistance and take notes on key themes emerging in the focus group discussion. Prior studies have found that cultural concordance between racial-ethnic minority participants and mindfulness facilitators promotes trust and acceptance of the intervention.^{22,23,26,27}

Sample and Recruitment

Four mindfulness workshop/focus group sessions were conducted with 6-8 participants each, for a total of 26 participants. The sample size and number of focus groups were informed by qualitative research guidelines for achieving saturation.^{28,29} The eligibility criteria for participants included (1) being 18 years of age or older, (2) having Arab, Middle Eastern, or North African heritage, (3) currently residing in the U.S., and (4) speaking and understanding English. Recruitment was conducted primarily through community outreach on email listservs and social media in collaboration with leaders of Arab/MENA American community organizations. Community leaders, service providers, and prospective participants were also encouraged to share information about the study with other Arab/MENA Americans. Participants were offered a US\$25 incentive to participate in the study, which was given as an electronic gift card after completing the mindfulness workshop and focus group session.

Data Analysis

After audio recordings of sessions were transcribed, qualitative coding of session transcriptions was conducted iteratively by 3 members of the research team (AH, MK, MN) utilizing thematic analysis.³⁰ At the beginning of the analysis process, the coding team met to establish group expectations and discuss each member's respective positionality and how their identities may inform their approach to the data.³¹ AH and MK have Arab/MENA heritage, and AH is Muslim and fluent in Arabic. MK is Eastern Orthodox Christian. MN is South Asian and of Hindu descent. All 3 coders have experience with mindfulness in varying capacities, including research, clinical practice, and cultural practice. Other members of the research team (SA, AV, IBZ) provided supervision of the study design, data collection, and analysis processes, given their collective expertise in MBIs, implementation science, cultural adaptations, and qualitative methods.

In preparation for the first round of coding, coders completed a thorough reading of each transcript and wrote analytical memos on code ideas, emergent themes, and potential conceptual models. Then, coders independently coded the 4 transcripts utilizing a descriptive coding scheme, with words and short phrases to summarize excerpts.³² Coding was conducted using Dedoose, a qualitative data analysis web application.³³ Following this first round of open and blinded coding, a codebook was developed and utilized in a second round of blinded coding. After coding all 4 transcripts independently using the codebook, the coding team met again. During these meetings, transcripts were unblinded, and the coders discussed differences in coding decisions until consensus was achieved for each coded excerpt. Codes were grouped into themes, and coded excerpts within each theme informed the findings.³²

Results

Participants' ages ranged from 19 to 48 years, with a mean of 27 years. Most participants were students ($n = 18$) in graduate school or college. Participants were also predominately cisgender females ($n = 19$). Participants were primarily from the Midwest ($n = 18$), with a few from the East Coast ($n = 4$), West Coast ($n = 2$), and Southeastern U.S. ($n = 2$). A range of heritage countries, generational experiences, religious affiliations, and levels of religiosity were represented. Over half of the participants reported that they had either never or only once or occasionally practiced meditation or yoga. Additional participant characteristics are reported in [Table 1](#).

Perceived Benefits of Mindfulness Among Participants

Increased Present-Moment Awareness and Sense of Grounding. Participants discussed how the mindfulness practices helped them become more aware of their breath, bodies, and thoughts. This experience is summarized by a participant with limited prior exposure to mindfulness: "I don't think I realized how fast-paced life really is until we did this [meditation]. At the beginning, my heart rate was very high, because that's how it normally is. Through the process, I realized how much lower it was getting. I felt like I could breathe easier. And now I just feel better." For this participant, the increased awareness of his heart rate promoted by the meditation may have been initially challenging, but continued engagement in the practice led to a gradual sense of relief and a new perspective on his daily experiences of stress. Another participant likened his experience meditating to the feeling of being "back in *Falasteen* (Palestine), like on the hills, and looking at the olive trees, and I'm picking the almonds... I just felt present and connected." Here, the participant related the increased sense of presence and connection he experienced in the meditations to feelings of being grounded in his heritage country.

Table I. Participant Characteristics.

	N = 26	%
Age		
Range	19-48	
Mean	27	
Gender		
Cisgender female	19	73.07
Cisgender male	5	19.23
Trans female	1	3.85
Non-binary	1	3.85
Arab/MENA heritage country		
Lebanon	8	30.77
Palestine	6	23.08
Iraq	3	11.54
Egypt	3	11.54
Syria	2	7.69
Iran	2	7.69
Somalia/Yemen ^a	1	3.85
Jordan/Palestine ^a	1	3.85
Generation status		
1 st - Born in Arab/MENA country	6	23.08
2 nd - Parents born in Arab/MENA country	18	69.23
3 rd - Grandparents born in Arab/MENA country	2	8.69
Religion		
Muslim	13	50.00
Christian	6	23.08
Jewish	1	3.85
Agnostic	3	11.54
Atheist	3	11.54
Religiosity		
Not religious	9	34.62
Slightly religious	5	19.23
Moderately religious	8	30.77
Very religious	4	15.38
Meditation experience		
Never	1	3.85
Once or occasionally	14	53.85
Regularly <1 month	2	7.69
Regularly 1-6 months	4	15.38
Regularly 7-11 months	1	3.85
Regularly 12+ months	4	15.38
Yoga experience		
Never	3	11.54
Once or occasionally	13	50.00
Regularly <1 month	3	11.54
Regularly 1-6 months	2	7.69
Regularly 7-11 months	0	0
Regularly 12+ months	5	19.23

^aThese participants indicated having 2 countries of Arab/MENA heritage.

Coping with Stress Related to Arab/MENA Identity. Participants discussed stress associated with experiences of interpersonal and systemic discrimination and exclusion. A Lebanese American participant summarized the range of stressors she experiences in relation to her identity:

I find it incredibly stressful to be Arab in this country... whether or not I live a politically active life. I don't always identify as Arab. My name is kind of ambiguous, but it's a different name, and so even that, and the discrimination that comes with it, or being othered, or not having a category like Arab or MENA on scholarships or the Census. Even just the identity piece can be very stressful, or always having to justify my experience or existence in spaces, and whether or not to disclose that I'm Arab.

This participant highlighted the unique stressors that face Arab/MENA Americans, such as the tension between lived experiences of marginalization and not being formally recognized as a racial-ethnic minority group, and lacking access to resources and spaces that promote a sense of belonging.

Participants tied the potential stress management benefits of mindfulness to issues specific to Arab/MENA American identity. For example, several participants discussed how they could use mindfulness to cope with distress related to sociopolitical instability and crises occurring in their heritage countries. One participant encapsulated sentiments expressed by many, stating, "It feels like I have the weight of the world on my shoulders," with respect to her concerns about family back in her heritage country and feeling helpless. Participants viewed mindfulness as a way to care for themselves amid these distressing emotions by accepting their emotional response to the suffering of their communities and recognizing the factors outside of their control while also recognizing their own agency. An Iranian participant summarized her experience with mindfulness in relation to the Woman, Life, Freedom protests that were occurring during the study:

I was thinking a lot the past few weeks about what's going on in Iran... But there's not much you can control if you're not there right now. So, part of me feels guilty that I'm not there supporting and fighting. I think the exercise helped me focus on what I can control, which is my body, my words, things I support here.

Participants from other heritage countries expressed similar sentiments, referencing sociopolitical problems that "are very protracted" and the importance of learning how to deal with these chronic stressors. For these participants, mindfulness has the potential to help them take a broader perspective and engage in issues of sociopolitical and personal importance within their spheres of influence. At the same time, participants viewed mindfulness as a self-care tool to sustain their social and political engagement in the long term. This sentiment is reflected in the response of a Palestinian American participant:

I go to a private university that's predominantly White, so I've got the responsibility to educate people about *Falasteen* (Palestine), or different things happening in the Middle East... It's good to practice mindfulness and know that it's not my responsibility to be the one tackling things or fighting for issues, but I can do my part. It's also good to remember to take time and care of myself in order to best assist and help other people.

Here, the participant highlighted the importance of managing her stress around advocacy, especially while being in an environment where she is a racial-ethnic minority, to reduce feelings of burnout and continue to serve her community.

Group Format and Healing as a Community

Participants emphasized the value of "healing as a community" and expressed appreciation for the group format of the mindfulness workshop and having Arab/MENA peers and a facilitator. A Lebanese American participant reflected on this at the end of her session:

I am thankful to have this sort of group and session, where we can even just talk about our experiences... It was really comforting to know that people had similar experiences... It's even strange being in a Zoom call with this many Arab/MENA-identifying people.

The participant's comment reflected a sense of community in the group and trust in discussing personal stressors with others who share a broader heritage and experience similar challenges. The extent to which this sentiment was shared among participants points to limited community resources and spaces for Arab/MENA Americans.

Alignment Between Mindfulness and Arab/MENA Culture

Informal Mindfulness Practices within Arab/MENA Culture. During the mindfulness workshop, participants were provided information about formal mindfulness practice (meditation, yoga) and informal mindfulness practice (bringing qualities of mindfulness to everyday activities). Further, participants were asked to reflect on practices from Arab/MENA culture that could represent informal mindfulness practices. Participants identified several practices, including drinking tea and coffee, lighting *bakhour* (incense), engaging in ritual prayer (*salah*), invoking the names of God (*dhikr*), supplication (*dua*), reading and reciting poetry, preparing and eating meals with family, going for walks or sitting in nature, and gardening. One participant expressed appreciation for the opportunity to reflect on how "certain practices that are very normal, and almost sacred, in my culture and community of people, can also be very mindful." Other participants affirmed her sentiment, describing how this process helped them view mindfulness as something they could fit into their daily lives and connect with their cultural heritage.

Complementarity with Religion and Spirituality. Many participants viewed religious and spiritual practices as closely aligned with mindfulness. Among Muslim participants, performing ritual daily prayers (*salah*) was described as a time to reflect and center oneself. Some participants described how formal mindfulness practices could improve their religious or spiritual practice. One participant shared her experience practicing yoga regularly over the past 10 years and its impact on her religious practice: “Yoga has helped me pray better as a Muslim, and have more *khushu*’ (reverence, attentive humility) in particular. It’s still a totally daily struggle, but there have been moments in yoga class where I’ve brought that mind-body connection, I can feel like that and then recreate it in my prayers.” Similarly, another participant talked about how she treats the verses of the Quran she recites during her prayers “as a mantra” to draw her attention away from distracting thoughts and back to the present moment, which she “pulled from [her] mindfulness practice.” For these participants, their prior engagement with formal mindfulness practices deepened their capacities for focused attention and awareness, which became integrated into their religious practice.

Cultural Resonance of a Mind-Body Approach to Coping with Stress. Participants resonated with the concept of coping with stress through mind-body approaches. As 1 participant described, “In Arab/MENA culture, people tend to think of everything as like a physical symptom, and a physical solution is required for that, like with the breathing exercises.” This participant elaborated: “I just remember whenever I would feel anxiety or stress, I remember my father always telling me, ‘Just breathe, open the window, just get in some fresh air.’” This participant’s comments underscored the somatization of stress among members of the Arab/MENA community and the importance of stress management techniques engaging the mind-body connection.

Participants also emphasized the utility of mindfulness as an approach that does not require “talking about it” to deal with stress, especially given that some Arab/MENA Americans may not be as comfortable sharing vulnerable emotions. The use of a mind-body modality for coping with stress was also seen as potentially less stigmatizing than psychotherapy by some participants. This was summarized by 1 participant:

I’m just going off of my experience with my family. If we were to say we’re going to a therapist, it’s like, ‘Oh my God!’ But if my sister practiced meditation and yoga after she had a baby, they would say, ‘It’s habal, silly, but let her do it.’ They don’t know that she’s doing it for her mental health. They think she’s just doing it for a little bit of a workout or because celebrities do it.”

The participant described how her family would likely be less concerned about her sister participating in mind-body exercises than going to a therapist, because they would not necessarily associate the former with mental health challenges, which participants mentioned remain stigmatized among some Arab/MENA Americans.

Embodiment of Mindfulness Qualities Among Elders and Family Abroad. While participants often expressed the belief that their elders and family abroad would have difficulty accepting meditation, some participants also described these relatives as already embodying qualities of mindfulness. Participants referenced attitudes of mindfulness mentioned in the workshop, such as patience and non-clinging, to describe their relatives’ steadfast resilience in the face of ongoing adversity. This was exemplified by a participant’s description of the mindful resilience embodied by her family in Yemen amidst ongoing sociopolitical crises:

I think that people in those situations actually have more mindful practice than most of us here do. Under the strain, you either break or you survive. And a lot of the survival is actually something they do through mindfulness. This is something I learn from my grandmother, and my aunts and uncles... It’s a funny thing, because so much of what we experienced here is being taught what they know.

For this participant, the mindfulness training offered in the workshop reflected the knowledge that her elders embody from their life experiences.

Barriers to Engaging in Mindfulness Among Arab/MENA Americans

Limited Time and Overwhelm. Despite the perceived potential benefits of mindfulness, participants identified several barriers to engagement. Among the reasons cited, limited time was mentioned most frequently. Work and other responsibilities were often described as taking priority in participants’ schedules. As 1 participant expressed: “There are sometimes a hundred different things going on in my head. I will try to be like, take 5 or 10 minutes for mindfulness, but I’m like, I don’t have 5 or 10 minutes, I need to do this other thing.” This participant, like many others, described feeling so overwhelmed that she could not afford to take time to practice mindfulness.

Guilt Around Self-Care While Arab/MENA Community Faces Adversity. For participants, limited time was often connected to guilt around self-care when comparing their lives to those of family and community members facing acute sociopolitical crises in their heritage countries. The response of an Iranian American participant illustrated this barrier: “I’m constantly aware of how fortunate I am to have grown up in the States... Sometimes I definitely don’t believe that I ‘deserve’ to do stuff like this, because it’s like, I have nothing to complain about, I just do school and go to work.” Other participants also referenced the idea that others are going through something worse when describing their hesitation to practice self-care and build a regular mindfulness practice. One participant highlighted how Arab/MENA cultural values contribute to these experiences:

So much of our culture is based on community and is rarely based on the individual. We sometimes have a hard time sitting down with ourselves when there's so much going on, because it feels so selfish. You feel like there's no reason for you to take so much of this. Like, you're okay, you can keep going, because everybody else has bigger issues.

Here, the participant highlighted how within the context of a collectivistic culture, dedicating time to individual self-care practices can seem "selfish," especially when the individual is shielded from stressors impacting others in their community.

Pressure to Achieve Amidst Negative Stereotypes and Societal Discrimination

Guilt about practicing self-care was also connected to internalized pressure to achieve and prove oneself as an Arab/MENA American. The multi-faceted nature of the pressure to achieve was summarized by 1 participant:

You kind of get focused on having to show and prove yourself and belonging in a society where your identity gets antagonized... when I'm pressed for time, and I need to do a lot, I tend not to focus on mindfulness or my own self-care. It's something I've seen with my parents growing up and with other members of the community.

This participant's response underscores how societal discrimination impacts community norms, wherein achievement is seen as a way to protect against negative judgments and damaging stereotypes. Participants invoked "a cycle of needing to be productive 24/7," to the extent that "we don't know how to take a moment to relax... and any moment we do [relax], we feel like we're wasting our time." The idea that "we always have to work hard" was often cited as a barrier to mindfulness practice.

Perception of Mindfulness as White or American. Among participants, there was a general perception of mindfulness as a "White" or "American" practice. As 1 Lebanese American participant described: "Anytime I think of mindfulness or yoga or meditation, I tend to attribute it more to my American identity. And I think that a lot of that goes back to the fact that there's still so much stigma around mental health in our [Arab] community as a whole." This participant went on to describe how her brothers would likely "make fun of [her]" and call her a "White girl" if she were to say she did yoga or mindfulness meditation. Another participant described how he "feel[s] like a lot of yoga and mindfulness practices in general in the U.S. are affiliated with rich White people." Of note, 1 participant highlighted the discrepancy between the association of yoga with "White culture" and its "historical roots in South Asia." Overall, these comments point to a broader sense among participants that mindfulness may be

seen as foreign or culturally unacceptable to some members of the Arab/MENA community.

Religion and Spirituality Concerns. While many participants viewed mindfulness as complementary to religion/spirituality, some expressed concern that others with more traditional beliefs in the Arab/MENA community might perceive a conflict. One participant described beliefs that were held by others in her Muslim community, such as "prayer should always heal you" and "you should only be talking to God about your struggles." She viewed these beliefs as potential barriers to engaging in mindfulness. Some participants also mentioned that other Arab/MENA Americans may view engaging in mindfulness as engaging in another religion or, as 1 participant said, "teaching them to be Buddhist." This concern was reflected in another participant's comments:

I just feel this desire to help address what I think is a misconception that some people I know probably have around mindfulness, which is that it's limited to a specific spiritual or religious tradition. And just a desire to make it more accessible to people like my parents, who immigrated here 40 years ago, and I feel like at many points in their immigrant life experience could have benefitted from some of these tools.

This participant's response underscored differences in acculturation among Arab/MENA Americans, which may affect their perceptions of whether mindfulness aligns or conflicts with their religious and spiritual beliefs and practices. Participants described beliefs about mindfulness as conflicting with religion as misunderstandings or misconceptions held by others in the Arab/MENA community rather than beliefs that they personally held.

Mental Health Stigma, Limited Awareness, and Access to Resources. While some participants felt mindfulness to be less stigmatizing than psychotherapy, others emphasized its perceived association with mental health. Participants discussed how others in their community might avoid engaging in mindfulness due to the limited acceptance of mental health concerns. One participant summarized these sentiments by describing how it might be difficult for people in the community to "admit" that they are struggling to cope with stress and could benefit from practicing mindfulness. Participants also noted accessibility barriers. A Lebanese American participant summarized this issue, describing how she learned about wellness through programming at her college in the U.S.:

I'm also first-gen... the university I went to had the different elements of wellness, and it was like physical wellness, spiritual wellness, literally mapped out for me... how I can better perfect my wellness practices in relation to each area. And I just don't think there's that level of awareness or accessibility for a lot of other people in my community.

This participant's comment pointed to the role of acculturation in shaping access to mental health information and resources, with her own access mediated in a space she associated with her American identity. Limited access to culturally acceptable mental health care with Arab/MENA providers was also highlighted as a barrier by several participants.

Contextual Factors Shaping Arab/MENA Experiences with Mindfulness

Intergenerational Trauma. Participants across focus groups referenced their experiences of intergenerational trauma and stress as Arab/MENA Americans. A second-generation Palestinian American further specified these experiences of intergenerational trauma: "As MENA people, we've had experiences of ethnic cleansing, and we've dealt with a lot of colonialism." Another participant, also a second-generation Palestinian American, shared her perspective:

I am reminded of generational trauma and of unintentionally carrying the trauma of others from the stories we hear... It can kind of fall onto the next generation's shoulders to heal that trauma, and then that puts even more weight on you and existing in this world. And for a lot of my cousins, it's either we heal it, or we carry it with us, and then it passes down to our kids.

This participant's comment demonstrated her concern about transmitting inherited traumas to future generations. The weight of this responsibility was felt by others, as illustrated by a participant speaking about being the child of Arab immigrants: "There's a lot of pressure... I feel like we might be the first to break that cycle of generational trauma." For these participants, learning mindfulness skills could help equip them with healthy coping skills to disrupt intergenerational trauma.

Cultural Characteristics that Challenge Conventional Mindfulness Practice. Participants across focus groups described perceiving mindfulness as involving quiet and stillness, contrasting with their description of Arab/MENA culture as "loud" and "high energy." Several participants also identified diffuse personal boundaries within their families as a potential challenge to practicing meditation at home: "I know if I practice meditation, someone in my family is going to bust open the door, [ask] 'What are you doing, what's going on, why are you doing it?'" This comment illustrated how the individual nature of many formal mindfulness practices may go against cultural expectations to spend time interacting with others. It also highlighted limited private space as a potential barrier, given that many Arab/MENA Americans live with family.

Participants described tensions between concepts presented in the mindfulness workshop and Arab/MENA cultural values. Mindfulness was described as an "individualistic

approach to a stressor," which 1 participant contrasted with her experience of "Arab culture as very community focused." Trust, which was presented in the workshop as learning to trust oneself and one's feelings, was seen by 1 participant as potentially challenging for her Arab/MENA peers, as many "put a premium on the opinion of the community and how that should inform your life choices." For these participants, the relationship between individual and community in Arab/MENA culture seemed to diverge from their understanding of mindfulness teachings.

Heterogeneity Across Age, Gender, and Generational Status. Participants highlighted the heterogeneity of heritage countries, ethnic groups, and religious identities within Arab/MENA American communities. Given this heterogeneity, 1 participant recommended that facilitators help participants engage in connecting mindfulness to their individual experiences rather than "doing it for them," especially with respect to religion and spirituality. Generational status and acculturation were also discussed as important factors. Generally, participants expressed a belief that those who immigrated recently or are still living in Arab/MENA countries would be less open to learning about mindfulness. A similar belief was shared about elders in the Arab/MENA community. As 1 participant described, "an older [Arab/MENA] population that has more traditional views" may "scoff" at mindfulness or "see it as silly." Another participant described how mindfulness may be perceived as extraneous when many elders cope with adversity through their religious practice. Participants also highlighted potential gender differences, with women being perceived as more likely than men to embrace mindfulness and mental healthcare in general.

Adaptations Proposed by Participants

Participants offered suggestions on how they would adapt mindfulness programming for Arab/MENA Americans. Many recommended incorporating Arab/MENA cultural references into the mindfulness workshop content. Participants discussed integrating Arab/MENA music, such as the *oud*, and quotes from Arab/MENA authors to define and illustrate mindfulness concepts. Participants highlighted the rich tradition of poetry in the Arab/MENA region and suggested adding poems from Arab/MENA authors. Participants also identified scents that reminded them of their heritage, such as *bakhour* (incense) and mint, and suggested incorporating these into mindfulness practices. Visualization during meditation was also referenced as a strategy facilitators could use to help Arab/MENA participants connect with places that provide a sense of comfort and connection to identity, such as landscapes in their heritage countries.

Participants recommended offering coffee and tea during in-person mindfulness programs to help "welcome participants into the space," reflecting the cultural tradition of hospitality. Another participant discussed how hospitality

could be extended as a metaphor for “greet[ing] your thoughts with hospitable warmth and presence and non-judgment.” Several participants also suggested using examples and metaphors that are relevant to Arab/MENA Americans when explaining mindfulness concepts and presenting psychoeducation on stress. Additionally, some participants highlighted the opportunity for integrating mindfulness with religion and spirituality, discussing strategies that ranged from collaborating with faith leaders to implement mindfulness programs, such as having “mindfulness in mosques,” to prompting participants to reflect on how mindfulness intersects with their faith.

Participants provided recommendations to increase the accessibility of mindfulness programming, such as translating the curriculum and facilitating sessions in Arabic or other MENA languages for non-English speaking community members. They also discussed how providing Arabic translations of key terms, such as mindfulness and its qualities, would enhance sessions that are otherwise facilitated in English. Participants suggested adding visual materials such as worksheets for participants with differing learning styles to follow along with the information provided during the session.

Participants recommended maintaining concordance in the facilitator’s identity for mindfulness groups with Arab/MENA Americans, as this helped them feel understood and as though mindfulness could help someone from their background. Participants expressed a desire for more interaction with group members, suggesting individual introductions, icebreakers, discussion questions, and relational mindfulness activities. Participants discussed how implementing mindfulness programming in community spaces could improve group cohesion and accessibility for older Arab/MENA Americans. In-person programming was seen as “ideal” for fostering relationships between participants. At the same time, participants acknowledged that an online format could reduce obstacles to participation for other Arab/MENA Americans.

Participants recommended that mindfulness facilitators emphasize stress psychoeducation and present mindfulness as a health promotion strategy to increase acceptability. Emphasizing informal mindfulness practice, such as bringing qualities of mindfulness to prayer, cultural rituals, or other daily activities, was seen as a way to engage individuals with limited time. Encouraging short at-home practices was also recommended, so participants can learn to “find those small moments, even if it’s ten minutes each day to practice mindfulness.” Participants discussed how a multiweek program would allow more opportunities to learn mindfulness skills.

Discussion

The high burden of stress described by the participants in this study underscores the importance of developing culturally

relevant stress management interventions for Arab/MENA Americans. The stressors described by participants in this study align closely with the model of cumulative racial-ethnic trauma among Arab/MENA Americans by Awad and colleagues.¹¹ This model outlines stressors Arab/MENA Americans experience at the macro- and micro-level and describes their impacts on well-being. Participants in the present study described experiencing macro-level stressors, such as historical trauma and a hostile national context, as well as micro-level stressors, including interpersonal discrimination and lack of recognition of their identities. The impact of these stressors on participants in the present study reflects those from Awad and colleagues’ model, including fear, hopelessness, alienation, and physical and mental health conditions.¹¹

Culturally adapted MBIs for Arab/MENA Americans have the potential to address stress-related health disparities in this population. Participants in this study viewed mindfulness as a useful approach to coping with stressors relevant to their identities and described it as potentially more acceptable than psychotherapy, aligning with prior findings on the acceptability of mind-body approaches with racial-ethnic minorities.¹⁶ At the same time, participants identified aspects of mindfulness that could be adjusted to align with their cultural values, which has also been observed more broadly among racial-ethnic minority populations in MBI studies.^{22,23,34,35}

Responses from participants in the present study highlighted aspects of stress and well-being that reflect the unique risk and resilience factors of Arab/MENA Americans. Intergenerational stress and trauma, identified in prior studies with Arab/MENA Americans,^{11,36} emerged as important concepts to integrate into stress psychoeducation for mindfulness programs. Further, participants connected their personal well-being to their families and broader communities, paralleling prior findings of community support among Arab/MENA Americans.³⁷ While participants viewed mindfulness as a tool to sustain their community advocacy in the long term, they worried that mindfulness represents an individualistic approach to well-being. Such concern evokes critiques about the commodification of secular mindfulness in the West and its removal from a spiritual context emphasizing interrelatedness.³⁸ Findings from the present study underscore the importance of communicating how mindfulness can support both individual and communal well-being when working with Arab/MENA Americans and may also be relevant for other racial-ethnic minority communities.

Religion/spirituality also emerged as an area in which participants expressed both alignment and discordance with mindfulness practice. While participants in this study often viewed mindfulness and religion and spirituality as complementary and mutually enhancing, they expressed concern that other Arab/MENA Americans, especially those who are older or more traditional in their views, may perceive a conflict between them. These varying perspectives on religion and spirituality likely reflect generational differences in acculturation among Arab/MENA Americans.³⁹ Similar

Table 2. Potential Adaptations to MBIs Based on Focus Group Data.

Type of Adaptation	Examples of Adaptations
Language	<ul style="list-style-type: none"> - Translate materials into Arabic and other MENA languages, especially for non-English speaking participants - Use Arabic/MENA-language terms to enhance the presentation of main concepts (such as attitudes of mindfulness)
Persons	<ul style="list-style-type: none"> - Utilize an Arab or MENA-identifying facilitator
Metaphors	<ul style="list-style-type: none"> - Integrate culturally relevant Arab/MENA stories, poetry, imagery, metaphors, and symbols into curriculum
Content	<ul style="list-style-type: none"> - Emphasize stress psychoeducation and present mindfulness as a health-promotion strategy - Integrate sensory experiences from Arab/MENA culture into mindfulness exercises (tea/coffee, incense, music) - Discuss the interplay between mindfulness, religion, and spirituality - Prompt participants to reflect on cultural strengths that promote mindfulness and encourage informal practice through cultural rituals - Add relational mindfulness activities and increase interaction between group members
Concept	<ul style="list-style-type: none"> - Highlight <i>sumud</i> (steadfastness) and <i>sabr</i> (patience) as forms of resilience - Center community well-being as interconnected with individual well-being and discuss how mindfulness can support both - Address intergenerational trauma in stress psychoeducation
Goals	<ul style="list-style-type: none"> - Check in with participants periodically about extent to which mindfulness is supporting culturally relevant goals, such as improving relationships and interpersonal communication, and promoting sustainable advocacy and engagement with community issues
Methods	<ul style="list-style-type: none"> - Adjust length of sessions to accommodate busy schedules - In-person modality can increase sense of community between participants and may be more accessible for older generations - Online modality can reduce barriers for others, especially younger generations - Implementing in community spaces and houses of worship - Provide visual materials to supplement learning
Context	<ul style="list-style-type: none"> - Trauma-informed mindfulness facilitation principles - Attention to heterogeneity of community with respect to age, generational status, gender, acculturation, heritage country, religion, religiosity, and other intersecting identities

concerns about religion, spirituality, and mindfulness have been documented in studies with Black American communities.¹⁷ Facilitators working with Arab/MENA Americans may consider strategies outlined by Haidar and colleagues,¹⁷ which range from proactively discussing religion and spirituality with participants in MBIs to creating spiritually tailored groups and collaborating with faith leaders.

Participants' responses also point to cultural values that can be integrated into conceptualizations of well-being among Arab/MENA Americans. Participants discussed the resilience of their ancestors, families, relatives remaining in their heritage countries, and the broader Arab/MENA community in the face of ongoing adversity. *Sumud*, an Arabic term for steadfastness or perseverance amidst adversity, has been observed in the psychological literature as a form of resilience and a Palestinian cultural value.⁴⁰ It has also been documented in other Arab contexts, such as in a psychoeducational intervention to promote resilience among Lebanese families.⁴¹ The cultural value of perseverance is also captured in the Arabic term *sabr*, which translates to patience.^{42,43} Invoking these cultural values may enrich psychoeducation on stress coping and resilience.

The present study sought to identify potential adaptations to MBIs among Arab/MENA Americans. [Table 2](#)

summarizes proposed adaptations from participants, as well as potential adaptations that build upon issues raised by participants in their discussion of cultural strengths, stressors they face, and perceived barriers and facilitators to practicing mindfulness. We organized these by Bernal and colleagues' cultural sensitivity framework,⁴⁴ which specifies 8 domains for adapting interventions: (1) language, (2) persons, (3) metaphors, (4) content, (5) concept, (6) goals, (7) methods, and (8) context. Guidelines from Loucks and colleagues can be utilized to ensure that the essential elements of MBIs are retained while integrating cultural adaptations for Arab/MENA Americans.

Findings from the present study should be considered within the context of its sample. Participants were mostly female, young adults, in college or graduate school, residing in the Midwest, of Levantine ancestry, and born in the U.S. While participants shared their personal thoughts and what they believed others in their community might perceive about mindfulness, further research directly engaging Arab/MENA Americans of varying backgrounds is needed. Future studies can utilize similar qualitative methodologies with other sectors of the Arab/MENA American population to examine potential differences in stressors and perceived barriers and facilitators to engaging in mindfulness practice.

Other future directions for research on mindfulness with Arab/MENA Americans include developing and testing culturally adapted MBIs. Participants in this study highlighted the impact of learning mindfulness skills and discussing stress with others sharing their broader racial-ethnic identity, especially given that Arab/MENA Americans are often isolated from each other or lack spaces specifically for members of their community. Pilot trials of MBIs with Arab/MENA Americans will advance health equity by increasing the visibility of an underrepresented population in the mindfulness literature and addressing the dearth of evidence-based integrative health intervention studies with Arab/MENA Americans.

Appendix A

Focus Group Moderator's Guide

- I. Perceptions of the Workshop and Skills Learned
 - (1) Which aspects of this workshop resonated with you, and why?
 - Are there any aspects in particular that resonated with your identity as a person of Arab/MENA heritage?
 - (2) Which aspects of this workshop did not resonate with you, and why?
 - Are there any aspects in particular that did not resonate with your identity as a person of Arab/MENA heritage?
 - (3) How might you use the information and practices you learned today in your everyday life? Do you believe they will be helpful for the problems and stressors you are facing? If so, how? If not, why?
 - (4) What might prevent you from using the tools from this workshop?
 - Prompts:
 - (i) Time?
 - (ii) Space?
 - (iii) Culture?
 - (iv) Religion?
 - (v) Family?
 - (vi) Relationships?
 - (vii) Stress?
 - (viii) Don't find the tools useful?
 - (ix) Motivation?
- (II) Perceptions of how other Arab/MENA American people would receive mindfulness concepts
 - (5) Was there anything in this workshop that feels like it wouldn't "fit" or "work" with people from Arab/MENA American communities?
 - (6) If you were tasked with leading this workshop for a group of Arab/MENA American participants, what might you change about it?

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by the the Graduate Research Grant at Northwestern University. The participation of Andrea Haidar was supported by the UCSF Osher Center research training fellowship program (NCCIH T35 T35AT010592 Chao and Adler, PIs).

ORCID iD

Andrea Haidar  <https://orcid.org/0000-0003-2667-4831>

References

1. Goldberg SB, Tucker RP, Greene PA, et al. Mindfulness-based interventions for psychiatric disorders: A systematic review and meta-analysis. *Clin Psychol Rev*. 2018;59:52-60. doi:10.1016/j.cpr.2017.10.011
2. Khoury B, Lecomte T, Fortin G, et al. Mindfulness-based therapy: A comprehensive meta-analysis. *Clin Psychol Rev*. 2013;33(6):763-771. doi:10.1016/j.cpr.2013.05.005
3. Majeed MH, Ali AA, Sudak DM. Mindfulness-based interventions for chronic pain: Evidence and applications. *Asian J Psychiatr*. 2018;32:79-83. doi:10.1016/j.ajp.2017.11.025
4. Zhang D, Lee EKP, Mak ECW, Ho CY, Wong SYS. Mindfulness-based interventions: An overall review. *Br Med Bull*. 2021;138(1):41-57. doi:10.1093/bmb/ldab005
5. DeLuca SM, Kelman AR, Waelde LC. A systematic review of ethnoracial representation and cultural adaptation of mindfulness- and meditation-based interventions. *Psychol Stud*. 2018; 63(2):117-129. doi:10.1007/s12646-018-0452-z
6. Sun S, Goldberg SB, Loucks EB, Brewer JA. Mindfulness-based interventions among people of color: A systematic review and meta-analysis. *Psychother Res* 2021;32(3):1-14. doi: 10.1080/10503307.2021.1937369
7. Waldron EM, Hong S, Moskowitz JT, Burnett-Zeigler I. A systematic review of the demographic characteristics of participants in US-based randomized controlled trials of mindfulness-based interventions. *Mindfulness*. 2018;9(6): 1671-1692. doi:10.1007/s12671-018-0920-5
8. National Arab American Demographics. Arab American Institute. <https://www.aaiusa.org/demographics>. Accessed March 1, 2024.
9. Awad GH, Hashem H, Nguyen H. Identity and ethnic/racial self-labeling among Americans of Arab or Middle Eastern and North African descent. *Identity* 2021;21(2):1-16. doi:10.1080/15283488.2021.1883277
10. Maghbouleh N, Schachter A, Flores RD. Middle Eastern and North African Americans may not be perceived, nor perceive themselves, to be White. *Proc Natl Acad Sci USA*. 2022;119(7): e2117940119. doi:10.1073/pnas.2117940119

11. Awad GH, Kia-Keating M, Amer MM. A model of cumulative racial-ethnic trauma among Americans of Middle Eastern and North African (MENA) descent. *Am Psychol*. 2019;74(1):76-87. doi:10.1037/amp0000344
12. Abuelezam NN, El-Sayed AM, Galea S. The health of Arab Americans in the United States: An updated comprehensive literature review. *Front Public Health*. 2018;6(262). doi:10.3389/fpubh.2018.00262
13. Awad GH, Abuelezam NN, Ajrouch KJ, Stiffler MJ. Lack of Arab or Middle Eastern and North African health data undermines assessment of health disparities. *Am J Publ Health*. 2022;112(2):209-212. doi:10.2105/ajph.2021.306590
14. Amer MM, Hovey JD. Anxiety and depression in a post-September 11 sample of Arabs in the USA. *Soc Psychiatr Psychiatr Epidemiol*. 2011;47(3):409-418. doi:10.1007/s00127-011-0341-4
15. Proulx J, Croff R, Oken B, et al. Considerations for research and development of culturally relevant mindfulness interventions in American minority communities. *Mindfulness*. 2017;9(2):361-370. doi:10.1007/s12671-017-0785-z
16. Burnett-Zeigler I, Schuette S, Victorson D, Wisner KL. Mind-body approaches to treating mental health symptoms among disadvantaged populations: A comprehensive review. *J Alternative Compl Med*. 2016;22(2):115-124. doi:10.1089/acm.2015.0038
17. Haidar A, Ekene N, Burnett-Zeigler I. The role of religion and spirituality in adapting mindfulness-based interventions for Black American communities: A scoping review. *Mindfulness*. 2023;14(8):1852-1867. doi:10.1007/s12671-023-02194-5
18. Womack V, Fleming CM, Proulx J. *Beyond White Mindfulness: Critical Perspectives on Racism, Well-Being and Liberation*. Routledge Books; 2022. 10.4324/9781003090922
19. Sun S, Goldberg SB, Loucks EB, Brewer JA. Mindfulness-based interventions among people of color: A systematic review and meta-analysis. *Psychother Res*. 2022;32(3):277-290. doi:10.1080/10503307.2021.1937369
20. Kabat-Zinn J. *Full Catastrophe Living: Using the Wisdom of Your Body and Mind to Face Stress, Pain, and Illness*. New York Dell Publishing Co; 1990.
21. Burnett-Zeigler I, Satyshur MD, Hong S, Wisner KL, Moskowitz J. Acceptability of a mindfulness intervention for depressive symptoms among African-American women in a community health center: A qualitative study. *Compl Ther Med*. 2019;45:19-24. doi:10.1016/j.ctim.2019.05.012
22. Watson NN, Black AR, Hunter CD. African American women's perceptions of mindfulness meditation training and gendered race-related stress. *Mindfulness*. 2016;7(5):1034-1043. doi:10.1007/s12671-016-0539-3
23. Watson-Singleton NN, Black AR, Spivey BN. Recommendations for a culturally-responsive mindfulness-based intervention for African Americans. *Compl Ther Clin Pract*. 2019;34(34):132-138. doi:10.1016/j.ctcp.2018.11.013
24. Creswell JW, Creswell Báez JW. *30 Essential Skills for the Qualitative Researcher*. 2nd ed. Sage Publications Inc; 2021.
25. Harris PA, Taylor R, Thielke R, Payne J, Gonzalez N, Conde JG. Research electronic data capture (REDCap)--a metadata-driven methodology and workflow process for providing translational research informatics support. *J Biomed Inf*. 2009;42(2):377-381. doi:10.1016/j.jbi.2008.08.010
26. Woods-Giscombé CL, Gaylord SA. The cultural relevance of mindfulness meditation as a health intervention for African Americans: Implications for reducing stress-related health disparities. *J Holist Nurs*. 2014;32(3):147-160. doi:10.1177/0898010113519010
27. Muñoz BJ, Parra DC, Saperstein SL, Aparicio EM, Lewin AB, Green KM. Feasibility of implementing a mindfulness-based online program for Latina immigrants and the staff that work with them. *Mindfulness*. 2023;14(5):1148-1161. doi:10.1007/s12671-023-02123-6
28. Hennink M, Kaiser BN. Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Soc Sci Med*. 2022;292(1):114523. doi:10.1016/j.socscimed.2021.114523
29. Guest G, Namey E, McKenna K. How many focus groups are enough? Building an evidence base for nonprobability sample sizes. *Field Methods*. 2016;29(1):3-22. doi:10.1177/1525822X16639015
30. Kiger ME, Varpio L. Thematic analysis of qualitative data: AMEE Guide No. 131. *Med Teach*. 2020;42(8):846-854. doi:10.1080/0142159X.2020.1755030
31. Olmos-Vega FM, Stalmeijer RE, Varpio L, Kahlke R. A practical guide to reflexivity in qualitative research: AMEE guide no. 149. *Med Teach*. 2022;45(149):1-11. doi:10.1080/0142159x.2022.2057287
32. Saldana J. *The Coding Manual for Qualitative Researchers*. Sage; 2021.
33. Dedoose Version 9.0. 17, cloud application for managing, analyzing, and presenting qualitative and mixed method research data. 2021. Los Angeles, CA: Sociocultural Research Consultants, LLC. www.dedoose.com
34. Tenfelde SM, Hatchett L, Saban KL. "Maybe black girls do yoga": A focus group study with predominantly low-income African-American women. *Compl Ther Med*. 2018;40:230-235. doi:10.1016/j.ctim.2017.11.017
35. Abu-Ras W, Abu-Bader SH. The impact of the September 11, 2001, attacks on the well-being of Arab Americans in New York City. *J Muslim Ment Health*. 2008;3(2):217-239. doi:10.1080/15564900802487634
36. Ahmed SR, Kia-Keating M, Tsai KH. A structural model of racial discrimination, acculturative stress, and cultural resources among Arab American adolescents. *Am J Community Psychol*. 2011;48(3-4):181-192. doi:10.1007/s10464-011-9424-3
37. Pyles L. Healing justice, transformative justice, and holistic self-care for social workers. *Soc Work*. 2020;65(2):178-187. doi:10.1093/sw/swaa013
38. Amer MM. Arab American acculturation and ethnic identity across the lifespan: Sociodemographic correlates and psychological outcomes. In: S Nassar-McMillan, K Ajrouch, J Hakim-Larson, eds. *Biopsychosocial Perspectives on Arab*

- Americans: Culture, Development, and Health*. doi:[10.1007/978-1-4614-8238-3_8](https://doi.org/10.1007/978-1-4614-8238-3_8). Springer; 2014:153-173.
39. Hammad J, Tribe R. Culturally informed resilience in conflict settings: A literature review of Sumud in the occupied Palestinian territories. *Int Rev Psychiatr*. 2021;33(1-2):132-139. doi:[10.1080/09540261.2020.1741259](https://doi.org/10.1080/09540261.2020.1741259)
40. Bosqui T, Mayya A, Younes L, Baker MC, Annan IM. Disseminating evidence-based research on mental health and coping to adolescents facing adversity in Lebanon: A pilot of a psychoeducational comic book 'Somoud'. *Conflict Health*. 2020;14(1):78. doi:[10.1186/s13031-020-00324-7](https://doi.org/10.1186/s13031-020-00324-7)
41. Arozullah AM, Padela AI, Volkan Stodolsky M, Kholwadia MA. Causes and means of healing: An Islamic ontological perspective. *J Relig Health*. 2020;59(2):796-803. doi:[10.1007/s10943-018-0666-3](https://doi.org/10.1007/s10943-018-0666-3)
42. Fahm AO. Islam and disaster management in contemporary times: A psycho-socio-spiritual response. *J Relig Spiritual Soc Work Soc Thought*. 2019;38(3):259-280. doi:[10.1080/15426432.2019.1632246](https://doi.org/10.1080/15426432.2019.1632246)
43. Bernal G, Bonilla J, Bellido C. Ecological validity and cultural sensitivity for outcome research: issues for the cultural adaptation and development of psychosocial treatments with Hispanics. *J Abnorm Child Psychol*. 1995;23(1):67-82. doi:[10.1007/BF01447045](https://doi.org/10.1007/BF01447045)
44. Loucks EB, Crane RS, Sanghvi MA, et al. Mindfulness-based programs: Why, when, and how to adapt? *Glob Adv Health Med*. 2022;11:216495612110688. doi:[10.1177/21649561211068805](https://doi.org/10.1177/21649561211068805)