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**ARAB AMERICAN WOMEN'S HEALTH STUDY: CORRELATIONAL AND  
EXPERIMENTAL EXAMINATION OF A SEXUAL HEALTH INTERVIEW**

by

**HANNAH J. HOLMES**

**DISSERTATION**

Submitted to the Graduate School

of Wayne State University,

Detroit, Michigan

in partial fulfillment of the requirements

for the degree of

**DOCTOR OF PHILOSOPHY**

2019

MAJOR: PSYCHOLOGY (Clinical)

Approved By:

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Advisor

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Date

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## CHAPTER 1: LITERATURE REVIEW

### Background

Arab Americans are a group of Americans of Arab heritage or identity with diverse ethnic, religious, and cultural backgrounds. Of approximately 22 countries that are considered Arabic, Arab Americans are most commonly of Syrian, Lebanese, Palestinian, Iraqi, or Jordanian heritage. Arab Americans are a rapidly growing group in the United States, increasing from 850,000 people of Arab ancestry in 1990 to 1.9 million in 2010, according to the U.S. census. The Arab American Institute estimates the actual number of Americans of Arab descent to be nearly 3.5 million, which is higher than the census captures due to its lack of an Arab ethnic category. Although Arab Americans live in every state, they are most concentrated in California, New York, and Michigan, particularly Metro Detroit.

Compared to other minority groups, there is relatively little scholarly research on Arab Americans (Amer & Awad, 2016). Arab Americans are particularly underrepresented in health research (Naber, 2000), and Arab young adults who have been raised in the U.S. are especially understudied (Britto & Amer, 2007). This underrepresentation may be in part because of their “invisibility” in the United States as a result of the U.S. race/ethnicity classification system, which classifies Arab Americans as White. There are important differences between Arab Americans and European Americans in terms of culture and heritage, however, and Arab Americans are often targets of discrimination and prejudice (Naber, 2000). Therefore, furthering research on Arab Americans is a worthwhile endeavor that will allow us to reduce stereotyping and improve policies and interventions intended to improve the health and wellbeing of Arab Americans.

## **Physical and Mental Health**

Arab Americans appear to have slightly elevated health problems relative to European Americans (Yosef, 2008). Rates of diabetes and certain types of cancer seem to be higher for Arab Americans compared to Whites and other minority groups (Dallo, 2016). Arab Americans also have higher levels of anxiety, depression, and serious psychological distress compared to the general population and other racial/ethnic minority groups (Amer & Hovey, 2012; Dallo, Kindratt, & Snell, 2013). There are a variety of reasons for these health disparities, including differences in acculturation, socioeconomic status, discrimination, health beliefs and behaviors, as well as healthcare access, utilization, and quality (Dallo, 2016).

## **Acculturation and Acculturative Stress**

Health appears to improve with acculturation. Immigrant Arabs report poorer health status compared to U.S.-born Arab Americans, and Arabic-speaking immigrants report poorer health than their English-speaking counterparts and U.S.-born Arab Americans (Abdulrahim & Baker, 2009). This health disparity, however, is stronger for Christian Arab Americans compared to their Muslim counterparts (Amer & Hovey, 2007). The type and extent of acculturation impacts health as well; for example, Arab Americans who indicate moderate identification with both Arab and American cultures reported better physical well-being than those who report strong identification with both cultures. The poorer physical health outcomes associated with strong dual-identification may result from conflicting loyalties to both cultures and identities (Jadalla & Lee, 2012). There are also acculturative differences in terms of health behaviors. More acculturated Arab Americans—those who are more integrated into American culture—are more likely to use alcohol (Jadalla & Lee, 2012) and drugs (Arfken, Kubiak, & Farrag, 2009), whereas less acculturated Arab Americans are more likely to smoke cigarettes (Jadalla & Lee,

2012). Furthermore, Arab Americans, especially those who are less acculturated, may encounter difficulty navigating the American healthcare system or linguistic and cultural barriers (Yosef, 2008), which may increase risk for disease morbidity.

Stress has a well-documented impact on health (Cohen, Gianaros, & Manuck, 2016; Segerstrom & Miller, 2004) via multiple pathways, including directly affecting various physiological, immune, and endocrine responses, promoting unhealthy behaviors, interfering with adaptive management of chronic illness, and increasing negative mood and helplessness (Lumley, Ziadni, Arfken, & Hammad, 2016). Arab Americans face a variety of unique chronic stressors that likely play a role in their health status, including acculturative stress, discrimination and prejudice, and trauma. The process of acculturation, including overcoming language barriers, exposure to values that may seem at odds with cultural traditions, and redefinition of identities and roles within the family and society, can be stressful (Kira & Wrobel, 2016). This acculturative stress can have a negative impact on mental health. In particular, acculturative stress has been linked with depression among Arab American adolescents (Ahmed, Kia-Keating, & Tsai, 2011) and adults (Amer & Hovey, 2005; Wrobel et al., 2009).

### **Trauma**

In addition to the stress of acculturation and discrimination, some Arab Americans have experienced other traumatic events that contribute to physical and psychological health problems. Refugees may be especially at risk due to traumas experienced in their home countries, such as war, political oppression, or torture. Studies of Iraqi refugees have shown elevated rates of mental health problems such as posttraumatic stress disorder, depression, and anxiety (Jamil et al., 2002), and Iraqi refugees who left after the Gulf War reported more stress-related medical conditions than those who left earlier, which may be due to the stress of living

through the war (Jamil et al., 2005). In addition to stressors experienced in their country of origin, immigrants and refugees also experience the stress of being uprooted from one's social networks and the loss of meaningful interpersonal relationships upon leaving their country of origin (Kira & Wrobel, 2016).

Arab American women, in particular, report high rates of trauma. One study found that 93% of Arab American women reported experiencing some sort of trauma in their lifetimes (Hassouneh & Kulwicki, 2007). Gender discrimination is a type of ongoing, continuous trauma for girls and women that influences the effects of other life traumas (Kira et al., 2014), and gender discrimination is particularly salient for Arab women. A series of national gender equality profiles by the United Nations Children's Fund (UNICEF, 2011) documented a range of discriminatory events experienced by many women in Arab cultures, although they are not universal to all Arab communities: These experiences include sexual harassment; disparities in education, labor, and political representation; domestic violence; early and forced marriage; sexual exploitation; as well as more extreme forms of discrimination, such as female genital mutilation, honor killings, and rape. These experiences of gender discrimination increase the risk of psychological symptoms following trauma; in a study of women refugees from Arab, African, and Asian countries who had survived torture, gender discrimination was associated with increases in PTSD as well as dissociation, suicidality, and deficits in executive function (Kira et al., 2010). In addition to the influence of trauma on Arab American women's health, Kridli (2002) proposed that Arab immigrant women may be particularly at risk for poor health outcomes compared to their male counterparts in part because the women are more likely to stay at home raising children, where they are coping with language difficulties and other cultural barriers without as many opportunities to integrate outside the home (Kridli, 2002).

## Somatization

It has been suggested that Arab Americans tend to express emotions somatically, through physical symptoms or ailments (Al-Krenawi & Graham, 2000). For example, Arab Americans may express more symptoms of fatigue and lack of energy when reporting issues of depression (Al-Krenawi & Graham, 2000), or stomachaches or headaches instead of emotional distress. Arab Americans may also use somatic metaphors or proverbial expressions to express psychological issues (Nguyen, Foulks, & Carlin, 1991). This mode of expressing symptoms may reflect a holistic understanding of the connection between mind and body, so that vocabulary used to express mental states overlaps with that used to express physical states. But it also is possible that expressing symptoms physically is a way to mitigate stigma toward mental health problems (Mahmood & Ahmed, 2016). Although some authors propose that this tendency to somaticize symptoms is similar among both Arabs in the Middle East and Arab Americans or Arabs living in the West (e.g., Al-Krenawi & Graham; Erickson, & Al-Timimi, 2001), the literature is unclear whether this is the case, or if somatization varies as a function of acculturation (Mahmood & Ahmed, 2016).

## Sexual Health

Sexual health and sexuality are broad terms that encompass many domains of physical, psychological, and relational functioning. Sexual health is defined by the World Health Organization as “a state of physical, mental and social well-being in relation to sexuality” (WHO; 2006, p. 5). Sexuality is experienced and expressed not only via behaviors and practices, but also through thoughts, fantasies, desires, beliefs, attitudes, values, roles and relationships. Thus, sexual health must include not only healthy physical functioning, but also healthy psychological and relational functioning. Relatively little research has examined sexual health

among Arab American women, in part because of taboos surrounding sexuality in Arab culture. In the following section, key aspects of sexual health and research relevant to Arab American sexual health will be reviewed.

Physical well-being in relation to sexuality includes sexual function and the absence of sexually transmitted infections (STIs). Sexual dysfunction, which occurs within any stage of the sexual response cycle including desire/libido, arousal, and orgasm, as well as pain during and/or after sex, can interfere with sexual health and well-being (Rosen et al., 2000). Sexual dysfunction affects about 43% of all women in the United States (Laumann, Paik, & Rosen, 1999). STIs, such as HIV/AIDS, gonorrhea, and chlamydia, are common in the United States, affecting an estimated 110 million women and men in 2008 (Satterwhite et al., 2013). It is unclear whether these statistics are representative of Arab American women specifically. No studies have assessed STIs among Arab American women. Moreover, with the exception of one study of sexual dysfunction among Jordanian diabetic women, which showed higher rates of dysfunction among the women who were diabetic compared to those who were not (Ali, Al Hajeri, Khader, Shegem, & Ajlouni, 2008), there are no studies of sexual dysfunction among Arab American women.

Positive components of sexual health, such as sexual satisfaction, pleasure, and well-being, are sometimes overlooked in favor of illness-related aspects of sexual health such as sexual dysfunction or sexually-transmitted infections. There is some evidence that individuals from Arab cultures may understand sexual health in a narrow physiological, reproductive sense. For example, a study of Iranian women in Australia revealed that they understood pregnancy, contraception, and menopause as sexual health issues; however, they did not identify issues around relationships or sexual pleasure or pain as aspects of sexual health (Khoei & Richters,

2008). The WHO, however, notes that sexual health is “not merely the absence of disease, dysfunction, or infirmity”; it also includes positive aspects of sexuality such as sexual satisfaction and well-being.

Sexual satisfaction is related to emotional and relationship satisfaction, and this relationship appears to be even stronger for women than for men (Laumann et al., 1999). The Global Study of Sexual Attitudes and Behaviors (Laumann et al., 2006), a study of 27,500 men and women in 29 countries, revealed that in “gender-equal sexual regimes” such as western European and European-linked Western countries reported the highest level of sexual satisfaction, with 77.6% indicating satisfaction with sexual function. Women in “male-centered sexual regimes” were less likely to report satisfaction, with 60.3% of women in Islamic and some Asian and European countries and 50% of women in East Asian countries reporting satisfaction with sexual function. Across all areas, men reported more sexual satisfaction than women, although this difference was most pronounced in the “male-centered sexual regimes.” No studies have examined Arab American women’s sexual satisfaction, so it is unclear whether they would more closely follow the pattern of women in the US, who report relatively higher levels of satisfaction, compared to women in Arab and Asian countries.

A key relational aspect of sexual health is the necessity for sexual experiences with others to be respectful and safe, free of coercion, discrimination, and violence (WHO, 2006). Mental and psychological factors interact with sexuality as well. Sexual self-schemas, for example, are cognitive representations about the sexual aspects of oneself that are derived from past experience guide sexual behavior, and influence and how sexually-relevant social information is processed. Andersen and Cyranowski (1994) conceptualize and measure three dimensions of self-schemas: passionate-romantic, open-direct, and embarrassed-conservative. A tendency to

experience passionate-romantic emotions and a behavioral openness to sexual experience are considered “positive” sexual self-views, whereas embarrassment or conservatism are considered “negative” sexual self-views. Labeling these sexual self-views as “positive” and “negative” is value-laden, and may not apply to this population. Therefore, alternative, more neutral labels will be used to describe these two domains. Research on undergraduate samples has shown that women’s sexual self-schemas predict sexually-relevant emotions and behaviors; for example, women with positive sexual self-views reported more willing sexual relationships in the past compared to negative self-view women, and anticipated entering into more sexual relationships in the future. Women with negative sexual self-views had fewer sexual experiences and relationships, more negative and conservative attitudes toward sex, and were less confident making predictions about their sexual future (Andersen & Cyranowski, 1994). No studies to date have examined sexual self-schemas and their correlates among Arab American women.

Many aspects of an individual’s experience influence, and are influenced by, their sexuality: biological, psychological, social, economic, political, cultural, ethical, legal, historical, religious, and spiritual factors all inform and guide one’s sexual experience and expression (WHO, 2006). A consideration of Arab American women’s cultural context is necessary for a more complete understanding of their sexual health as well as their physical and mental health.

### **Cultural Context**

Arab Americans engage with two distinct cultures: the Arab culture that is part of their heritage, and the Western, American culture in which they reside. Level of acculturation varies by individual, with some Arab Americans identifying strongly with either Arab or American culture, and others integrating both to various degrees. Negotiating and integrating these two cultures can result in bicultural conflict, which occurs when two cultural identities conflict and

clash rather than integrate (Benet-Martinez & Haritatos 2005). There is relatively little research on bicultural identity development among Arab Americans, but studies of youth and young adult Arab Americans have shown that, although many successfully integrate their bicultural identity, others experience identity conflict (Sirin & Fine, 2007; Sirin, Bikmen, Mir, & Fine, 2008).

Gender and sexuality play a prominent role in this identity negotiation. Sexuality is a complex cultural challenge for Arab Americans, as they face the task of negotiating the pressure to embrace relatively permissive American sexual norms as well as preserve their relatively conservative Arab heritage (Stephan & Aprahamian, 2016). For example, in a focus group study of Arab American adolescents, the adolescents distinguished Arab Americans from white Americans particularly through the distinction between white girls and Muslim Arab American girls, who are supposed to be more “pure” and chaste. These adolescents considered themselves to be “in between” white Americans and what they called “boaters,” or people with a purely Arab identity (Ajrouch, 2004). Discussing sexuality openly with someone other than a spouse is considered taboo in Arab culture (Abudabbeh, 2005), and premarital sex is forbidden (Ajrouch, 1999; Al-Krenawi & Jackson, 2014), as opposed to mainstream American culture, where premarital sex is commonly discussed and practiced.

Sexual restrictions arise in part from religion, which is highly important within Arab culture and permeates all domains of life, including health, relationships, and sexuality. Although most of the Arab world is Muslim, most Arab Americans identify as Christian (63%), whereas about one-quarter of Arab Americans identify as Muslim (24%; Arab American Institute, n.d.). “Arab” and “Muslim” are often conflated in U.S. media, but they are distinct identities. In fact, Arab Americans constitute only 26% of the Muslim American population (Pew Research Center, 2011). In addition to differences between Christian and Muslim Arab Americans, there are

diverse branches, belief systems, and traditions within each religious group as well (Amer & Kayyali, 2016). Despite the diversity of religious affiliation among Arab Americans, both Muslims and Christians identify religious values as important and core components of their ethnic identity (Keck, 1989; Barry, Elliott, & Evans, 2000).

In addition to the influence of religion, family plays a critical role in Arab society, where individual identity is strongly connected to collective family identity, and family honor is highly valued. Thus, behaviors that enhance family honor and status are encouraged, and those that would bring shame or dishonor to the family are strongly discouraged (Erickson & Al-Timimi, 2001). Engaging in inappropriate sexual behavior is culturally described as '*ayh*', which means "shameful act" in Arabic (Stephan & Aprahamian, 2016), and those who participate in these activities are considered to bring shame to both themselves and their family. The high importance placed on maintaining family honor, particularly through avoiding forbidden sexual behaviors, leads many parents to closely monitor and regulate their children's activity, which can cause Arab American adolescents to feel more restricted than their non-Arab peers. Arab American girls report perceiving that these restrictions are enforced more strongly with them than with their brothers (Ajrouch, 1990), which may be because marriage and virginity are considered key components of womanhood (Naber, 2006). Arab American parents may show their pride in Arab culture by maintaining restrictions on their daughters' freedom (Abdulhadi, Alsultany, & Naber, 2011), and in fact, some Arab American women report that they experience stricter parental rules in the U.S. compared to women in their homelands (Naber, 2013).

### **Relationship between Health and Sexuality**

Given the general under-representation of Arab Americans in research and taboo surrounding sexuality in Arab culture, it is not surprising that Arab American sexual health is

woefully understudied. Yet, sexuality is an important aspect of health, in part because stress and negative emotions that arise from conflicts and shame over sexual desires and experiences can lead to psychological and somatic symptoms. Dating relationships that do not align with familial or cultural expectations can create family discord and conflict (Ahmed et al., 2011), and if these relationships are kept secret, secrecy itself can be very stressful (Frijns, Finkenauer, Vermulst, & Engels, 2005). Additionally, sexual behaviors, including premarital sex, can result in shame and fear of punishment (Abudabbeh & Nydell, 1993; Kulwicki et al., 2000).

Sexuality is also salient to health in terms of consent and force. Unwanted sexual experiences, including childhood sexual abuse, adult sexual assault, and intimate partner violence, have well-established deleterious effects on health. Sexual assault increases risk of mental health problems including posttraumatic stress, depression, anxiety, and other forms of psychological distress (Koss et al., 1994). Women with sexual assault histories also experience more physical health problems (Golding, 1999) and are more likely to engage in sexual health risk behaviors (Campbell, Sefl, & Ahrens, 2004) than those without such histories. Two studies specifically among Arab American women found relatively high rates of intimate partner violence of a sexual nature. In one study of 277 Arab American women, 20% reported being sexually abused by their partner (Kulwicki, 1996). Another study of Iraqi immigrant women found that 30% reported being raped by their partner, and 90% of the women in abusive relationships reported one or more psychosomatic symptoms such as headaches, back pain, muscle pain, stomach aches, and breathing problems (Barkho, Fakhouri, & Arnetz, 2011). Although intimate partner violence and sexual assault are experienced by women of all cultural and ethnic groups, cultural factors unique to Arab Americans, including stigma surrounding the

discussion of sexuality and the importance of family honor, may impede the disclosure and resolution of such experiences (Kulwicki, 2016).

Bicultural identity conflict, which arises when a person's two cultural identities are in conflict, may make the relationship between sexual health and physical and emotional health more salient. As discussed above, Arab and Western values surrounding sexuality sharply contrast each other. Arab Americans who are having difficulty negotiating those two sets of values may experience more physical and emotional symptoms as a result of sexual difficulties, negative sexual self-schemas, or unwanted sexual experiences compared to those who have less bicultural identity conflict. This observation would be consistent with the finding that Arab Americans who report strong identification with both Arab and American cultures report worse physical health compared to those who less strongly identify with both cultures (Jadalla & Lee, 2012). Additionally, Muslim Arab Americans report poorer health status compared to Christian Arab Americans (Amer & Hovey, 2007), who may experience less distance and discord between their dual identities. Taken together, these findings may support the notion that individuals with high bicultural identity conflict will experience poorer physical and emotional health outcomes in relation to sexual health compared to those with low conflict.

### **Women's Health Interview**

Given the conflict and taboo surrounding the topic of sexuality among Arab American women, confidential discussion of these sensitive topics with a knowledgeable and empathic woman interviewer may yield beneficial effects. People generally report that disclosing difficult emotions, experiences, or conflicts is helpful (Pennebaker, Zech, & Rimé, 2001); furthermore, there is a large body of correlational and experimental evidence that doing so can be beneficial to a range of physical and mental health outcomes (Frattaroli, 2006). A meta-analysis of the health

effects of written emotional expression interventions among healthy participants revealed significant health benefits, including reported health, psychological well-being, physiological functioning, and general functioning (Smyth, 1998).

Conversely, inhibiting disclosure, particularly in the case of keeping secrets, can have a negative impact on health. Self-concealment, which is “the predisposition to actively conceal from others personal information that one perceives as distressing” (Larson & Chastain, 1990, p. 440), was found in a meta-analysis to be strongly associated with negative health outcomes, including depression, anxiety, distress, physical symptoms, and negative health behaviors (Larson, Chastain, Hoyt, & Ayzenberg, 2015). In one study, close to half (43%) of participants reported recalling an important emotional life event that they have kept secret; those who reported such memories also indicated more illness and lower life satisfaction than those who did not recall a secret emotional event (Finkenauer & Rimé, 1998a). Interestingly, the emotions least likely to be shared were shame and guilt (Finkenauer & Rimé, 1998b), which often involve sexual issues and negative experiences. For example, a study of gay men who concealed their sexual orientation found that those who were HIV-negative were more likely to suffer from major illnesses, and those who were HIV-positive died more quickly, compared to those who were more open about their homosexuality (Cole, Kemeny, Taylor, & Visscher, 1996). These findings suggest that keeping secrets, and especially secrets about one’s sexual thoughts, behavior, or identity, can negatively impact one’s health. This outcome could be a result of stress that arises from the biological work that goes into inhibiting one’s thoughts, feelings, or behaviors; the conflict between the urges both to reveal and to conceal results in a physiologically taxing increase in sympathetic activation (Larson et al., 2015). Alternatively,

talking with others about personal conflicts and stressful experiences may help a person to organize and resolve their experience, resulting in improved health (Pennebaker et al., 2001).

The benefits of disclosure about private, stressful secrets or conflicts may be most powerful for those who have disclosed little in the past, and who report difficulty with disclosure. Theoretically, these individuals would experience more physiological stress from inhibiting disclosure, and thus more relief following disclosure, than individuals who disclose easily. This notion is supported by findings from a randomized trial of the effects of written emotional disclosure among women with chronic pelvic pain: The women with more ambivalence about emotional expression showed greater improvement in disability related to pain, compared to those who were less ambivalent (Norman, Lumley, Dooley, & Diamond, 2004). Disclosure about one's sexual attitudes, thoughts, or behaviors—that is, sexual self-disclosure— involves disclosure about private information such as potentially stressful secrets or conflicts. These secrets or conflicts may be particularly stressful among Arab American women, whose culture has many taboos about the expression of sexuality. Thus, in this study, women who report little past sexual self-disclosure and rate sexual self-disclosure as difficult may experience greater benefits from participating in a sexual health interview than women who report that their sexual self-disclosure has been relatively more frequent and easier.

In addition to potential health benefits of sexual disclosure, discussion about sexual health topics with a knowledgeable interviewer may increase subsequent willingness to engage in sexual disclosure with important others, such as romantic partners or physicians. One study showed that individuals who were exposed to a television show that demonstrated discussion of sexual history and STI testing were more likely to engage in discussions about these topics later, compared to those in a control condition (Moyer-Guse, Chung, & Jain, 2011). This finding

supports the notion that simply becoming more familiar with sexual health topics, and learning how they can be discussed in a professional and supportive manner, can increase one's likelihood of later discussing these important topics with relevant others.

Some may argue that sharing thoughts and feelings about private and taboo topics is dangerous. On the contrary, there is evidence to show beneficial effects from the disclosure of stigmatized, difficult topics – when the person receiving the disclosure responds in a positive, empathic, and supportive way. For example, in a study of disclosure among survivors of sexual assault – which is a highly stigmatized and difficult experience to disclose – positive social reactions to the disclosure about the sexual assault was positively associated with perceived control over recovery, as well as adaptive social and individual coping (Ullman & Peter-Hagene, 2014). Thus, disclosure in a confidential setting with an empathic, knowledgeable interviewer who responds in a helpful and supportive way is not only safe, but can also be beneficial.

### **Overview and Goals of Current Study**

The overall goal of the current study was to fill the gap in the literature on Arab American sexual health by examining how sexual health is related to physical and psychological health. This was accomplished using both: a) correlational findings about sexual, physical, and psychological health from information gathered through self-report questionnaires and a 60-minute women's health interview; and b) an experimental test of the effects of the women's health interview on physical and psychological health. A sample of young adult Arab American women were assessed at baseline via various questionnaires for various constructs (sexual attitudes, cultural and religious identity, and physical and mental health), and then randomized to either an immediate or delayed health interview. The health interview obtained additional information about health, particularly relatively private sexual health-related attitudes and

experiences. Participants had a subsequent (5-week delay) re-assessment of the same constructs as assessed at baseline, and the delayed-interview participants then had the interview. This design provided, then, both a correlational component—examining associations among the variables obtained from the questionnaires and interview—and an experimental component—testing the effects of the interview (vs. delayed interview) on changes in attitudes and health status.

## Hypotheses

**Correlational.** It was hypothesized that low sexual well-being, negative sexual self-schemas, and history of unwanted sexual experiences would be adversely associated with physical and psychological health (depressive, anxiety, and somatic symptoms) and satisfaction with life, beyond the effects of cultural and demographic variables, including acculturation, conservatism, age, and sexual experience (correlational hypothesis 1; C1). It was also hypothesized that bicultural identity conflict would moderate these relationships, such that among women with high identity conflict, low sexual well-being, negative self-schemas, and unwanted sexual experiences would be more strongly associated with distress symptoms and lower life satisfaction, than found among women with little identity conflict (correlational hypothesis 2; C2).

**Experimental.** It was hypothesized that participants in the interview condition would report fewer somatic and psychological symptoms and more willingness to discuss sexual health with medical providers than participants in the delayed interview condition (i.e., the delayed interview condition) (experimental hypothesis 1; E1). It was also hypothesized that the effect of the interview on health and attitude outcomes would be moderated by sexual self-disclosure, such that women who report low comfort with sexual self-disclosure and infrequent past sexual

self-disclosure would experience more physical and psychological health benefits compared to women who are comfortable with sexual self-disclosure and who self-disclosed frequently in the past (experimental hypothesis 2; E2).

## CHAPTER 2: METHOD

### Participants

In this study, any woman who self-identified as having an Arab or Chaldean heritage and resided in the United States at the time of the study was eligible. Of note, Chaldean Americans are a Catholic, ethnoreligious group from Iraq, many of whom live in Metro Detroit (Sengstock, 1982). Many Chaldean Americans identify as ethnically distinct from Arab Americans, in part because of their separate religious beliefs and histories. Nonetheless, Chaldeans have many similar cultural traditions and beliefs and share a common geographical origin, and some Chaldean Americans do identify as Arab American as well. Because the distinction between the two groups is ambiguous, and some Chaldeans do identify as Arab American as well, we chose to include women who identified as either Arab or Chaldean American.

Women were recruited from Wayne State University and the community via fliers, the WSU website, word of mouth, and SONA, an online tool used by the Psychology department to recruit students for research. Interested individuals contacted the lab via email or phone and participated in a phone screening to verify their study eligibility. Inclusion criteria were: women, age 18 to 35, and identifies as Arab American or Chaldean. Exclusion criteria included conditions that could interfere with the interview, including non-English speaking.

A total of 181 women were screened, and 47 (26%) of these were excluded from the study because they did not meet study criteria or were not interested in participating. A final sample of 134 women met criteria and were enrolled into the study and randomized (immediate interview,  $n = 91$ ; delayed interview,  $n = 43$ ). As shown in Table 1, the sample was primarily young ( $M$  age = 20.6), unmarried, first-generation Arab- or Chaldean-American women students.

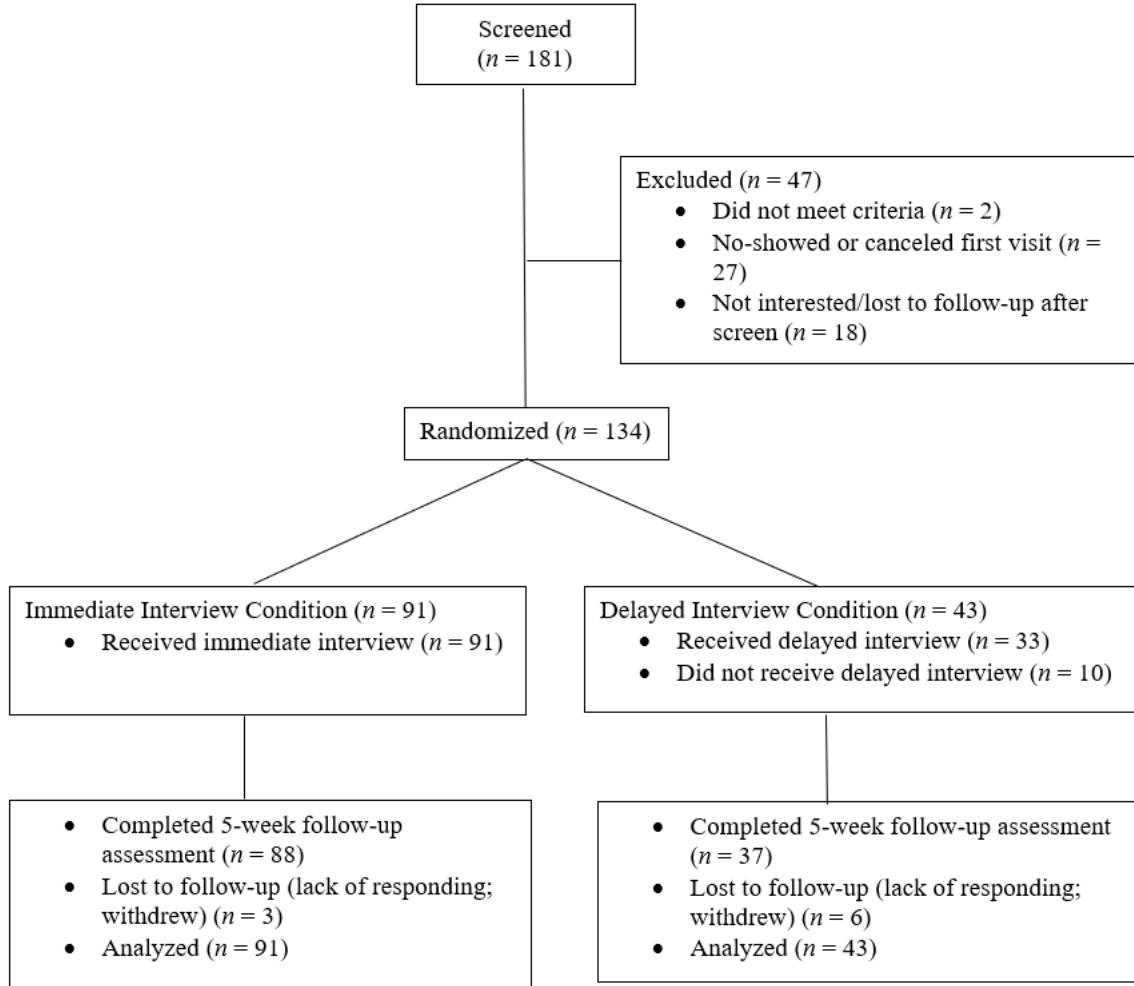
Half the women were Muslim, and 38% were Christian/Catholic. Figure 1 depicts patient flow through the study.

Table 1

*Full Sample Demographic and Background Descriptive Information (N = 134)*

Variable	
Age in years, <i>M (SD)</i>	20.6 (3.0)
Education, <i>M (SD)</i>	13.7 (1.4)
Full-time student, <i>n (%)</i>	91 (68%)
Relationship status	
Never married, <i>n (%)</i>	127 (95%)
Other, <i>n (%)</i>	7 (5%)
Sexual orientation <sup>a</sup>	
Heterosexual, <i>n (%)</i>	114 (91%)
Bisexual, <i>n (%)</i>	7 (6%)
Other	4 (3%)
Past sexual experience <sup>b</sup> , <i>n (%)</i>	71 (57%)
Hijabi <sup>a</sup> , <i>n (%)</i>	34 (27%)
Country of origin <sup>a</sup>	
Iraq, <i>n (%)</i>	48 (38%)
Lebanon, <i>n (%)</i>	38 (30%)
Palestine, <i>n (%)</i>	9 (7%)
Yemen, <i>n (%)</i>	8 (6%)
Syria, <i>n (%)</i>	7 (6%)
Other, <i>n (%)</i>	15 (12%)
Generational status <sup>c</sup>	
Immigrant, <i>n (%)</i>	26 (22%)
1 <sup>st</sup> generation, <i>n (%)</i>	84 (72%)
2 <sup>nd</sup> generation, <i>n (%)</i>	7 (6%)
Religion <sup>a</sup>	
Muslim, <i>n (%)</i>	62 (50%)
Catholic/Christian, <i>n (%)</i>	47 (38%)
Other, <i>n (%)</i>	16 (13%)

<sup>a</sup>*n* = 125; <sup>b</sup>*n* = 124; <sup>c</sup>*n* = 117



*Figure 1.* Patient flow through the study.

## Procedure

Participants were recruited in multiple ways. To recruit students, screening questions to determine eligibility for the study were added to SONA, and eligible, interested students signed up for a timeslot to participate in the study via SONA. Students on SONA who met eligibility criteria were also recruited directly via email. Other potential participants (members of the community or students who are not on SONA) contacted the Stress and Health Lab, and screening was conducted via phone to determine eligibility. During this screening, potential participants were given an overview of the study and were screened for inclusion and exclusion

criteria. If they remained interested and eligible, a time was scheduled for the participant to attend the first session in the laboratory.

At this first session, participants provided written, informed consent, completed baseline questionnaires via Qualtrics, and then were randomized into the immediate interview or delayed interview conditions. Both the interviewer and the participant were blinded to assigned condition until baseline measures were completed. Two-thirds of participants were randomized to participate in the interview immediately, and one-third of participants were randomized to the waitlist condition. Because interviews served not only as an experimental condition, but also provided data, this randomization ratio minimized the occurrence of missing interview data due to attrition, which was expected to be somewhat higher among people assigned to the delayed interview condition. Randomized blocks of 3 and 6 were used to yield conditions of the desired ratio, and randomization was stratified by interviewer to control for interviewer effects. Participants randomized to the interview condition completed their interview at the lab immediately following randomization. Five weeks after randomization, they repeated most baseline measures, plus several measures that assessed satisfaction with and reactions to their interview. Participants assigned to the delayed interview condition completed baseline and follow-up questionnaires at the equivalent time as the immediate interview condition and completed the interview right after the follow-up questionnaires. Thus, all participants had two visits to the lab: one visit at which they completed Qualtrics measures followed by an interview, and another visit at which they completed only Qualtrics measures. Interviews were conducted by one of three women graduate students in clinical psychology. Participants were provided \$15 for completion of each of the baseline and follow-up evaluations, and \$20 for completion of the interview, for a total of \$50 for completion of the entire study. Participants who chose to receive

SONA credits instead of money received 1 credit after each completed questionnaire session and 1.5 credits after the interview, for 3.5 credits total.

**Women's health interview.** The women's health interview was a one-session interview lasting approximately 60 minutes. All interviews were audio-recorded for supervision purposes and so that interview content could be analyzed at a later date, if desired. A licensed clinical psychologist supervised all interviews. The goals of the interview were to gather information about the participant, and to provide an opportunity for disclosure, which might improve subsequent health and openness. The interview provided an assessment of participants' sexual health, including sexual behaviors and attitudes, contraception, pregnancy, and protection against STIs, physical health, psychological health, cultural identity, and stressful experiences including unwanted sexual experiences. Thus, the interview consisted of detailed questions about the participant's culture, stress, and health, with a focus on sexuality. The interview started with questions about general stressors and strengths, culture, and stress and conflicts surrounding sexuality. Then, a detailed health history was obtained, starting with physical and mental health and progressing to questions about sexual health behaviors and attitudes. Throughout the interview, there was a particular focus on learning what conflicts and stressors, especially those related to culture, the participant experienced surrounding her sexual behaviors and attitudes. Metacommunication about the participant's comfort with and concerns about sharing information with the interviewer was used at the beginning of the interview and throughout the interview as needed, to build rapport and increase the participant's willingness to share information about personal, sensitive topics. At the end of the interview, the participant was asked about what she discovered during the interview and her reactions to the interview, and was

provided referrals for follow-up (i.e., sexual assault resources, free or low-cost sexually transmitted infection testing, and mental health referrals).

Participants completed brief measures of mood and physical symptoms immediately before and after the interview was completed, and reactions to the interview were assessed immediately after the interview. The complete women's stress and health interview protocol can be found in the appendix.

**Delayed interview control.** Participants in the delayed interview control condition ended session 1 as soon as they completed baseline questionnaires. Five weeks after randomization, they completed follow-up measures after which they completed the stress and health interview at the same session. This session was scheduled at baseline and participants were sent a reminder notice midway during the 5-week delay to increase the likelihood of participant retention.

## Measures

Because answering some of the sexual health scales could be a form of emotional or stress disclosure, and because giving such measures to all participants at baseline could confound the experimental manipulation, it was decided that the more sensitive, private, and possibly stigmatizing sexuality measures would be given verbally during the interview instead of at baseline. Please see Table 2 for a complete list of measures, as well as the construct measured, when each measure was administered, and which hypotheses it tested.

Table 2

*Measures*

	Measure	Construct	Administered	Hypothesis
Sexual Health Predictors	Sexual Self-Schema Scale (SSSS)	Sexual self-schemas	Baseline	C1
	Sexual Self-Disclosure Scale (SSSD-a)	Discomfort with sexual disclosure	Interview, follow-up	E1, E2
	Sexual Self-Disclosure Scale (SSSD-b)	Previous sexual disclosure	Interview, follow-up	E1, E2
	Female Sexual Function Index (FSFI)	Sexual function	Interview, follow-up	C1
	Sexual Satisfaction Scale for Women (SSS-W)	Sexual satisfaction	Baseline, follow-up	C1
	Sexual Experiences Short Form Victimization (SES-SFV)	Sexual victimization	Interview	C1
Health Outcomes	Patient Health Questionnaire (PHQ-15)	Somatic symptoms	Baseline, Follow-up	C1, E1
	Brief Symptom Inventory (BSI)	Psychological symptoms	Baseline, Follow-up	C1, E1
	Satisfaction with Life Scale (SWLS)	Satisfaction with life	Baseline, Follow-up	C1, E1
Cultural Variables	Vancouver Index of Acculturation (VIA)	Acculturation	Baseline, follow-up	E1
	Bicultural Identity Integration Scale – Version 2 (BIIS-2)	Bicultural identity conflict	Baseline, follow-up	C2
	Right-Wing Authoritarianism – Revised scale	Conservatism	Baseline, follow-up	E1
	Short Social Dominance Orientation scale	Conservatism	Baseline, follow-up	E1

Note: C = Correlational, E = Experimental

### **Sexual Health Predictors**

Because sexuality is a taboo subject in Arab culture, the task of selecting measures of sexuality for this study was a sensitive one. Ghorashi, Merghati-Khoei, and Yousefy (2014) published an expert opinion article in which they discussed the applicability or cultural compatibility of existing sexual behavior measures for use in a context with Iranian women.

Although this does not necessarily generalize beyond Iranian women, it may serve as a helpful starting point from which to select measures, given that no studies of Arab American sexual behaviors exist. Those authors found 19 tools to be applicable in the Iranian culture, 10 to be culturally problematic, and others to be focused on a specific sexual problem rather than looking at sexual behaviors. Measures the authors considered incompatible with Iranian culture were omitted from the present study, in the hopes that this would increase their potential applicability to the Arab American population.

**Sexual self-schemas.** This was assessed using the Sexual Self-Schema Scale (SSSS; Andersen & Cyranowski, 1994). The SSSS is an unobtrusive measure of women's cognitive views about the sexual aspects of themselves, which Andersen and Cyranowski conceptualize as "derived from past experience, manifest in current experience, influential in the processing of sexually relevant social information" and which "guide sexual behavior" (1994, p. 1079). The scale consists of 50 trait adjectives, 26 of which represent aspects of women's sexuality. This measure was given to all participants as a questionnaire at baseline, because it does not appear on its face to be assessing sexuality. Respondents indicated the extent to which each trait describes them on a scale of 0 (*not at all descriptive of me*) to 6 (*very much descriptive of me*). Adjectives fall within three clusters: Passionate-Romantic (Factor 1), Open-Direct (Factor 2), and Embarrassed-Conservative (Factor 3). The three factor scores were produced by summing items, reversing where appropriate. The total sexual self-schema score was calculated by adding Factor 1 and Factor 2, and then subtracting Factor 3, with higher scores indicating a more positive/open sexual self-schema. Andersen and Cyranowski (1994) reported acceptable Cronbach's alpha values for the full scale ( $\alpha = .82$ ), Factor 1 ( $\alpha = .81$ ), Factor 2 ( $\alpha = .77$ ), and Factor 3 ( $\alpha = .66$ ). In this study's sample, reliability was lower but still acceptable for Factor 1 ( $\alpha = .73$ ), Factor 2 ( $\alpha =$

.70), and the full scale ( $\alpha = .72$ ), but reliability for Factor 3 was unacceptably low ( $\alpha = .49$ ). Thus, only the full scale was analyzed in this study.

**Sexual self-disclosure.** Two scales measuring self-disclosure about sexuality will be used: Catania's (2010) Sexual Self-Disclosure Scale (SSDS-a) and Herold and Way's (2010) Sexual Self-Disclosure Scale (SSDS-b). The SSDS-a was administered at baseline and follow-up, and the SSDS-b was administered verbally during the interview. The SSDS-a consists of 19 items that measure the respondent's self-reported ease or difficulty with disclosing information about sexuality in different contexts, including in public or private or in mixed company versus same-sex company, and in a variety of interpersonal contexts, including face-to-face interviews with men or women interviewers of different ages, friends, sexual partners, physicians, and specialists in sexual problems. Responses were rated on a scale of 0 (*extremely easy*) to 6 (*extremely difficult*). A total score was produced by averaging items, with lower scores indicating less threat or discomfort associated with sexual self-disclosure. This scale has good internal reliability in the literature (Catania, 2010;  $\alpha = .93$ ) and in our sample ( $\alpha = .86$ ).

The SSDS-b (Herold & Way, 2010) assesses the degree to which participants report they have disclosed about specific sexual topics (i.e., personal views on sexual morality, premarital sexual intercourse, oral sex, masturbation, sexual thoughts or fantasies, sexual techniques found would find pleasurable, use of contraception, and sexual problems or difficulties one might have) with particular people (i.e., mother, father, friend, and dating partner). The rating scale includes four response options: (1) "Have told the person nothing about this aspect of me"; (2) "Have talked only in general terms about this item"; (3) "Have talked in some detail about this item but have not fully discussed my own attitudes or behaviors"; and (4) "Have talked in complete detail about this item to the other person. He or she knows me fully in this respect." Scores for each

target group were averaged to provide mean self-disclosure scores for each of the target groups separately, and a total SSDS-b score was calculated by averaging self-disclosure scores on all target groups. All subscales show adequate internal consistency in the literature (Herold & Way, 2010;  $\alpha = .71 - .94$ ) and in our sample ( $\alpha = .74 - .96$ ). The mother, father, and partner subscales had non-normal distributions, so only the total sexual self-disclosure score (which was normally distributed) was used.

**Sexual function.** Sexual function was assessed during the interview using the Female Sexual Function Index (FSFI; Rosen et al., 2000). The FSFI consists of 19 items that assess six domains of sexual functioning: desire, subjective arousal, lubrication, orgasm, satisfaction, and pain. Responses are rated on a 5-point scale, with anchor points varying depending on the question (e.g., “Almost never or never” to “Almost always or always,” or “Very low or none at all” to “Very high”). A sixth option (“No sexual activity”) is available for questions that can only be rated when the participant has engaged in sexual activity over the past 4 weeks (e.g., “Over the past 4 weeks, how confident were you about becoming sexually aroused during sexual activity or intercourse?”). This questionnaire was administered verbally during the interview rather than the baseline assessment. Individual domain scores were obtained by summing individual items in the domain and multiplying by a provided domain factor. The full-scale score is obtained by summing the six domain scores. This scale has high internal consistency in the literature ( $\alpha = .89 - .96$ ; Rosen et al., 2000), and in our sample, reliability ranged from acceptable to excellent ( $\alpha = .71 - .97$ ). The FSFI total score and subscales had a variety of problems (e.g., non-normal distributions, skewness, kurtosis) across the whole sample, likely due to relatively large proportion of participants with limited or no sexual experience, as described in the Results section. Thus, the FSFI was excluded from the study.

**Sexual satisfaction.** Participant's sexual satisfaction was assessed during the interview using the Sexual Satisfaction Scale for Women (SSS-W; Meston & Trapnell, 2005). Only the 6-item contentment subscale (e.g., "I feel content with the way my present sex life is") was used among this sample of both partnered and non-partnered women, because it asks general questions that are not dependent on having a partner. Statements are rated on a 5-point scale, ranging from "Strongly disagree" to Strongly agree" and from "Not at all satisfactory" to "Completely satisfactory." This scale had adequate internal reliability in the literature (Meston & Trapnell;  $\alpha = .83$ ), and reliability was nearly identical in our sample ( $\alpha = .84$ ).

**Consensual sexual experience.** Sexual experience was defined in this study as any consensual partnered sexual activity. Participants were asked during the interview whether they had engaged in four categories of sexual activity: non-intercourse sexual contact (e.g., manual stimulation), oral sex, vaginal sex, and anal sex. Participants who indicated they had engaged in at least one of these activities were coded as 1 (past consensual sexual experience), and women who had not were coded 0 (no past consensual experience. sexual experience).

**Unwanted sexual experiences.** The Sexual Experiences Scale – Short Form Victimization (SES-SFV; Koss et al., 2007) is a 7-item measure of frequency of unwanted sexual victimization over one's lifetime. The SES-SFV also assesses tactics used during the victimization experience (e.g., telling lies, using force, etc.). Participants completed this measure on paper during the interview. Frequencies across all items (types of unwanted sexual experiences) were summed to obtain a total unwanted sexual experience score. This scale has adequate internal reliability, with Cronbach's alpha typically in the low .70s (Cecil & Matson, 2006). Reliability was adequate in this sample ( $\alpha = .79$ ).

## Health Outcomes

Measures of health outcomes, including somatic symptoms, psychological symptoms, and satisfaction with life, were assessed via questionnaire at baseline and follow-up rather than during the interview.

**Somatic symptoms.** This was measured using the 15-item Patient Health Questionnaire (PHQ-15; Kroenke, Spitzer, & Williams, 2002). This questionnaire examines to what extent individuals are bothered by somatic symptoms such as headaches, dizziness, and shortness of breath), rated on a scale of 0 (*not bothered at all*) to 2 (*bothered a lot*). Items were averaged to create a total score, with higher scores indicating more somatic symptom distress. The PHQ-15 has good internal reliability in past research (Kroenke, Spitzer, & Williams;  $\alpha = .80$ ). Reliability was similar in our sample ( $\alpha = .77$ ).

**Psychological symptoms.** Participants completed the 53-item Brief Symptom Inventory (BSI; Derogatis, 1983), which is an abbreviated version of the Symptom Checklist 90 (SCL-90) and is used to assess a person's general emotional, behavioral, and interpersonal functioning. Participants were asked to rate how much discomfort each item had caused over the last 2 weeks. The items are rated on a scale of 0 (*not at all*) to 4 (*extremely*). Items from the depression and anxiety subscales were averaged to create a measure of psychological symptoms. Consistent with reliability reported in the literature (Derogatis, 1983), this combined depression and anxiety scale had good reliability in our sample ( $\alpha = .91$ ).

**Satisfaction with life.** This was measured using the Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985), which is a 5-item measure of global life satisfaction (e.g., "The conditions of my life are excellent"). Items are rated on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). Items were averaged to produce a total score, with higher scores

indicating higher levels of global life satisfaction. This scale has good internal reliability in past research ( $\alpha = .87$ ) and in our sample ( $\alpha = .84$ ).

### Cultural Variables

**Acculturation.** The Vancouver Index of Acculturation (VIA) was developed by Ryder, Alden, and Paulhus (2000) to measure mainstream and heritage acculturation independently. The scale consists of 20 statements rated on a scale of 1 (*strongly disagree*) to 9 (*strongly agree*). Ten of the statements relate to the respondent's heritage ("I often participate in my heritage cultural traditions"), and ten relate to the respondent's mainstream culture ("I often participate in mainstream American cultural traditions"). The VIA subscales (Heritage dimension and Mainstream dimension) have been shown to be reliable in Chinese ( $\alpha = .91, .89$ ), East Asian ( $\alpha = .92, .85$ ), and miscellaneous ( $\alpha = .91, .87$ ) samples (Ryder et al., 2000). In our sample, the heritage subscale had excellent reliability ( $\alpha = .91$ ) and the mainstream (American) subscale had good reliability ( $\alpha = .82$ ) after dropping one item that negatively impacted subscale reliability in this sample ("I would be willing to marry an American person."). The VIA Heritage subscale was positively skewed in our sample. The skew was reduced with square root transformation; however, sensitivity analyses indicated that regression outcomes were virtually unchanged when the transformed VIA Heritage variable was entered as a covariate rather than the original variable. Therefore, the original VIA Heritage variable was used in all analyses.

**Bicultural identity integration.** Bicultural identity integration was measured using the Bicultural Identity Integration Scale – Version 2 (BIIS-2; Huynh, 2009). The BIIS-2 is a 19-item measure of bicultural identity integration (BII), which is "the degree to which bicultural individuals see their identities as compatible and integrated (high BII) or as oppositional and difficult to integrate (low BII)" (Huynh, 2009, p. 3). The BIIS-2 consists of two subscales

reflecting two related but conceptually distinct components of bicultural identity integration: harmony versus conflict (e.g., “I am conflicted between the Arab/Chaldean and American ways of doing things”), and blendedness versus compartmentalization (e.g., “I feel Arab/Chaldean and American at the same time”). Participants were asked to rate their agreement with each item on a scale of 1 (*strongly agree*) to 5 (*strongly agree*). This study was validated on an ethnically diverse sample, and both the cultural harmony ( $\alpha = .86$ ) and cultural blendedness ( $\alpha = .81$ ) had good reliability. In our sample, both cultural harmony ( $\alpha = .89$ ) and cultural blendedness ( $\alpha = .85$ ) had good reliability after dropping one item that reduced the scale’s reliability (i.e., “I am simply an Arab/Chaldean who lives in North America”).

The BIIS-2 was intended to be a baseline measure, but it was inadvertently omitted from the baseline set of questionnaires at the beginning of the study. When this was discovered during data collection, the BIIS-2 was added to both the baseline and follow-up questionnaires to capture the maximum number of participants before they completed the study. Participants who had already completed baseline and follow-up questionnaires were contacted by email and asked to complete the BIIS-2 as a stand-alone measure. Because the BIIS was intended to capture bicultural identity integration at baseline, variables called “BIIS Harmony Best” and “BIIS Blendedness Best” were created for use in analyses, which used best available data for each participant (i.e., baseline data if available, then follow-up data if only that was available, and then stand-alone measure administered after completion of the study). These “best” variables correlated highly with baseline and follow-up BIIS data.

**Conservatism.** Conservative attitudes and beliefs were assessed using the conservatism subscale on the Right-Wing Authoritarianism – Revised scale (RWA-R; Rattazzi, Bobbio, & Canova, 2007). The RWA-R is a 21-item measure of right-wing authoritarianism, which

involves willingness to submit to authorities, adherence to social conventions and norms, and hostile attitudes toward people who do not adhere to norms. The RWA-R consists of two subscales, authoritarian aggression and submission (i.e., “Obedience and respect for authority are the most important values children should learn”) and conservatism (i.e., “There is nothing wrong with premarital sexual intercourse”). Items are rated on a scale of 1 (*totally disagree*) to 7 (*totally agree*). Subscale and total scores were obtained by averaging scores for items, reversing where appropriate. Both subscales and the total scale have adequate internal reliability in past research (Rattazzi et al., 2007;  $\alpha = .72 - .77$ ). The conservatism subscale, which is the only subscale that was analyzed in this study, had good reliability in this sample ( $\alpha = .85$ ).

### **Statistical Analyses**

Data were entered into SPSS version 24 and examined for accuracy and outliers. Because many of the measures had not been used on an Arab/Chaldean American population, inter-item correlations were examined to determine whether any items should be dropped from scales to improve reliability. Such changes are described in the above Measures section. Outlier values (i.e., values outside -3.29 to +3.29 SD) were winsorized by replacing the outlier values with the value at -3.29 or 3.29 SD. Skewed variables (i.e., VIA, SSDS-b, FFSI) were addressed as described in the Measures section. All missing baseline and follow-up data, as well as missing data from the “best” bicultural identity integration subscales, were imputed using the expectation-maximization method. Missing data on past sexual experience were imputed using regression, with baseline psychological and somatic symptoms, sexual health, and cultural variables entered as predictors. To verify that randomization worked properly, demographics and baseline measures were compared between the two experimental conditions (immediate interview vs. delayed interview control) using t-tests and Chi-squares.

### **Correlational Hypotheses**

Correlational analyses were performed on baseline measures of all 134 participants. Data collected during the interview (i.e., past sexual victimization, consensual sexual experience) were also used in some analyses. To test correlational hypotheses about baseline predictors (C1), bivariate correlations were used to test the association between covariate and potential moderator variables (i.e., acculturation, conservatism, and bicultural identity integration) and somatic and psychological symptoms, sexual health (i.e., sexual satisfaction, sexual self-esteem, sexual self-schema, and past sexual victimization), and satisfaction with life. All significant correlations that included sexual health variables were also tested in linear regressions that covaried past consensual sexual experience (dichotomous yes/no variable).

Bicultural identity harmony and conflict were tested as potential moderators of the relationship between sexual health and health outcomes (C2) using Hayes' (2013) PROCESS macro to conduct moderation analyses (MODEL 1). To test for significance of effects, 95% bias-corrected bootstrapped confidence intervals based on 1,000 bootstrapped samples were obtained. Significant and marginally significant interactions were probed by testing the conditional effects of the predictor at three levels of the moderator – one standard deviation below the mean, at the mean, and one standard deviation above the mean – and by testing the conditional effects of the moderator at the same three levels of the predictor. Significant and marginally significant interactions were further illustrated by plotting the interaction. Non-hypothesized potential moderators were conducted in the same manner described above.

### **Experimental Hypotheses**

To test effects of the interview on somatic symptoms, psychological symptoms, satisfaction with life, and comfort with discussing sexual health (E1), an analysis of covariance

(ANCOVA) were used to assess between-condition differences from baseline to follow-up, with baseline levels of each outcome measure (somatic symptoms, psychological symptoms, satisfaction with life, and comfort with discussing sexual health) as the covariate. Within-condition, paired t-tests determined how each condition changed over time. Between-condition effect sizes were calculated by subtracting baseline mean from follow-up mean, and dividing this by baseline standard deviation.

To test for moderation effects of discomfort with sexual self-disclosure (SSDS<sub>a</sub>) and past sexual self-disclosure (SSDS<sub>b</sub>) on somatic symptoms, psychological symptoms, and satisfaction with life (E2), Hayes' (2013) PROCESS macro was used to conduct moderation analyses (MODEL 1). To test for significance of effects, 95% bias-corrected bootstrapped confidence intervals based on 1,000 bootstrapped samples were obtained. Significant and marginally significant interactions were probed by testing the conditional effects of the predictor at three levels of the moderator – one standard deviation below the mean, at the mean, and one standard deviation above the mean – and by testing the conditional effects of the moderator at the same three levels of the predictor. Significant and marginally significant interactions were further illustrated by plotting the interaction.

## CHAPTER 3: RESULTS

### Sample Description

Most women (57%) reported some past consensual sexual experience, which was defined in this study as any consensual partnered sexual activity (i.e., non-intercourse sexual contact such as manual stimulation, oral sex, vaginal sex, or anal sex). Most participants (91%) identified as heterosexual; 6% identified as bisexual, and another 3% identified as “other” (e.g., pansexual, demisexual, asexual). Most participants (67%) reported no past unwanted sexual experiences on the Sexual Experiences Scale – Short Form Victimization; the other 33% reported unwanted sexual experiences including verbal and physical sexual coercion, molestation, and rape. A vast majority of participants (95%) had never been married; the other 5% percent were married ( $n = 3$ ), living with a partner in a committed relationship ( $n = 2$ ), or separated/divorced ( $n = 2$ ). Most participants (69%) had had at least one romantic partner in the past. Over half of participants (55%) reported that they had never discussed their sexual health with a physician.

Means, standard deviations, ranges, and Cronbach’s alphas for all baseline measures are presented in Table 3. Overall, participants reported relatively few health problems. As seen in Table 3, mean somatic and psychological symptom scores were low relative to the range of scores, and the mean life satisfaction score was relatively high. The most commonly endorsed physical problems were headaches (14%), migraines (10%), asthma (10%), polycystic ovarian syndrome (4%), and irritable bowel syndrome (3%). At baseline, most participants (66%) reported no alcohol use over the past 4 weeks. Of the 44% of participants who reported alcohol use in the past 4 weeks, most (57%) denied any episodes of binge drinking (i.e., four or more drinks within a 2-hour period). Most participants (84%) reported no tobacco use; 4% reported daily tobacco use, and 12% reported tobacco use less than daily.

Table 3

*Sample Baseline Measure Descriptive Information (N = 134)*

Baseline Measure	Mean (SD)	Min.	Max.	Alpha
Patient Health Questionnaire 15	7.14 (4.44)	0.00	21.00	.78
Brief Symptom Inventory – Depression/Anxiety	0.91 (0.80)	0.00	3.42	.91
Satisfaction with Life Scale	4.18 (1.30)	1.0	6.6	.84
Sexual Satisfaction Scale for Women – Contentment	18.38 (3.06)	6.00	25.00	.79
Sexual Self-Schema Scale – Total	56.27 (10.27)	33.00	84.00	.72
Sexual Self-Esteem Inventory – Total	4.06 (0.75)	1.92	5.94	.75
Sexual Experiences Scale – Short Form Victimization	1.30 (2.55)	0.00	13.00	--
Vancouver Index of Acculturation – American	7.09 (1.22)	3.56	8.89	.91
Vancouver Index of Acculturation – Heritage	7.48 (1.47)	2.51	9.00	.82
Right Wing Authoritarianism – Conservatism	3.47 (1.30)	1.00	6.71	.85
Bicultural Identity Integration – Harmony	3.28 (0.90)	1.18	5.00	.89
Bicultural Identity Integration – Blendedness	3.91 (0.72)	1.86	5.00	.85
Past consensual sexual experience (n, % yes)	77 (57.5%)	--	--	--

### Correlational

First, covariate and potential moderator variables were tested as correlates of somatic and psychological symptoms, sexual health, and satisfaction with life. All significant correlations that included sexual health variables were then tested in linear regressions that covaried sexual experience (dichotomous yes/no variable). Table 4 presents correlations among baseline physical, psychological, and sexual health variables. Correlations among baseline culture and sexuality variables that were tested as covariate and potential moderator variables are presented in Table 5. Correlations between baseline culture and sexuality and health variables are presented in Table 6.

Table 4

*Correlations among Baseline Physical, Psychological, and Sexual Health Variables (N = 134)*

	BSI	SWLS	SSSW	SSS	SSEI	SES-SFV
PHQ-15	.58**	-.29**	.04	.16	-.23**	.24**
BSI		-.51**	-.09	.04	-.46**	.22**
SWLS			.02	.11	.33**	-.15
SSSW				-.04	-.22**	-.05
SSS					.29**	.14
SSEI						-.28**

\* $p < .05$ ; \*\* $p < .01$ 

Note: PHQ-15 = Patient Health Questionnaire – 15; BSI = Brief Symptom Inventory; SWLS = Satisfaction with Life Scale; SSSW = Sexual Satisfaction Scale for Women, Contentment subscale; SSS = Sexual Self-Schema Scale; SSEI = Sexual Self-Esteem Inventory; SES-SFV = Sexual Experiences Scale – Short Form Victimization

Table 5

*Correlations among Baseline Culture and Sexuality Variables Tested as Covariates and Moderators (N = 134)*

	VIA Heritage	RWA	BII Harmony	BII Blend	Sex experience	Discomfort with SSD
VIA American	.40**	.08	.15	.22**	.01	-.04
VIA Heritage		.35**	-.26**	.26**	-.28**	-.07
RWA			.12	-.05	-.26**	.24**
BII Harmony				-.14	-.15	-.08
BII Blend					-.10	-.15
Sex experience						-.09

\* $p < .05$ ; \*\* $p < .01$ 

Note: VIA American = Vancouver Index of Acculturation, American subscale; VIA Heritage = Vancouver Index of Acculturation, Heritage subscale; RWA = Right Wing Authoritarianism, Conservatism subscale; BII Harmony = Bicultural Identity Integration Scale, Harmony subscale; BII Blend = Bicultural Identity Integration Scale, Blendedness subscale; Discomfort with SSD = Discomfort with sexual self-disclosure; Sex experience = Past consensual sexual experience (dichotomous variable; 0 = No, 1 = Yes).

Table 6

*Correlations between Baseline Culture and Sexuality and Health Variables*

	PHQ-15	BSI	SWLS	SSSW	SSS	SSEI	SES-SFV
VIA American	-.13	-.29**	.23**	.01	.06	.10	-.07
VIA Heritage	-.19*	-.26**	.32**	-.10	.03	-.03	-.06
RWA	.04	-.07	.17	.00	-.11	-.19*	.06
BII Harmony	-.21*	-.32**	.21*	.11	.09	.20*	-.18*
BII Blendedness	-.05	-.11	.19*	-.10	.18*	.10	.03
Sex experience	.17*	.12	-.09	.16	.17	.15	.18*

\* $p < .05$ ; \*\* $p < .01$

Note: PHQ-15 = Patient Health Questionnaire – 15; BSI = Brief Symptom Inventory; SWLS = Satisfaction with Life Scale; SSSW = Sexual Satisfaction Scale for Women, Contentment subscale; SSS = Sexual Self-Schema Scale; SSEI = Sexual Self-Esteem Inventory; SES-SFV = Sexual Experiences Scale – Short Form Victimization; VIA American = Vancouver Index of Acculturation, American subscale; VIA Heritage = Vancouver Index of Acculturation, Heritage subscale; RWA = Right Wing Authoritarianism, Conservatism subscale; BII Harmony = Bicultural Identity Integration Scale, Harmony subscale; BII Blend = Bicultural Identity Integration Scale, Blendedness subscale; Sex experience = Past consensual sexual experience (dichotomous variable).

American acculturation and heritage acculturation correlated negatively with psychological symptoms ( $r = -.29, p = .001$ ;  $r = -.26, p = .003$ , respectively) and positively with satisfaction with life ( $r = .23, p = .01$ ;  $r = .32, p < .001$ , respectively). Only heritage acculturation, but not American acculturation, correlated negatively with somatic symptoms ( $r = -.19, p = .03$ ). Acculturation did not correlate with any sexual health variables.

Conservatism was not associated with somatic or psychological symptoms or satisfaction with life, but it did correlate positively with discomfort with sexual self-disclosure ( $r = .24, p = .01$ ) and negatively with sexual self-esteem ( $r = -.19, p = .03$ ), and the relationship between conservatism and discomfort with sexual self-disclosure remained significant even after controlling for past sexual experience ( $\beta = .23, p = .01$ ). The relationship between conservatism and sexual self-esteem fell to marginally significant after covarying past sexual experience ( $\beta = -.16, p = .07$ ).

Bicultural identity harmony correlated negatively with somatic symptoms ( $r = -.21, p = .01$ ) and psychological symptoms ( $r = -.32, p < .001$ ) and positively with satisfaction with life ( $r = .21, p = .02$ ). Harmony also correlated positively with sexual self-esteem ( $r = .20, p = .02$ ), and it remained significant after controlling for past sexual experience ( $\beta = .23, p = .01$ ). Because both bicultural identity harmony and sexual self-esteem correlate strongly with psychological symptoms, psychological symptoms were included as a covariate as well. After psychological symptoms were added, harmony no longer correlated with sexual self-esteem ( $\beta = .09, p = .26$ ). Harmony did not correlate with any other sexual health variables.

Finally, bicultural identity blendedness did not correlate with somatic or psychological symptoms, but it did correlate positively with satisfaction with life ( $r = .19, p = .03$ ). Blendedness correlated positively with positive sexual self-schema ( $r = .18, p = .04$ ), and this relationship remained significant after controlling for past sexual experience ( $\beta = .19, p = .02$ ). Blendedness did not correlate with any other sexual health variables.

**Hypothesis 1.** The first correlational hypothesis was that lower sexual well-being, negative sexual self-schemas, and history of unwanted sexual experiences would correlate cross-sectionally with poorer physical and psychological health (depressive, anxiety, and somatic symptoms) and lower satisfaction with life, beyond the effects of cultural and demographic variables, including acculturation, conservatism, age, and sexual experience. As detailed below, regression analyses indicated that all four sexual health variables – sexual satisfaction, sexual self-esteem, sexual self-schema, and unwanted sexual experiences – correlated with at least one health variable after controlling for acculturation, conservatism, age, and sexual experience (see Table 7).

In zero-order correlations, sexual satisfaction did not correlate with somatic symptoms, psychological symptoms, or satisfaction with life. However, after controlling for acculturation, conservatism, age, and sexual experience, sexual satisfaction was a marginally significant negative correlate of psychological symptoms ( $\beta = -.15, p = .07$ ).

Sexual self-esteem correlated inversely with somatic symptoms ( $r = -.23, p = .007$ ) and psychological symptoms ( $r = -.46, p < .001$ ) and positively with satisfaction with life ( $r = .33, p < .001$ ) in zero-order correlations. Sexual self-esteem remained a significant correlate of somatic symptoms ( $\beta = -.24, p = .006$ ), psychological symptoms ( $\beta = -.48, p < .001$ ) and satisfaction with life ( $\beta = .36, p < .001$ ) beyond the effects of acculturation, conservatism, age, and sexual experience.

In zero-order correlations, sexual self-schema correlated positively, but only at a marginally significant level, with somatic symptoms ( $r = .16, p = .07$ ). After controlling for acculturation, conservatism, age, and sexual experience, sexual self-schema was a significant correlate of somatic symptoms ( $\beta = .19, p = .03$ ). Sexual self-schema did not correlate with psychological symptoms or satisfaction with life.

Unwanted sexual experiences correlated positively with somatic symptoms ( $r = .24, p = .005$ ) and psychological symptoms ( $r = .22, p = .01$ ) and marginally correlated negatively ( $r = -.15, p = .08$ ) with satisfaction with life. Unwanted sexual experiences remained a correlate of somatic symptoms ( $\beta = .19, p = .03$ ) and psychological symptoms ( $\beta = .18, p = .03$ ), but not satisfaction with life, while controlling for acculturation, conservatism, age, and sexual experience.

Table 7

*Regression Results from Correlational Study (N = 134)*

Sexual Health Variable	Somatic Symptoms		Psychological Symptoms		Satisfaction with Life	
	$\beta$	p	$\beta$	p	$\beta$	p
Sexual Satisfaction	-0.04	.67	-0.15	.07	0.04	.61
Sexual Self-Schema	0.19	.03	0.06	.71	0.12	.16
Sexual Self-Esteem	-0.24	.006	-0.48	< .001	0.36	< .001
Unwanted Sexual Experiences	0.19	.03	0.18	.03	-0.14	.10

Note:  $\beta$  reflects results after controlling for acculturation, conservatism, age, and sexual experience.

**Hypothesis 2.** The second correlational hypothesis was that bicultural identity conflict would moderate the relationships between sexual health (lower sexual well-being, negative sexual self-schemas, and history of unwanted sexual experiences) and physical and psychological health (depressive and anxiety symptoms) and lower satisfaction with life, such that among women with identity conflict, lower sexual well-being, negative self-schemas, and unwanted sexual experiences will be more strongly associated with symptoms and lower life satisfaction, than found among women with little identity conflict. Past consensual sexual experience was covaried in moderator analyses to remain consistent with primary correlational analyses. Bicultural identity blendedness moderated one relationship, but only at a marginally significant level. Bicultural identity harmony significantly moderated one relationship and moderated one additional relationship at a marginally significant level. These results are detailed below and presented in Table 8.

Table 8

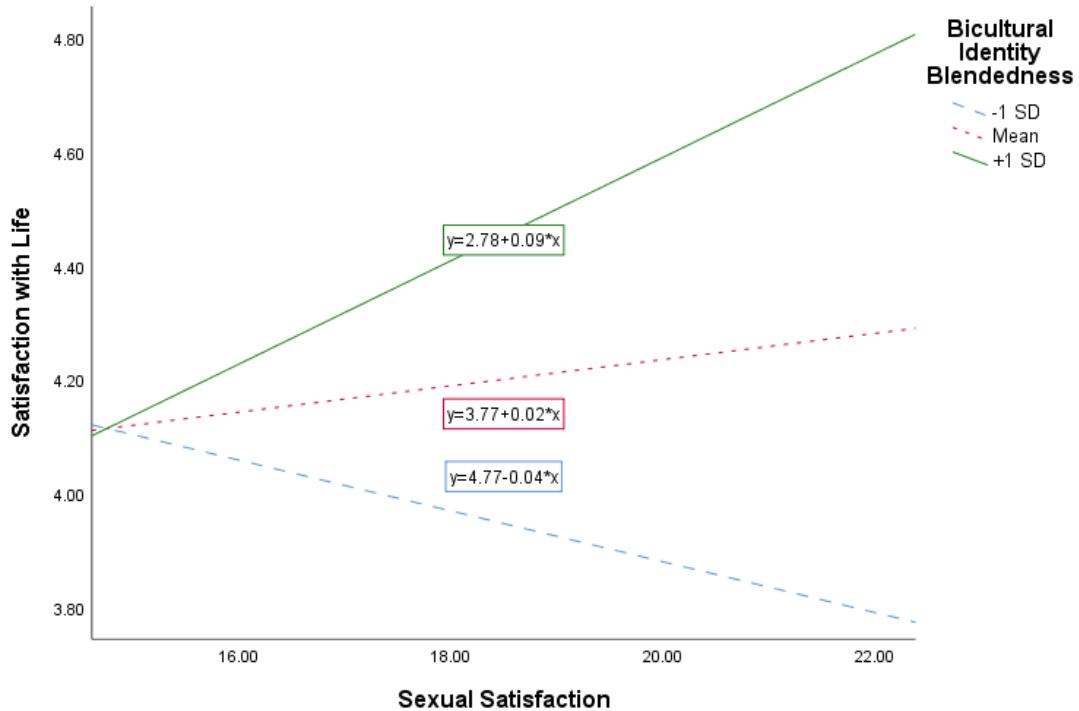
*Bicultural Identity Harmony and Bicultural Identity Blendedness as Moderators of the Relationship between Sexual Health Predictors and Somatic Symptoms, Psychological Symptoms, and Satisfaction with Life (n = 134)*

Interaction Term	Outcome					
	Somatic Symptoms		Psychological Symptoms		Satisfaction with Life	
	$\beta$	p	$\beta$	p	$\beta$	p
Harmony x Sexual Satisfaction	-0.11	.43	-0.03	.51	0.02	.67
Harmony x Sexual Self-Schema	0.00	1.00	0.00	.87	-0.01	.39
Harmony x Sexual Self-Esteem	-0.70	.24	-0.01	.90	-0.06	.72
Harmony x Unwanted Sexual Experiences	-0.39	.04	-0.05	.12	0.11	.05
Blendedness x Sexual Satisfaction	-0.20	.27	-0.02	.62	0.09	.07
Blendedness x Sexual Self-Schema	-0.02	.72	0.00	.85	0.00	.87
Blendedness x Sexual Self-Esteem	-0.67	.35	-0.05	.66	0.11	.60
Blendedness x Unwanted Sexual Experiences	-0.04	.88	-0.06	.17	0.03	.70

*Note:* Past consensual sexual experience was covaried in these analyses.

Bicultural identity blendedness was a marginally significant moderator of the relationship between sexual satisfaction and satisfaction with life while controlling for past consensual sexual experience (interaction term:  $\beta = 0.09$ ,  $p = .07$ ). The interaction was probed by testing the conditional effects of sexual satisfaction on satisfaction with life at three levels of bicultural identity blendedness – one standard deviation below the mean, at the mean, and one standard deviation above the mean. As shown in Figure 1, among women with high bicultural identity blendedness, there was a marginally significant positive correlation between sexual satisfaction and satisfaction with life ( $\beta = 0.09$ ,  $p = .09$ ), but there was no relationship between sexual satisfaction and satisfaction with life among women with mean or low levels of bicultural identity blendedness. The interaction was further probed by testing the conditional effects of bicultural identity blendedness on three levels of sexual satisfaction, in the same way as described above. There was a significant positive relationship between bicultural identity blendedness and satisfaction with life among women with mean ( $\beta = 0.63$ ,  $p = .01$ ) or high (+1 SD above mean;  $\beta = 0.34$ ,  $p = .03$ ) levels of sexual satisfaction, but there was no relationship

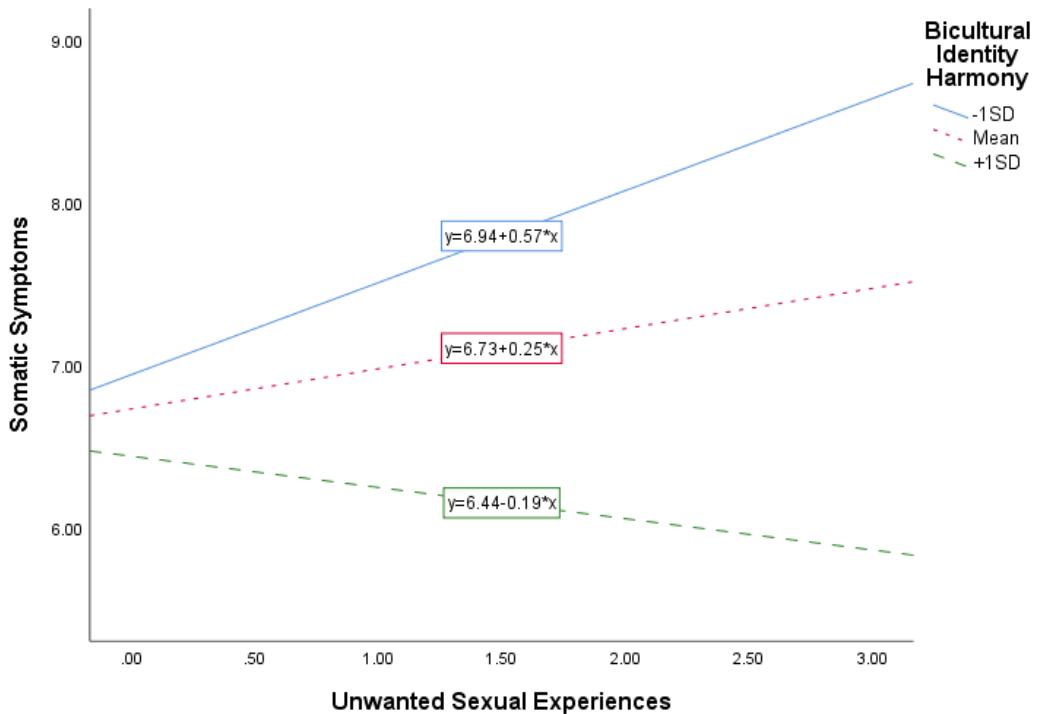
between bicultural identity blendedness and satisfaction with life among women with low sexual satisfaction (see Figure 2).



*Figure 2.* Bicultural identity blendedness marginally moderates the relationship between sexual satisfaction and satisfaction with life.

Bicultural identity harmony was a significant moderator of the relationship between unwanted sexual experiences and somatic symptoms while controlling for past consensual sexual experience (interaction term:  $\beta = -0.39$ ,  $p = .04$ ). The interaction was probed by testing the conditional effects of unwanted sexual experiences on somatic symptoms at three levels of bicultural identity harmony. As shown in Figure 3, among women with low bicultural identity harmony, there was a significant positive correlation between unwanted sexual experiences and somatic symptoms ( $\beta = 0.57$ ,  $p = .002$ ), but there was no relationship between unwanted sexual experiences and somatic symptoms among women with mean or high levels of bicultural identity harmony. The interaction was further probed by testing the conditional effects of bicultural

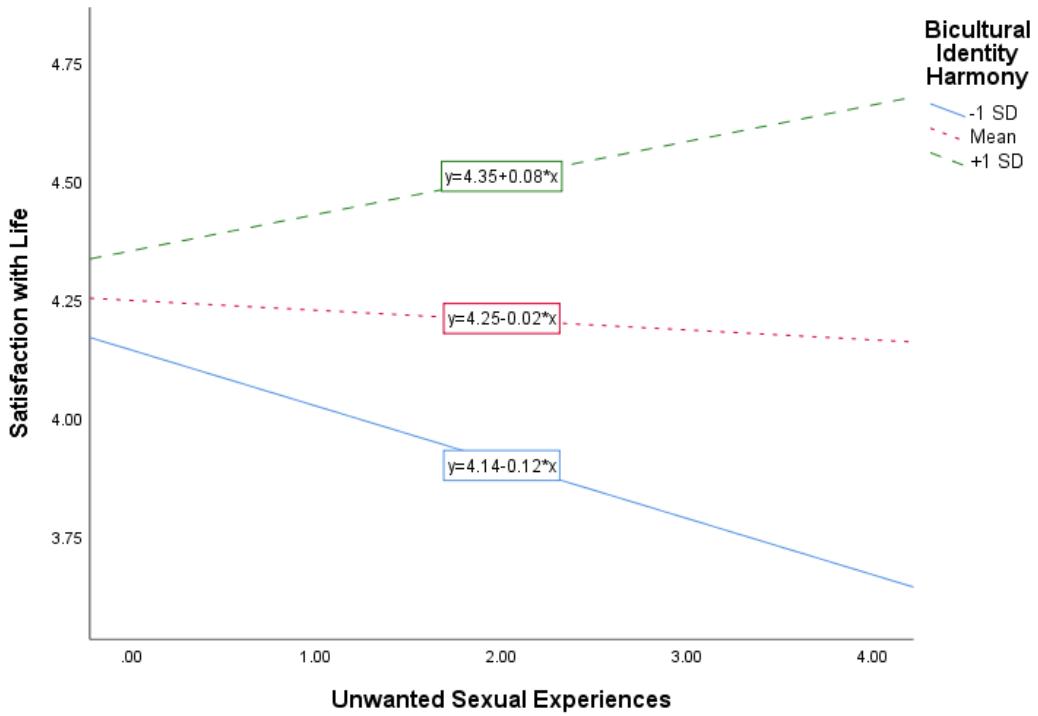
identity harmony on somatic symptoms at three levels of unwanted sexual experiences, in the same way as described above. There was a significant negative relationship between bicultural harmony and somatic symptoms only among women with high (+1SD above mean;  $\beta = -1.43$ ,  $p = .006$ ) amounts of unwanted sexual experiences, but there was no relationship between somatic symptoms and bicultural harmony among women who reported no past unwanted sexual experiences (see Figure 3).



*Figure 3.* Bicultural identity harmony moderates the relationship between unwanted sexual experiences and somatic symptoms.

Bicultural identity harmony also marginally significantly moderated the relationship between unwanted sexual experiences and satisfaction with life (interaction term:  $\beta = 0.11$ ,  $p = .05$ ). The interaction was probed by testing the conditional effects of unwanted sexual experiences on satisfaction with life at three levels of bicultural identity harmony. As shown in Figure 3, among women with low bicultural identity harmony, there was a significant negative correlation between unwanted sexual experiences and satisfaction with life ( $\beta = -0.12$ ,  $p = .03$ ),

but there was no relationship between unwanted sexual experiences and somatic symptoms among women with mean or high levels of bicultural identity harmony. The interaction was further probed by testing the conditional effects of bicultural identity harmony on somatic symptoms at three levels of unwanted sexual experiences, in the same way as described above. There was a significant positive relationship between bicultural harmony and satisfaction with life only among women with mean ( $\beta = 0.26, p = .04$ ) and high (+1SD above mean;  $\beta = 0.53, p = .005$ ) amounts of unwanted sexual experiences, but there was no relationship between bicultural harmony and satisfaction with life among women who reported no past unwanted sexual experiences (see Figure 4).



*Figure 4.* Bicultural identity harmony marginally moderates the relationship between unwanted sexual experiences and satisfaction with life.

## Experimental

The two conditions did not differ significantly on demographics or baseline levels of any outcome measures (see Table 9), indicating that randomization created equivalent conditions, as intended. The 125 participants who completed the study differed significantly from the 9 non-completers (lost to follow-up) on baseline heritage acculturation ( $t[123] = -2.30, p = .02$ ) and on baseline sexual satisfaction ( $t[123] = 2.24, p = .03$ ). Specifically, completers reported higher heritage acculturation ( $M = 7.56, SD = 1.32$ ) and lower sexual satisfaction ( $M = 18.22, SD = 3.08$ ) compared to non-completers ( $M = 6.41, SD = 2.80$  and  $M = 20.56, SD = 1.81$ , respectively). The two groups did not differ at baseline on any other predictor, moderator, or outcome measure. Chi-square analyses indicated equivalence between the two groups (i.e., participants who did and did not complete the study) on all other demographic measures.

Table 9

*Comparison of Conditions on Demographic Measures at Baseline (N = 134)*

Variable	Immediate Interview (n = 91)	Delayed Interview (n = 43)	t / X <sup>2</sup>	p
Age in years, M (SD)	20.8 (3.3)	20.2 (2.3)	0.96	.34
Education, M (SD)	13.7 (1.4)	13.5 (1.3)	0.91	.36
Full-time student, n (%)	60 (66%)	31 (72%)	0.51	.48
Relationship status			0.04	.84
Never married, n (%)	86 (95%)	41 (95%)		
Other, n (%)	5 (5%)	2 (5%)		
Sexual orientation <sup>a</sup>			0.00	1.00
Heterosexual, n (%)	83 (91%)	31 (91%)		
Bisexual, n (%)	6 (7%)	1 (3%)		
Other	2 (2%)	2 (6%)		
Past sexual experience <sup>b</sup> , n (%)	52 (57%)	19 (58%)	0.00	.97
Hijabi <sup>a</sup> , n (%)	28 (31%)	6 (18%)	2.15	.14
Country of origin <sup>a</sup>			1.48	.48
Iraq, n (%)	32 (35%)	16 (47%)		
Lebanon, n (%)	29 (32%)	9 (27%)		
Palestine, n (%)	8 (9%)	1 (3%)		
Yemen, n (%)	7 (8%)	1 (3%)		
Syria, n (%)	5 (6%)	2 (6%)		
Other, n (%)	10 (11%)	5 (15%)		
Generational status <sup>c</sup>			1.37	.24
Immigrant, n (%)	20 (24%)	6 (18%)		
1 <sup>st</sup> generation, n (%)	57 (69%)	27 (79%)		
2 <sup>nd</sup> generation, n (%)	6 (7%)	1 (3%)		
Religion <sup>a</sup>			2.41	.12
Muslim, n (%)	49 (54%)	13 (38%)		
Catholic/Christian, n (%)	30 (33%)	17 (50%)		
Other, n (%)	12 (13%)	4 (12%)		

<sup>a</sup>n = 125; <sup>b</sup>n = 124; <sup>c</sup>n = 117

Note: All tests were two-tailed. Chi-square test for sexual orientation compared Heterosexual with Bisexual and Other combined. Condition equivalence for country of origin was determined by comparing Iraq, Lebanon, and all other countries combined in a 2x3 Chi-square test. Chi-square test for generational status compared 1<sup>st</sup> generation with Immigrant and 2<sup>nd</sup> generation combined. Chi-square test for religion compared Muslim with Catholic/Christian and Other combined. Other relationship status includes married, separated, divorced, and living with partner in a committed relationship; other sexual orientation includes asexual, pansexual, demisexual, bicurious, and “no label”; other religion includes agnostic, atheist, non-religious, and non-practicing.

### Main Effects of Interview

Table 10 presents the means and standard deviations for each outcome measure by condition at baseline and 5-week follow-up, the baseline-adjusted means and standard errors at follow-up, results of the ANCOVAs comparing conditions, and effect sizes for between-condition comparisons. All of the outcomes showed numerical superiority for the Interview condition (except psychological symptoms, which was equivalent between conditions). However, only one variable reached statistical significance, and another was marginally significant. Women in the immediate interview condition reported significantly greater follow-up sexual satisfaction ( $F(1, 131) = 4.82, p = .03$ ) and marginally less follow-up discomfort with sexual self-disclosure ( $F(1, 131) = 3.80, p = .053$ ) compared to women in the delayed interview condition. The two conditions did not differ significantly on follow-up somatic symptoms, psychological symptoms, satisfaction with life, sexual self-esteem, sexual self-schema, or discomfort with sexual self-disclosure to medical providers.

Table 10

*Comparison of immediate and delayed interview conditions on outcomes from baseline to 5-week follow-up, between-condition analyses of covariance, and between-condition effect sizes*

Outcome Measures	Time point	Immediate Interview (n = 91)	Delayed Interview (n = 43)	ES	F	$\eta^2$	p
Somatic symptoms	Baseline	7.01 (4.53)	7.40 (4.30)				
	5-week	6.38 (4.03)	7.48 (4.31)				
	5-week adj.	6.45 (0.33)	7.33 (0.48)		2.29	.02	.13
	Change	-0.64 (3.76)	0.09 (3.09)	-0.21			
Psych symptoms	Baseline	0.88 (0.80)	0.96 (0.81)				
	5-week	0.70 (0.68)	0.75 (0.76)				
	5-week adj.	0.72 (0.06)	0.72 (0.08)		0.00	.00	.99
	Change	-0.18 (0.64)**	-0.21 (0.56)*	-0.05			
Satisfaction with life	Baseline	4.21 (1.34)	4.11 (1.22)				
	5-week	4.33 (1.30)	4.19 (1.24)				
	5-week adj.	4.30 (0.09)	4.25 (0.12)		0.15	.00	.70
	Change	0.12 (0.85)	0.08 (0.93)	0.05			
Sexual satisfaction	Baseline	18.36 (2.89)	18.42 (3.43)				
	5-week	19.10 (3.12)	17.96 (3.31)				
	5-week adj.	19.11 (0.30)	17.94 (0.44)		4.82	.04	.03
	Change	0.74 (2.71)*	-0.42 (4.34)	0.35			
Sexual self-esteem	Baseline	4.11 (0.69)	3.95 (0.87)				
	5-week	4.17 (0.76)	4.00 (0.79)				
	5-week adj.	4.13 (0.04)	4.09 (0.06)		0.24	.00	.75
	Change	0.64 (0.41)	0.05 (0.36)	0.10			
Sexual self-schema	Baseline	57.08 (9.41)	54.54 (11.81)				
	5-week	58.93 (10.97)	55.56 (12.02)				
	5-week adj.	58.22 (0.74)	57.05 (1.08)		0.79	.01	.38
	Change	1.85 (7.59)*	1.02 (6.19)	0.12			
SSD discomfort: Total	Baseline	3.13 (0.79)	3.09 (0.77)				
	5-week	3.07 (0.65)	3.22 (0.70)				
	5-week adj.	3.06 (0.05)	3.23 (0.07)		3.80	.03	.05
	Change	-0.06 (0.59)	0.13 (0.50)	-0.34			
SSD discomfort: Medical	Baseline	2.27 (1.29)	2.26 (1.22)				
	5-week	2.20 (1.15)	2.31 (1.04)				
	5-week adj.	2.19 (0.09)	2.31 (0.14)		0.52	.00	.47
	Change	-0.08 (1.10)	0.05 (0.96)	-0.12			

\* $p < .05$ ; \*\* $p < .01$  significant within-group change. Note. For Baseline, 5-week, and Change scores,  $M$  ( $SD$ ); for 5-week adjusted score,  $M$  ( $SE$ ). 5-wk adjusted (adj.)  $M$  is adjusted for the baseline value of the outcome measure. Between condition ES was the standardized difference in change between conditions: ([Immediate interview follow-up minus baseline] minus [Delayed interview follow-up minus baseline]) divided by pooled  $SD$  of change scores. SSD = sexual self-disclosure; ES = effect size;  $SE$  = standard error.

Within the immediate interview condition, women reported significantly reduced psychological symptoms ( $t = 2.69, p = .01$ ) and significantly greater sexual satisfaction ( $t = -2.60, p = .01$ ) and positive sexual self-schemas ( $t = -2.32, p = .02$ ) at follow-up compared to baseline. There were no within-group changes on somatic symptoms, satisfaction with life, sexual self-esteem, or discomfort with sexual disclosure among women in the immediate interview condition. Within the delayed interview condition, psychological symptoms were also significantly reduced from baseline to follow-up ( $t = 2.48, p = .02$ ), and discomfort with sexual disclosure increased marginally from baseline to follow-up ( $t = -1.70, p = .10$ ). There were no within-group changes on somatic symptoms, satisfaction with life, sexual satisfaction, sexual self-esteem, or sexual self-schema among women in the delayed interview condition.

### **Tests of Moderation of the Interview's Effects**

It was hypothesized that the effect of the interview on health and attitude outcomes would be moderated by sexual self-disclosure, such that women who report more baseline discomfort with sexual self-disclosure would experience more physical and psychological health benefits as a result of participating in the interview, compared to women with less baseline discomfort with sexual self-disclosure. However, analyses indicated that baseline comfort with sexual self-disclosure did not predict outcomes within the immediate interview condition, nor did sexual self-disclosure moderate the effect of condition on any outcome (see Table 11).

Table 11

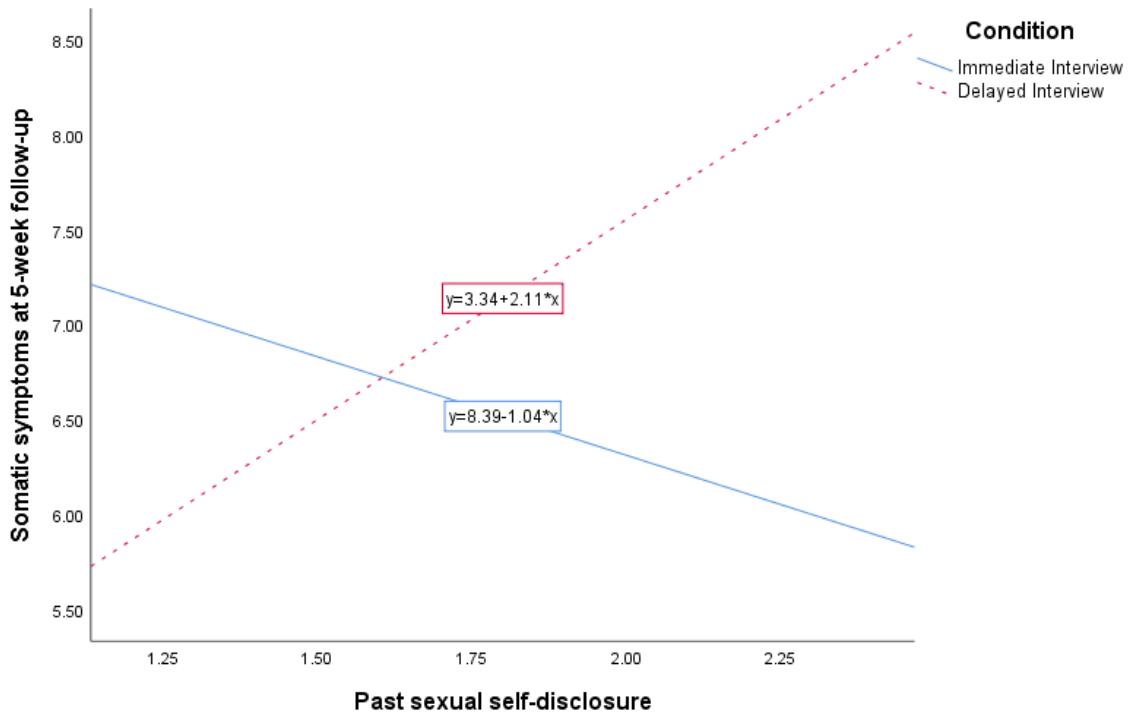
*Discomfort with Sexual Self-Disclosure and Past Sexual Self-Disclosure as Moderators of the Effect of Condition on Outcomes*

Interaction Term	Outcome (5-week follow-up)	$\beta$	p
Group x Discomfort with sexual self-disclosure	Somatic symptoms	-1.01	.18
	Psychological symptoms	0.16	.22
	Satisfaction with life	-0.25	.22
	Sexual satisfaction	0.29	.68
	Sexual self-esteem	0.07	.46
	Sexual self-schema	-0.38	.83
Group x Past sexual self-disclosure	Somatic symptoms	3.15	.02
	Psychological symptoms	0.14	.55
	Satisfaction with life	0.23	.51
	Sexual satisfaction	-1.61	.20
	Sexual self-esteem	0.17	.33
	Sexual self-schema	3.25	.29
	Discomfort with SSD – total	0.08	.70
	Discomfort with sexual SSD – physicians	0.14	.72

*Note.* SSD = Sexual Self-Disclosure; baseline scores of outcome measures were covaried in these analyses.

In contrast to participants' degree of discomfort with sexual self-disclosure, participants' reported *extent* of past sexual self-disclosure (regardless of their discomfort with disclosure) did moderate condition effects on one outcome. Past sexual self-disclosure moderated the effect of condition on follow-up somatic symptoms while covarying baseline somatic symptoms ( $\beta = 3.15$ ,  $p = .02$ ). The interaction was probed by testing the conditional effects of condition (immediate or delayed interview) on follow-up somatic symptoms at three levels of past sexual self-disclosure – one standard deviation below the mean, at the mean, and one standard deviation about the mean. There was a group effect on follow-up somatic symptoms only among women who reported high (+1SD) levels of past sexual self-disclosure ( $\beta = 2.34$ ,  $p = .01$ ), but not among women who reported mean or low (-1SD) levels of past sexual self-disclosure (see Figure 4). The interaction was further probed by testing the conditional effects of past sexual self-disclosure on somatic symptoms within the immediate interview condition and the delayed interview

condition. In the delayed interview condition, women with less (-1SD) past sexual self-disclosure showed marginally significantly less somatic symptoms than their counterparts who reported more (+1SD) past sexual self-disclosure ( $\beta = 2.11, p = .06$ ). In the immediate interview group, there was no significant difference in somatic symptoms between women with high (+1SD) and low (-1SD) past sexual self-disclosure. Past sexual self-disclosure did not moderate the effect of condition on follow-up psychological symptoms, satisfaction with life, or sexuality variables.



*Figure 5.* Past sexual self-disclosure moderates the effect of condition on somatic symptoms at 5-week follow-up.

## CHAPTER 4: DISCUSSION

This study was the first to examine sexual health among Arab American women, a growing and understudied group in the United States. The wide variety of measures used in this study – including somatic and psychological symptoms, several aspects of sexuality, and cultural identity – afford the novel opportunity to examine the interplay among Arab Americans' cultural identity and physical, psychological, and sexual health. In particular, the inclusion of bicultural identity integration is unique and allows for an in-depth exploration of how conflict (versus harmony) and blendedness (versus compartmentalization) regarding bicultural identity impact health.

Overall, the study's hypotheses were partially supported by the results. All four aspects of sexual health (sexual satisfaction, sexual self-esteem, sexual self-schemas, and unwanted sexual experiences) were associated with at least one other aspect of health (somatic symptoms, psychological symptoms, and satisfaction with life), after accounting for potentially explanatory characteristics including acculturation, conservatism, age, and sexual experience. This finding supports the hypothesis that sexual health would be associated with physical and psychological health and satisfaction with life. Bicultural identity conflict moderated three of these relationships in the expected direction, providing limited, partial support to the hypothesis that relationships between sexual health and somatic/psychological health would be stronger among women with bicultural identity conflict than among women with low bicultural identity conflict. Specifically, women with low bicultural identity harmony had stronger adverse relationships between unwanted sexual experiences and both somatic symptoms and satisfaction with life compared to women with average or high bicultural identity harmony, and women with high bicultural identity blendedness had a stronger positive relationship between sexual satisfaction

and satisfaction with life compared to women with average or low bicultural identity blendedness. Participation in the women's health interview resulted in significantly improved sexual satisfaction and marginally reduced discomfort with sexual self-disclosure, compared to women in the delayed interview condition. Participation in the interview did not impact somatic or psychological symptoms, satisfaction with life, sexual self-esteem, sexual self-schema, or discomfort with sexual self-disclosure to medical provider. These findings provide partial support for the hypothesis that participation in the interview would result in improved physical and psychological health, satisfaction with life, and comfort with discussing sexual health with medical providers. With only one exception, the benefits of the interview extended to women with varying degrees of discomfort with sexual self-disclosure and extent of past sexual self-disclosure. This finding does not support our hypothesis that women who were uncomfortable with sexual self-disclosure and had disclosed infrequently in the past would experience more physical and psychological health benefits from the interview compared to women who were comfortable with sexual self-disclosure and had sexually self-disclosed frequently. These findings are discussed in more detail below.

### **Correlational Study**

#### **Relationships among Cultural Variables and Somatic, Psychological, and Sexual Health Outcomes**

Women with greater American and heritage acculturation reported fewer psychological symptoms and greater satisfaction with life, consistent with past research indicating that health appears to improve with acculturation (e.g., Abdulrahim & Baker, 2009). Women who report more American acculturation likely have better access and fewer language barriers to medical care, including mental health services. Women who are more American-acculturated may also

experience less stigma and discrimination, which may lead to better mental health and more satisfaction with life. These factors likely do not fully explain the relationship between acculturation and health outcomes, however, because women with higher heritage acculturation (who may have more language barriers to medical care or more experiences of stigma and discrimination) also had fewer psychological symptoms and greater satisfaction with life. Women may report greater acculturation, both with heritage culture and American culture, when their American and heritage cultural identities are integrated and blended – and indeed, in this sample, heritage acculturation strongly and positively correlated with bicultural identity harmony and blendedness.

Perceived harmony between heritage culture and American culture (bicultural identity harmony) was inversely associated with somatic and psychological symptoms and positively associated with satisfaction with life, indicating greater overall health among individuals with more harmony between their two cultural identities. Perceived overlap between heritage culture and American culture (bicultural identity blendedness) was associated with satisfaction with life. These findings support the notion that discord between dual cultural identities may contribute to the poorer health outcomes found among Arab Americans who identify strongly with both Arab and American cultures, compared to those who identify only moderately with both cultures (Jadalla & Lee, 2012). The internal conflict that arises from the tension between two cultural identities could cause stress-related somatic symptoms or psychological distress, and furthermore, the struggle to reconcile two cultural identities could lead to shame and secret-keeping when one engages in behaviors or has beliefs that defy the expectations or standards of one part of their cultural identity. For example, many women in the present study reported that there would be negative social and emotional consequences if members of their community

learned about some of their religious beliefs, past or current sexual behaviors, or sexual orientation, among other sensitive topics, and past research suggests that maintaining such secrets can have deleterious effects on health (Cole, Kemeny, Taylor, & Visscher, 1996; Finkenauer & Rimé, 1998a; Finkenauer & Rimé, 1998b). Women with more integrated and blended bicultural identities may have less internal tension and feel less pressure to withhold personal secrets, thus resulting in fewer somatic symptoms and better mental health and satisfaction with life overall.

Bicultural identity integration was also related to some sexual health variables. Individuals with more bicultural identity harmony reported higher sexual self-esteem, regardless of past consensual sexual experience. However, bicultural identity harmony was no longer related to sexual self-esteem after accounting for psychological symptoms, which reflects the strong relationship between psychological symptoms and both bicultural identity integration and sexual self-esteem. Women who reported bicultural identity blendedness also reported more positive sexual self-schema, regardless of past consensual sexual experience. A woman who scores high on sexual self-schema is more inclined to experience passionate-romantic emotions, is more behaviorally open to sexual experience, and is less embarrassed or conservative about sex; thus, given the taboo surrounding sexuality in Arab culture, it may be that an Arab American woman who has an open, confident attitude toward sexuality is also likely to have an identity that blends her more conservative Arab heritage and her more sexually permissive or open American heritage.

Finally, conservatism was not associated with somatic or psychological symptoms or satisfaction with life. However, more conservative women did report more discomfort with sexual disclosure and lower sexual self-esteem. This relationship between conservatism and

discomfort with sexual disclosure is unsurprising because, by definition, more conservative individuals are less likely to engage in conversation about topics considered taboo, such as sexuality. The relationship between conservatism and sexual self-esteem weakened after accounting for past sexual experience, indicating that the lower sexual satisfaction that more conservative women reported may have been due in part simply to less sexual experience.

### **Relationships among Sexual Health and Somatic and Psychological Symptoms**

As hypothesized, sexual self-esteem was inversely associated with somatic symptoms and psychological symptoms and positively associated with satisfaction with life, beyond the effects of acculturation, conservatism, age, and sexual experience. Sexual self-esteem refers to one's *self-perception* of their sexuality in several domains. Thus, one interpretation of this finding is that the depressive cognitions and anxiety associated with psychological symptoms negatively impact one's self-appraisal of their sexual skill, attractiveness, and so on; and that furthermore, sexual self-esteem relates to somatic symptoms and satisfaction with life insofar as the depressive cognitions and anxiety negatively impact them. Conversely, feeling poorly about one's sexuality may exacerbate psychological distress and reduce satisfaction with life in and of itself.

Our sample reported rates of unwanted sexual experiences very similar to rates reported in national statistics. According to the Centers for Disease Control and Prevention (CDC), about one in three women experience sexual violence involving physical contact during her lifetime (CDC, 2019). The same proportion of women (33.3%) in this sample reported a history of unwanted sexual experiences, including past sexual assault (26.7%), rape (6%), or attempted rape (9%) in their lifetime. As expected, unwanted sexual experiences correlated positively with somatic symptoms and psychological symptoms, but not satisfaction with life, after controlling

for culture and sexuality variables. These findings are consistent with a large body of literature indicating that unwanted sexual experiences have a deleterious effect on health (Koss et al., 1994; Golding, 1999), and confirm that this relationship extends to Arab American women.

Sexual satisfaction was inversely associated with psychological symptoms after accounting for acculturation, conservatism, age, and sexual experience. It is possible that sexual satisfaction is a protective factor for mental health or, conversely, feeling less depressed and anxious generally may simply transfer to feelings about one's sex life as well. However, this finding should be interpreted with caution, given that sexual satisfaction was not related to somatic symptoms or satisfaction with life, and that a relatively large number of analyses were run, and the relationship was only marginally significant.

One correlational finding was unexpected. Women with more "positive"/open sexual self-schemas reported more somatic symptoms after accounting for acculturation, age, conservatism, and sexual experience. One potential explanation for this finding is that women with more positive, open sexual self-schemas are also more aware of their bodies and physical sensations, resulting in more reported somatic symptoms. Alternatively, Arab American women with more positive sexual self-schemas (i.e., who are more open to sexual experience and less embarrassed/conservative about sexuality) may also have some emotional conflict about their sexual attitudes and behaviors, which manifests in stress-related physical symptoms.

The relationship between sexual satisfaction and satisfaction with life depended on women's degree of bicultural identity blendedness. Among women with high bicultural identity blendedness, sexual satisfaction was positively associated with satisfaction with life, but there was no relationship between sexual satisfaction and satisfaction with life among women with mean or low bicultural identity blendedness. In other words, for women with a more blended

bicultural identity, satisfaction with life increased as sexual satisfaction increased. There was no such relationship among women with a less blended bicultural identity and, in fact, among women with low identity blendedness, satisfaction with life non-significantly decreased as sexual satisfaction increased. This finding aligns with the notion that sexuality may create emotional conflict or struggle for women who experience their Arab and American identities as highly separate. That is, for an Arab American woman who views her Arab and American identities as highly distinct, sexual satisfaction (and perhaps sexual behaviors) may actually create internal struggle and conflict as she attempts to bridge the divide between the disparate sexual mores and expectations of her two cultures, thus resulting in lower satisfaction with life.

The relationships between unwanted sexual experiences and somatic symptoms and satisfaction with life depended on women's degree of bicultural identity harmony. Among women with low bicultural identity harmony, unwanted sexual experiences were associated with somatic symptoms and dissatisfaction with life, but there was no relationship between unwanted sexual experiences and somatic symptoms and satisfaction with life among women with average or high bicultural identity harmony. In other words, among women who perceive more conflict between their two cultural identities, unwanted sexual experiences were more predictive of somatic symptoms and dissatisfaction with life compared to among women who experience their two cultural identities as more harmonious.

Taken together, the moderating effects of bicultural identity harmony on the relationship between unwanted sexual experiences and somatic symptoms and satisfaction with life may indicate that women who have more difficulty negotiating their two cultural identities experience even more stress (and stress-related symptoms, such as somatic symptoms) as a result of negative sexual experiences, compared to their counterparts with more bicultural identity

harmony. Although it is generally difficult to disclose or discuss unwanted sexual experiences, it may be even more difficult for Arab American women, given the stigma surrounding the discussion of sexuality in Arab culture (Kulwicki, 2016). This difficulty with disclosure may be especially salient for women who are already struggling to reconcile their Arab and American identities, and who may fear potential repercussions of disclosing their negative sexual experience to others.

### **Experimental Study**

Participation in the sexual health interview improved women's sexual satisfaction. The interview focused not only on sexual attitudes, beliefs, and experiences, but also on participants' stress or conflicts related to sexuality. In line with past research about the benefits of self-disclosure about secrets and other sensitive topics (e.g., Frattaroli, 2006; Pennebaker et al., 2001), discussing sexuality-related stress or conflict may have allowed women to resolve such conflicts, resulting in increased satisfaction with their sexual lives. Furthermore, many women reported that they had never talked so openly about sexuality, and they may have had preconceived notions that their sexual attitudes or experiences were unusual or strange, and that it would be uncomfortable or even dangerous to discuss them. Having a discussion about these topics with an open, non-judgmental interviewer may have helped to normalize participants' sexual experiences (or lack thereof) and improve how they felt about their sexual lives, regardless of their degree of current and past sexual experience. Similarly, the non-judgmental and validating responses of interviewers to participants' disclosures may have contributed to the reduction in discomfort with sexual self-disclosure seen among women who completed the interview. It seems that women learned through this experience that it is safe to disclose their sexual beliefs and experiences, at least in the particular setting used in this study (confidential,

face-to-face conversation with a professional woman). Unfortunately, the overall increased comfort with sexual self-disclosure that women reported did not extend to comfort disclosing with physicians. It is possible that participation in the interview only reduced participants' discomfort with sexual self-disclosure in contexts similar to that used in the study (i.e., young, women interviewers in a confidential setting for a research study). Additionally, this outcome variable (discomfort with sexual disclosure to physicians) may not be ideal, because most of the women will not have seen a physician in the 5 weeks since they started the study. Thus, because they have not had the opportunity to discuss their sexual health with a physician, they are likely only projecting about their discomfort based on prior experiences with physicians.

Overall, the interview yielded some sexual health benefits but did not significantly impact somatic or psychological symptoms or satisfaction with life. Given the taboo surrounding sexuality in Arab culture, one may expect that a sexual health interview could cause negative outcomes due to embarrassment or distaste for the topic. However, women who completed the interview reported small, non-significant within-condition improvement on all measures at follow-up; that is, women did not deteriorate on any measure due to participation in the interview. This indicates that overall, discussion of sensitive sexual topics in this population is not harmful and was even helpful in some regards.

These benefits of participation in the interview did not depend on how comfortable participants were with sexual self-disclosure before participating. However, the effect of participation in the interview on somatic symptoms did depend on participants' reported *extent* of past self-disclosure participants. Specifically, participation in the interview improved somatic symptoms at follow-up compared to the delayed condition only among women who had sexually self-disclosed the most in the past. This finding contradicts the expectation that women would

benefit most from the interview if they had not engaged in sexual self-disclosure as frequently in the past. However, this finding does align with research showing that psychotherapy patients have the best outcomes when the therapy used matches their preferences/skills (Norcross & Wampold, 2011). Similarly, the literature on the health benefits of emotional disclosure and emotion-focused interventions indicate that individuals who are more ambivalent about disclosing their emotions or more alexithymic have better outcomes when they engage in a treatment that does not require emotional insight and expression, such as relaxation training (e.g., Holmes et al., 2018). Alternatively, it may be that women who had self-disclosed most in the past also had more sexuality-related stress or conflicts, and thus experienced relief from somatic symptoms after participation in the interview. It should be noted, however, that past sexual self-disclosure did not moderate most outcomes (psychological symptoms, satisfaction with life, and all sexual health variables), indicating that the moderating effect of past sexual self-disclosure on the condition effects on somatic symptoms should be interpreted cautiously. The general lack of moderation suggests that, overall, the benefits of the interview extend to women with varying degrees of discomfort with sexual self-disclosure and extent of past sexual self-disclosure.

### **Implications**

Sexual health is an often-overlooked topic in clinical settings, including among psychologists, and clinicians may sometimes feel uncomfortable initiating discussion about this sensitive topic with patients for fear of upsetting, offending, or even harming them. This concern may be heightened when working with ethnic or religious populations with traditional sexual conventions. Yet, this study offers evidence that among Arab American women, such fear is likely unwarranted, and that openly discussing sexuality-related topics in a confidential, empathic setting is valuable, rather than risky. Sharing not only one's sexual beliefs and

experiences but also emotions and conflicts related to sexuality positively impacted sexual satisfaction and comfort with sexual self-disclosure. In addition to quantitative study outcomes that indicate discussing sexual matters was beneficial to participants, participants' qualitative reports after the interview suggested that they were thankful for the opportunity to talk about their sexual attitudes, beliefs, and experiences. Many participants even told interviewers that they shared information about themselves that they had never disclosed before, and they noted how helpful this was to them. More broadly, these findings and observations support the wider literature that has demonstrated emotional disclosure is beneficial to health, and clinicians are encouraged to approach sensitive and emotional topics with confidence, knowing that this will more likely lead to benefit than harm.

Similar to other minority groups, Arab Americans are subject to stereotypes and assumptions by dominant cultural groups. For example, I and researchers involved in this study had concerns that it would be difficult to recruit enough Arab American women who were willing to discuss sexuality, given their cultural background, but the ease and speed of recruitment surpassed our expectations. Despite some participants feeling hesitant or nervous initially, virtually all participants demonstrated openness to discussion about sexual topics with interviewers. Furthermore, we were able to recruit women with a wide variety of religious backgrounds, beliefs, and dress styles, including very conservative women with conservative dress. Stereotypes may lead one to assume that a conservative Arab American woman would be unwilling to participate in such a study, yet these expectations were defied, aptly illustrating the importance of challenging stereotypes with evidence. I and other interviewers were also surprised by the diversity of sexual experiences and attitudes reported by this group of women.

Clinicians can take away several important points from this study. One is that Arab Americans are not homogenous – that is, assumptions about their sexual attitudes and experiences and their willingness to discuss such topics cannot be made based on their nationality, religion, or dress. Furthermore, the benefit of broaching sexual topics in clinical contexts far outweighs the risks. Many women in this study had never been directly asked about their sexual health by a professional, and finally having this experience was helpful and eye-opening. Although conducting a thorough sexual health interview such as the one conducted in this study may not be practical in most clinical contexts, incorporating brief, open-ended questions about sexual health and conflicts into regular clinical practice signals that such topics are safe and welcome in that environment and can lead to fruitful and relevant information about a patient's concerns.

Findings from this study yield important implications for future research with Arab Americans. All measures used in the study had at least adequate reliability in our sample ( $\alpha < .70$ ), providing evidence that many measures used to assess sexual attitudes and behaviors can be used effectively with Arab American populations. Anecdotally, study interviewers observed that many participants expressed appreciation that a study was being conducted specifically to learn more about their sexual health and experiences as Arab American women, and some women noted the lack of research that exists on this particular population. Many participants were eager to learn about the results and requested a summary of findings after study completion. These observations highlight the value of studying Arab Americans, an understudied minority group, and receptiveness to this research among this demographic (young, college-educated Arab American women). This receptiveness may extend to other Arab American individuals as well, and more broadly, other understudied minority groups.

## Strengths and Limitations

This study's sample was religiously diverse, allowing conclusions to be drawn about Arab American women generally instead of being limited to only one religious classification (e.g., Muslim), as some past research has been. A relatively large sample ( $N = 134$ ) was recruited, and study attrition was low. The use of a delayed interview control condition made cause-effect conclusions about the effects of the interview possible by controlling for the passage of time.

Findings are limited by the sample studied, which comprised primarily young, unmarried, women residents of metro Detroit. Findings may not generalize to older or married Arab American women or Arab American women residing in other parts of the country, and they are unlikely to generalize to Arab American men. Additionally, the few married or divorced women in the study introduced heterogeneity to the findings. For example, married women in this population likely engage in sexual behaviors more frequently, given that within marriage relationships sexual activity is not morally or religiously forbidden. Furthermore, married Arab Americans likely have fewer conflicts surround their sexual feelings and behaviors, or at least have different conflicts compared to their unmarried counterparts.

It is also important to note that we included Chaldean American women in our study. Although they have many similar cultural traditions and beliefs to Arab Americans, they differ in some ways, which may have introduced variability to our sample unique to the Metro Detroit area. For example, Chaldean Americans are typically Catholic, whereas many Arab Americans are Muslim; because Christianity is the dominant religious affiliation in the United States, Chaldeans may have different experiences with stigma, discrimination, and bicultural identity negotiation than their Arab counterparts. The interviews were conducted in a private, non-

medical laboratory space in a psychology department by young, women clinical psychology graduate students. These factors limit the generalizability of experimental findings, and the feasibility, acceptability, and results of such an interview may differ if administered by interviewers with different demographics or in different settings, such as a medical setting. The sexual health interview protocol that was used in this study is relatively long (60 minutes) and may be hard to implement in clinical settings in its current form.

As is common for sexuality-related research, self-selection bias poses a problem for this study. Sexuality is a taboo topic for many people, and this is particularly true for Arab American populations. Because of this taboo, we titled the study “Arab American Women’s Health Study” on all recruitment materials (i.e., WSU website, SONA advertisement, and fliers) to avoid immediately deterring participants. However, in order to be clear with participants about what they could expect from the study, recruitment materials explained that they would be asked questions about “stress, culture, and health, with a focus on women’s sexuality.” Arab American women who chose to participate in this study knowing that they would be asked questions about sexuality likely differed in important ways from those who chose not to participate (e.g., were more comfortable with sexuality and sexual self-disclosure, less conservative, etc.). Reassuringly, we did see a range of conservatism, past sexual experience, and comfort with sexual self-disclosure in our sample, indicating that a diverse group of women were recruited.

There were several problems with measures used in this study, all of which are described and addressed in the Method section. In particular, the omission of the BIIS at baseline for a portion of the sample and administering this measure at a later time point may have impacted results, although the high correlation among BIIS scores at each time point mitigates this concern. Additionally, there is no theoretical reason the BIIS score would change over a short

time period or after the sexual health interview. Full-sample data on sexual function is not available because of the severe skew and kurtosis of the FSFI, which is likely a result of the relatively large proportion of participants with limited or no sexual experience (not only due to cultural/religious beliefs, but also the young age of our sample). The correlational data presented in this study was cross-sectional, which limits the conclusions that can be drawn from the data; more specifically, directionality and temporality cannot be determined. Thus, all interpretations of the baseline, correlational findings may have alternative explanations that could only be clarified with longitudinal and/or experimental designs. Finally, the relatively large number of analyses run increases the risk of Type I error.

The delayed interview control used in the experimental study, similar to a wait-list control, did not control for non-specific aspects of the interview session (e.g., validation, conversation). Conclusions are also limited by other aspects of the experimental design, such as follow-up timing. Only one follow-up time point was assessed; if longer-term outcomes had been assessed, changes seen at 5 weeks may have disappeared, or delayed findings may have emerged. For example, comfort with sexual self-disclosure to a physician may require more time so that participants have the time and opportunity to actually encounter a physician, or sexual health changes resulting from the interview may require more time for opportunities to engage in sexual behavior. There may have also been more immediate, short-term benefits of the interview that were not captured 5 weeks after its completion. Additionally, participants may have had more improved outcomes if the interview were stronger or had more interventional components. For example, no sexual health education was provided, which could have benefited participants. Although we assessed past sexual victimization, we did not offer any intervention aside from providing follow-up counseling recommendations. Further exploration of past unwanted sexual

experiences in addition to disclosure about these experiences may have yielded additional health benefits.

### **Future Directions**

Future research should replicate this sexual health interview and variants of it (e.g., shortened or revised versions) in different settings. For example, adapting this interview and testing its feasibility, acceptability, and outcomes in clinical settings would be particularly helpful. Implementing and testing the interview routinely in a clinical setting (e.g., not as an experimental study) would reduce the self-selection bias present in the current study. Additionally, the interview could be made stronger in several ways to increase its effectiveness, as described in the limitations. It would be particularly interesting to test the effects of an interview that included a sexual health education component, which could cover a variety of topics such as sexual behaviors, sexual communication, preventing pregnancy and sexually transmitted infection, and correcting myths about sexual assault.

This study should be replicated with a wider variety of Arab American women, including older and married women, as well as with Arab American men. This would allow for more accurate assessment of constructs that were difficult to measure in our study, including sexual function. Furthermore, conducting this study with different interviewers (i.e., men, different profession, older, etc.) would help to clarify whether the sexual health interview would still be beneficial under different circumstances. Because Arab Americans have a unique cultural context, findings might not replicate to other ethnic minority groups. Future research should examine the relationship between sexual health and other aspects of health and well-being, as well as the effects of conducting a sexual health interview, among those with other bicultural

identities. The particular customs and background of other cultural groups may result in different reactions to the interview.

Because Arab American women's sexual health is such an understudied topic, there are many more constructs and outcomes that should be examined. In the sexual health interview designed for this study (see Appendix A), both quantitative and qualitative information was gathered about many topics not yet analyzed for this dissertation, including reproductive health (i.e., pregnancy plans and sexually transmitted infections); specific sexual behaviors (i.e., masturbation, orgasm, and pornography use); stress and conflict about sexual orientation, sexual thoughts, and sexual behaviors; and the role that religious identity and cultural identity plays in sexuality and sexuality-related conflicts. This information will be explored in future analyses using descriptive, correlational, and qualitative methods. It would be particularly useful to analyze whether numerical ratings of stress and conflict surrounding sexuality correlate with other health outcomes at baseline and with interview outcomes.

In conclusion, these findings suggest that sexual health is an important part of overall health and well-being in Arab American women, independent of sociocultural factors such as conservatism and sexual experience. This study also provides preliminary evidence that one 60-minute sexual health interview conducted by a woman interviewer in a confidential setting can improve Arab American women's sexual satisfaction and reduce their discomfort with sexual self-disclosure. These findings may inform evidence-based practice among psychologists and other healthcare providers and improve the sexual health and well-being of Arab American women.

## APPENDIX A: Women's Health and Stress Interview Protocol

**Have participants complete “Before Session Ratings” and turn on audio recorder**

### **INTRODUCTION (5 minutes)**

- There are many things to cover in this session, so I'll keep you on track
- Remind the participant about confidentiality
- Remind them that the session will run for about 60 minutes
- Introduce yourself

#### a. Rationale

- In this interview, we'll explore stressful life events, your cultural identity, and your physical and sexual health history, and how these things relate to each other.
- There are two main purposes of this interview:
  - One is simply to learn more about your experiences, identity, and health, and what role, if any, your experiences and identity play in your health.
  - But also, research has shown that for some people, disclosing thoughts and feelings about conflicts, secrets, struggles, and other difficult situations or events can reduce stress and benefit health. So, another component of the interview is to facilitate the disclosure of thoughts and emotions about your health and sexuality, and especially any internal conflicts or struggles you might have in regard to those things.

- **Meta-communication about comfort of sharing with the interviewer:**

- *We are going to go through a variety of questions about your life. Some of these might be difficult to share, and there might be questions that you are not normally comfortable sharing with other people in your life. It is normal to feel somewhat uncomfortable sharing information about difficult or personal experiences in your life. You don't know me well, or how I might respond, but I encourage you to be honest and open with me, similar to how you would with a physician or another medical provider.*

*{How are you feeling about sharing with me today?}*

***More specifically - How do you feel about disclosing with me, as a [white/Arab/etc] woman?***

*{What are your concerns about sharing with me today?}*

*{I can understand if you feel reluctant to tell me some things, but I really encourage you to give it a try, even if it is difficult or embarrassing or upsetting.}*

### **DEMOGRAPHICS**

Age \_\_\_\_\_ DOB: \_\_\_\_\_

Marital status \_\_\_\_\_

Years of education/highest degree: \_\_\_\_\_ Major: \_\_\_\_\_

Employment: \_\_\_\_\_

- Employed full time
- Employed part time
- Unemployed looking for work
- Unemployed not looking for work

Which best describes your political orientation:

- Very conservative
- Somewhat conservative
- Moderate
- Somewhat liberal
- Very liberal
- Other \_\_\_\_\_

**STRENGTHS & STRESSORS** – (5 minutes). \*This section will also serve as an icebreaker, where you're getting to know the participant and building some rapport\*

a. **Strengths** - What are some things about you that you consider strengths? What are you proud of?

b. **Stress & Conflicts** - What in your life right now is stressful or difficult for you? How stressful is [insert domain] \_\_\_\_\_ on a scale of 1 (not at all) to 5 (extremely)? (Anchor Box 1)

-School?

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
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-Work?

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------

-Family?

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------

-Friends?

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------

-Health?

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------

-Romantic relationships?

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
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### CULTURE (10 minutes)

*Next, I'll ask you some questions about your cultural identity, which is a broad term that refers to the identity or feeling of belonging to any kind of social group that has its own distinct culture. In this interview, I'll be focusing mainly on your cultural identity as it relates to your nationality and/or ethnicity and religion.*

What is your nationality? \_\_\_\_\_ 1<sup>st</sup>/2<sup>nd</sup>/3<sup>rd</sup> (etc) generation? \_\_\_\_\_

What is your ethnicity? \_\_\_\_\_

Do you consider yourself to have a bicultural identity, meaning that your identity is made up of two different cultures (i.e., Arab and American)? (Y/N)

What types of stress or conflicts have you experienced related to your cultural identity?

Have you experienced any stigma or discrimination as a result of your cultural identity?

What was your religious upbringing (family's religion?) \_\_\_\_\_

What is your current religious affiliation? \_\_\_\_\_

- How large of an influence does religion have on your life? (Anchor Box 2)  
 1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)
  
- Do you wear a hijab? Y/N  
 If yes, how often? (Anchor Box 3)  
 1 (Never)      2 (Sometimes)      3 (About half the time)      4 (Most of the time)      5 (Always)

Record elaborations – particular settings or occasions? \_\_\_\_\_

- To what degree has your religious identity played a role in your sexuality? (Anchor box 2)  
 1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)
  
- To what degree has your cultural identity played a role in your sexuality? (Box 2)  
 1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)

\*\*Tell me more about the role that religion and culture play in your sexuality:

### **STRESS/CONFLICTS SURROUNDING SEXUALITY (5 minutes)**

What is your sexual orientation?

heterosexual       gay/lesbian       bisexual       other

How stressed/conflicted do you feel about your **sexual orientation**? (Box 1)

1 (Not at all)      2 (Slightly)      3 (Moderately)      4 (Very)      5 (Extremely)

To what degree does your religious identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)

To what degree does your cultural identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)

Elaborations:

How stressed/conflicted do you feel about any of your **sexual thoughts, desires, or feelings**? (Box 1)

1 (Not at all)      2 (Slightly)      3 (Moderately)      4 (Very)      5 (Extremely)

To what degree does your religious identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)

To what degree does your cultural identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)      4 (A lot)      5 (A great deal)

Elaborations:

## HEALTH HISTORY (30 minutes)

Goal: Get an overview of the participant's health history. This portion will start with general medication conditions, and then will progress to a focus on sexuality/sexual health issues.

a. Physical health history. *What kinds of health problems have you had in your life, if any, starting in childhood until now?*

b. Mental health history. *What mental health problems – for example, depression or anxiety – have you had in your life, starting in childhood until now?*

c. Sexual Health History

**Introduce the task:** Next, I'm going to ask you some questions about sexuality and sexual health. The World Health Organization defines sexual health as “a state of physical, emotional, mental, and social well-being in relation to sexuality,” so I'll ask questions about a broad range of not just physical experiences, but also your thoughts, emotions, and relationships.

**Also, check back in regarding disclosure – metacommunicate as needed.**

**Sexual Self-Disclosure** – First, I want to ask you some questions about the extent to which you've disclosed your sexual attitudes and behaviors to different types of people. (Box 5)

	Mother	Father	Close friend of same sex	Dating partner
1. My personal views on sexual morality	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
2. Premarital sexual intercourse	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
3. Oral sex	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
4. Masturbation	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
5. My sexual thoughts and fantasies.	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
6. Sexual techniques I find or would find pleasurable.	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
7. Use of contraception.	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4
8. Sexual problems or difficulties I might have.	1 2 3 4	1 2 3 4	1 2 3 4	1 2 3 4

**[For the following, prompt elaborations in addition to Likert ratings]**

- How was sexuality discussed in the home while growing up?
  - How easy was it to obtain information about sex? (Box 1)
 

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------
  - How open were your parents to answering questions about sex? (Box 1)
 

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------
- When did you first learn about sex?
  - How/from whom?
- Have you ever discussed your sexual health with a physician or other medical provider?
  - Why or why not?
- Who, if anyone, do you talk to about issues related to sexuality, including your sexual behaviors and sexual health?  
 How often? (Box 2)
 

1 (Not at all)	2 (A little)	3 (A moderate amount)	4 (A lot)	5 (A great deal)
----------------	--------------	-----------------------	-----------	------------------
- How much do you feel like you have to lie or keep secrets about your sexuality? (Box 1)
 

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------
- Tell me something you've never shared before or haven't shared with me, maybe something private like a secret. *[Metacommunicate: You don't know me well, or how I might respond, but I encourage you to be honest and open with me. I can understand if you feel reluctant to share that with me, but I really encourage you to give it a try, even if it is difficult or embarrassing or upsetting.]*

**Specific open-ended questions to probe for key conflicts in their romantic relationships. If no romantic relationships, expand to other relationships (friends, family, etc.)**

**\*\*Some of this may also come up later in the interview, after discussing specific behaviors/topics—come back and fill this in with more info as needed throughout the interview\*\***

- What do you struggle with or have a hard time expressing?
- What do you generally avoid?
- What do you feel pressured to do or say?
- What are you conflicted over?
- Are there any key people involved in this conflict(s)?

## Sexual Behaviors & Health

(Some questions taken from California Department of Public Health “Clinician’s Guide to Sexual History Taking” <http://www.cdph.ca.gov/pubsforms/Guidelines/Documents/CA-STD-Clinician-Guide-Sexual-History-Taking.pdf>)

**Introduce task, revisit confidentiality, metacommunicate:** Next, I'm going to ask some more detailed questions about your sexual health and different sexual behaviors. Remember, everything you share today is completely confidential, and will never be stored with your name or other identifying information.

- Relationship History:
  - Have you ever had a romantic partner? Y/N
 If yes:
  - Have you dated:
    - Only males
    - Mostly males
    - Equal amount male and female
    - Mostly females
    - Only females
  - How many romantic partners have you had? \_\_\_\_\_
  - How long did these relationships last? \_\_\_\_\_ years \_\_\_\_\_ months
  - Do you have a current steady romantic partner? Y/N
    - Have you had a steady romantic partner in the past 12 months? Y/N

Pregnancy plans:

- What are your current plans or desires regarding pregnancy?
- Are you trying to get pregnant? Y/N
- What are you doing to prevent pregnancy?
- Are you currently taking oral contraceptives? Y/N

Protection from STDs:

- What do you do to protect yourself from sexually transmitted diseases and HIV?
  - Abstinence
  - “Outercourse” (sexual stimulation that excludes penile penetration)
  - Condoms
  - Other
- How often do you use condoms? N/A (Box 3)  
 1 (Never)      2 (Sometimes)    3 (About half the time)    4 (Most of the time)    5 (Always)

Have you ever had an STI?

- \_\_\_ Chlamydia
  - When/treated:
- \_\_\_ Gonorrhea
  - When/treated:
- \_\_\_ Herpes
  - When/treated:
- \_\_\_ Warts
  - When/treated:
- \_\_\_ HIV
  - When/treated:
- \_\_\_ Other
  - What/when/treated:

- Sexual practices: *The next set of questions will be about your overall sexual functioning, sexual behaviors, and sexual experiences you may have had throughout your life that were unwanted. Remember that your responses to these questionnaires are completely confidential.*

### **Female Sexual Function Index (FSFI)**

INSTRUCTIONS: These questions ask about your sexual feelings and responses **during the past 4 weeks**. Please answer the following questions as honestly and clearly as possible. Your responses will be kept completely confidential. In answering these questions the following definitions apply:

Sexual activity can include caressing, foreplay, masturbation and vaginal intercourse.

Sexual intercourse is defined as penile penetration (entry) of the vagina.

Sexual stimulation includes situations like foreplay with a partner, self-stimulation (masturbation), or sexual fantasy.

Sexual desire or interest is a feeling that includes wanting to have a sexual experience, feeling receptive to a partner's sexual initiation, and thinking or fantasizing about having sex.

1. Over the past 4 weeks, how often did you feel sexual desire or interest?

- Almost always or always
- Most times (more than half the time)
- Sometimes (about half the time)
- A few times (less than half the time)
- Almost never or never

2. Over the past 4 weeks, how would you rate your level (degree) of sexual desire or interest?

- Very high
- High
- Moderate
- Low
- Very low or none at all

**NOTE TO INTERVIEWER: At this point, ask them if they've experienced any sexual activity – INCLUDING masturbation - over the last 4 weeks. If they have not, most of these questions won't apply and you can skip straight to questions 15 and 16, then move to the next questionnaire.**

Sexual arousal is a feeling that includes both physical and mental aspects of sexual excitement. It may include feelings of warmth or tingling in the genitals, lubrication (wetness), or muscle contractions.

3. Over the past 4 weeks, how often did you feel sexually aroused ("turned on") during sexual activity or intercourse?

1. No sexual activity

2. Almost always or always
  3. Most times (more than half the time)
  4. Sometimes (about half the time)
  5. A few times (less than half the time)
  6. Almost never or never
4. Over the past 4 weeks, how would you rate your level of sexual arousal ("turn on") during sexual activity or intercourse?
1. No sexual activity
  2. Very high
  3. High
  4. Moderate
  5. Low
  6. Very low or none at all
5. Over the past 4 weeks, how confident were you about becoming sexually aroused during sexual activity or intercourse?
1. No sexual activity
  2. Very high confidence
  3. High confidence
  4. Moderate confidence
  5. Low confidence
  6. Very low or no confidence
6. Over the past 4 weeks, how often have you been satisfied with your arousal (excitement) during sexual activity or intercourse?
1. No sexual activity
  2. Almost always or always
  3. Most times (more than half the time)
  4. Sometimes (about half the time)
  5. A few times (less than half the time)
  6. Almost never or never
7. Over the past 4 weeks, how often did you become lubricated ("wet") during sexual activity or intercourse?
1. No sexual activity
  2. Almost always or always
  3. Most times (more than half the time)
  4. Sometimes (about half the time)
  5. A few times (less than half the time)
  6. Almost never or never
8. Over the past 4 weeks, how difficult was it to become lubricated ("wet") during sexual activity or intercourse?
1. No sexual activity
  2. Extremely difficult or impossible
  3. Very difficult
  4. Difficult
  5. Slightly difficult
  6. Not difficult
9. Over the past 4 weeks, how often did you maintain your lubrication ("wetness") until completion of sexual activity or intercourse?
1. No sexual activity
  2. Almost always or always
  3. Most times (more than half the time)
  4. Sometimes (about half the time)
  5. A few times (less than half the time)
  6. Almost never or never
10. Over the past 4 weeks, how difficult was it to maintain your lubrication ("wetness") until completion of sexual activity or intercourse?
1. No sexual activity
  2. Extremely difficult or impossible
  3. Very difficult

4. Difficult
5. Slightly difficult
6. Not difficult

11. Over the past 4 weeks, when you had sexual stimulation or intercourse, how often did you reach orgasm (climax)?

1. No sexual activity
2. Almost always or always
3. Most times (more than half the time)
4. Sometimes (about half the time)
5. A few times (less than half the time)
6. Almost never or never

12. Over the past 4 weeks, when you had sexual stimulation or intercourse, how difficult was it for you to reach orgasm (climax)?

1. No sexual activity
2. Extremely difficult or impossible
3. Very difficult
4. Difficult
5. Slightly difficult
6. Not difficult

13. Over the past 4 weeks, how satisfied were you with your ability to reach orgasm (climax) during sexual activity or intercourse?

1. No sexual activity
2. Very satisfied
3. Moderately satisfied
4. About equally satisfied and dissatisfied
5. Moderately dissatisfied
6. Very dissatisfied

14. Over the past 4 weeks, how satisfied have you been with the amount of emotional closeness during sexual activity between you and your partner?

1. No sexual activity
2. Very satisfied
3. Moderately satisfied
4. About equally satisfied and dissatisfied
5. Moderately dissatisfied
6. Very dissatisfied

**15. Over the past 4 weeks, how satisfied have you been with your sexual relationship with your partner?**

1. **Very satisfied**
2. **Moderately satisfied**
3. **About equally satisfied and dissatisfied**
4. **Moderately dissatisfied**
5. **Very dissatisfied**

**16. Over the past 4 weeks, how satisfied have you been with your overall sexual life?**

1. **Very satisfied**
2. **Moderately satisfied**
3. **About equally satisfied and dissatisfied**
4. **Moderately dissatisfied**
5. **Very dissatisfied**

17. Over the past 4 weeks, how often did you experience discomfort or pain during vaginal penetration?

1. Did not attempt intercourse
2. Almost always or always
3. Most times (more than half the time)
4. Sometimes (about half the time)
5. A few times (less than half the time)
6. Almost never or never

18. Over the past 4 weeks, how often did you experience discomfort or pain following vaginal penetration?

1. Did not attempt intercourse

2. Almost always or always
3. Most times (more than half the time)
4. Sometimes (about half the time)
5. A few times (less than half the time)
6. Almost never or never

19. Over the past 4 weeks, how would you rate your level (degree) of discomfort or pain during or following vaginal penetration?

1. Did not attempt intercourse
  2. Very high
  3. High
  4. Moderate
  5. Low
  6. Very low or none at all
- 

### **Unwanted Sexual Experiences**

- Have you had any sexual experiences in the past that you didn't want or felt uncomfortable about? Y / N
- Tell me more about that (for example, what happened, who was involved, etc.): \_\_\_\_\_
- Age at incident (or when first occurred): \_\_\_\_\_
- How traumatic was this when it occurred? (Box 1)
 

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------
- How much has this affected your life in the past year? (Box 1)
 

1 (Not at all)	2 (Slightly)	3 (Moderately)	4 (Very)	5 (Extremely)
----------------	--------------	----------------	----------	---------------

\*\*Note details including:

Type: non-contact / non-penetrative contact / penetration

Force (e.g., verbal coercion, threats, taking advantage when too drunk to stop what was happening, physical force)

### **GIVE SES SELF-REPORT MEASURE**

---

- Have you ever had non-intercourse sexual contact, such as manual stimulation? Y / N  
How old were you when this first happened? \_\_\_\_ Was it:  
 Consensual  
 Nonconsensual  
 somewhere in between consensual and nonconsensual
- Have you ever had oral sex ('mouth on penis/vagina')? Y / N  
How old were you when this first happened? \_\_\_\_ Was it:  
 Consensual  
 Nonconsensual  
 somewhere in between consensual and nonconsensual
- Have you ever had vaginal sex ('penis in vagina' sex)? Y / N

How old were you when this first happened? \_\_\_\_ Was it:

- Consensual
- Nonconsensual
- somewhere in between consensual and nonconsensual

- Have you ever had anal sex ('penis in rectum/anus' sex)? Y / N

How old were you when this first happened? \_\_\_\_ Was it:

- Consensual
- Nonconsensual
- Somewhere in between consensual and nonconsensual

How stressed/conflicted do you feel about any of your current or past **sexual behaviors?** (Box 1)

1 (Not at all)                  2 (Slightly)                  3 (Moderately)                  4 (Very)                  5 (Extremely)

To what degree does your religious identity play a role in this stress/conflict? (Box 2)

1 (None at all)                  2 (A little)                  3 (A moderate amount)                  4 (A lot)                  5 (A great deal)

To what degree does your cultural identity play a role in this stress/conflict? (Box 2)

1 (None at all)                  2 (A little)                  3 (A moderate amount)                  4 (A lot)                  5 (A great deal)

*If YES to any of the above:*

- Has your sexual behavior been:
  - Only with males
  - Mostly with males
  - Equally with males and females
  - Mostly with females
  - Only with females
- Has your sexual interest/attraction been toward:
  - Only males
  - Mostly males
  - Equally males and females
  - Mostly females
  - Only females
- In the past two months, how many people have you had sex with? \_\_\_\_
- In the past 12 months, how many partners have you had? \_\_\_\_
- How many partners have you had in your lifetime? \_\_\_\_

Have you ever masturbated (define if needed – sexual self-stimulation)? Y/N

If y:

- a. When did you first masturbate?
- b. How often do you masturbate? (Box 4)
  - 1 Never    2 Rarely (6-12x/year)    3 Sometimes (2-4x/month)    4 Often (2+/week)    5 (At least daily)
- c. How stressed/conflicted do you feel about masturbation? (Box 1)
 

1 (Not at all)    2 (Slightly)    3 (Moderately)    4 (Very)    5 (Extremely)

To what degree does your religious identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)    4 (A lot)      5 (A great deal)

To what degree does your cultural identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)    4 (A lot)      5 (A great deal)

d. How much guilt/shame, if any, do you feel about masturbation? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)    4 (A lot)      5 (A great deal)

Elaborations:

Have you ever viewed pornography? Y/N

a. How often do you view pornography? (Box 4)

1 Never    2 Rarely (6-12x/year)    3 Sometimes (2-4x/month)    4 Often (2+/week)    5 (At least daily)

b. How stressed/conflicted do you feel about viewing pornography? (Box 1)

1 (Not at all)      2 (Slightly)      3 (Moderately)    4 (Very)      5 (Extremely)

To what degree does your religious identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)    4 (A lot)      5 (A great deal)

To what degree does your cultural identity play a role in this stress/conflict? (Box 2)

1 (None at all)      2 (A little)      3 (A moderate amount)    4 (A lot)      5 (A great deal)

Elaborations:

Have you ever achieved an orgasm? Define if needed (a climax of sexual excitement, characterized by feelings of pleasure centered in the genitals)

Yes

No

Uncertain

At what age did you experience your first orgasm? \_\_\_\_\_ years old

**How** did you first experience orgasm?

Masturbation while alone

Mutual masturbation ("petting")

Intercourse

Other

## 7. Experiential assessment (5 minutes)

*People have important thoughts and feelings about things that happen in sexual relationships or situations. Some thoughts and feelings can be expressed easily and comfortably, but other feelings are hard to express or communicate. In this exercise, I'm going to ask you to demonstrate how you might communicate different feelings. I'll describe a situation, and ask you to demonstrate how you might communicate it, using both words and nonverbal expressions, such as with your tone of voice, your eyes, your hands, and your posture.*

**1. Declining a request.** *Imagine that someone has asked you to do something sexually, for example, perform oral sex, but you do not want to do it. How would you express that you do not want to do it? I want to see what it is like for you to decline a sexual request in the most direct,*

*genuine, and straightforward way possible, using your tone of voice, emotions, mannerisms, and actions.*

(If participant struggles have them use the phrase: “No I do not want to do that.”)

- 0 = Did not do it at all
- 1 = Did it with great difficulty
- 2 = Did it with some difficulty
- 3 = Did it with a little difficulty
- 4 = Did it easily

used the default phrase

**2. Making a demand.** *Imagine that you are about to have sex with someone (boyfriend/husband/partner etc.) for the first time, and they do not want to use a condom, but you do. How would you express to them that you want them to use a condom? I want to see what it is like for you to make a sexual demand in the most direct, genuine, and straightforward way possible, using your tone of voice, emotions, mannerisms, and actions.*

(If participant struggles have them use the phrase: “Our sexual health is important to me, so I will only have sex if we use a condom.”)

- 0 = Did not do it at all
  - 1 = Did it with great difficulty
  - 2 = Did it with some difficulty
  - 3 = Did it with a little difficulty
  - 4 = Did it easily
- used the default phrase

#### 8. Wrap up (5 minutes)

- What have you discovered about yourself?
- How did you feel about the interview? What were your reactions? Likes/dislikes?
- Provide referral list

**\*\*\*Complete Post Session Ratings & Therapist Ratings\*\***

**Interview Anchor Points****1**

- 1 = Not at all  
2 = Slightly  
3 = Moderately  
4 = Very  
5 = Extremely

**2**

- 1 = None at all  
2 = A little  
3 = A moderate amount  
4 = A lot  
5 = A great deal

**3**

- 1 = Never  
2 = Sometimes  
3 = About half the time  
4 = Most of the time  
5 = Always

**4**

- 1 = Never  
2 = Rarely (6-12x/year)  
3 = Sometimes (2-4x/month)  
4 = Often (2+/week)  
5 = At least daily

**5****SSDS**

- 1 = Have told the person *nothing* about this aspect of me.  
2 = Have talked only in *general terms* about this item  
3 = Have talked in *some detail* about this item but have not fully discussed my own attitudes or behaviors  
4 = Have talked in *complete detail* about this item to the other person. He or she knows me fully in this respect.

## APPENDIX B: Measures

### DEMOGRAPHICS

Participant Initials

Participant ID

How old are you? (age in years)

Ethnic Category

- Hispanic or Latino
- Not Hispanic or Latino

Racial Category

- Middle Eastern or Arab
- East Asian (e.g. Japanese, Chinese)
- South Asian (e.g. Indian, Pakistani)
- Native Hawaiian or Other Pacific Islander
- Black or African American
- White or European American
- American Indian or Alaskan native
- Other \_\_\_\_\_

What is the highest level in school that you completed?

- Less than High School or GED (
- HS or GED (=12yrs)
- Some college, but less than an associate's degree (=13yrs)
- Associate's degree or two years of college (=14yrs)
- College degree [e.g. BA/BS] or four years of college (=16)
- Master's degree (=18yrs)
- Doctoral Degree (=20yrs)

What is your current relationship status?

- Married
- Separated
- Divorced
- Widowed
- Never Married
- Living with a partner in a committed relationship

What is your current employment status? (check all that apply)

- Homemaker
- Unemployed, but seeking employment
- Unemployed, not seeking employment
- Retired
- On disability
- Full-time employed
- Part-time employed
- Full-time student

What is your household income?

- Less than \$10,000
- \$10,000 to \$14,999
- \$15,000 to \$24,999
- \$25,000 to \$34,999
- \$35,000 to \$49,999
- \$50,000 to 74,999
- \$75,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 to \$199,999
- \$200,000 or more

Is your health affected by any of the following medical problems? (click the conditions that apply to you)

- Heart disease
- Diabetes
- Hypertension
- Chronic lung disease
- Cancer
- Gout
- Stroke
- Syncope/Fainting
- Kidney disease
- Liver disease
- Ulcer
- Psychiatric illness or mental disorder
- Alcohol or drug use
- Lupus
- Scleroderma
- Rheumatoid Arthritis
- Headaches
- Migraine
- Asthma

- Irritable Bowel Syndrome
- Crohn's Disease
- Ulcerative Colitis
- Chronic Pelvic Pain
- Interstitial Cystitis
- Vulvodynia
- Other \_\_\_\_\_

#### PHQ-15

During the past week, how much have you been bothered by any of the following problems?

	Not at all bothered	Bothered a little	Bothered a lot
A. Stomach pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
B. Back pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
C. Pain in your arms, legs, or joints (knee, hips, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
D. Menstrual cramps or other problems with your period (women only)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
E. Headaches	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
F. Chest pain	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
G. Dizziness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
H. Fainting spells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I. Feeling your heart pound or race	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
J. Shortness of breath	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
K. Pain or problems during sexual intercourse	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
L. Constipation	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
M. Nausea, gas, or indigestion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
N. Feeling tired of having low energy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
O. Trouble sleeping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## BSI

Below is a list of problems and complaints that people sometimes have. Please read each item and using the scale below, rate how much discomfort that problem has caused you in the past week (click on the circle). Please remember, you are to indicate how much the problem has bothered you in the past week, not how often it has happened.

	Not at all	A little bit	Moderately	Quite a bit	Extremely
Nervousness or shakiness inside	<input type="radio"/>				
Faintness of dizziness	<input type="radio"/>				
The idea that someone else can control your thoughts	<input type="radio"/>				
Feeling others are to blame for most of your troubles	<input type="radio"/>				
Trouble remembering things	<input type="radio"/>				
Feeling easily annoyed or irritated	<input type="radio"/>				
Pains in your heart or chest	<input type="radio"/>				
Feeling afraid in open spaces	<input type="radio"/>				
Thoughts of ending your life	<input type="radio"/>				
Feeling that most people cannot be	<input type="radio"/>				

trusted					
Poor appetite	○	○	○	○	○
Suddenly scared for no reason	○	○	○	○	○
Temper outbursts that you could not control	○	○	○	○	○
Feeling lonely even when you are with other people	○	○	○	○	○
Feeling blocked in getting things done	○	○	○	○	○
Feeling lonely	○	○	○	○	○
Feeling blue	○	○	○	○	○
Feeling no interest in things	○	○	○	○	○
Feeling fearful	○	○	○	○	○
Your feelings being easily hurt	○	○	○	○	○
Feeling that people are unfriendly or dislike you	○	○	○	○	○
Feeling inferior to others	○	○	○	○	○
Nausea or upset stomach	○	○	○	○	○
Feeling that you are watched or	○	○	○	○	○

talked about by others	<input type="radio"/>				
Trouble falling asleep	<input type="radio"/>				
Having to check and double check what you do	<input type="radio"/>				
Difficulty making decisions	<input type="radio"/>				
Feeling afraid to travel on buses, subways, or trains	<input type="radio"/>				
Trouble getting your breath	<input type="radio"/>				
Hot or cold spells	<input type="radio"/>				
Having to avoid certain things, places, or activities because they frighten you	<input type="radio"/>				
Your mind going blank	<input type="radio"/>				
Numbness or tingling in parts of your body	<input type="radio"/>				
The idea that you should be punished by your sins	<input type="radio"/>				
Feeling hopeless	<input type="radio"/>				

about the future					
Troubling concentrating	○	○	○	○	○
Feeling weak in parts of your body	○	○	○	○	○
Feeling tense or keyed up	○	○	○	○	○
Thoughts of death or dying	○	○	○	○	○
Having urges to beat, injure, or harm someone	○	○	○	○	○
Having urges to break or smash things	○	○	○	○	○
Feeling very self-conscious with others	○	○	○	○	○
Feeling uneasy in crowds	○	○	○	○	○
Never feeling close to another person	○	○	○	○	○
Spells of terror or panic	○	○	○	○	○
Getting into frequent arguments	○	○	○	○	○
Feeling nervous when you are left alone	○	○	○	○	○
Others not	○	○	○	○	○

giving you proper credit for your achievements					
Feeling so restless that you couldn't sit still	○	○	○	○	○
Feelings of worthlessness	○	○	○	○	○
Feeling that people will take advantage of you if you let them	○	○	○	○	○
Feelings of guilt	○	○	○	○	○
The idea that something is wrong with your mind	○	○	○	○	○

SWLS

Below are five statements with which you may agree or disagree. Using answers below, indicate your agreement with each item by placing the appropriate number on the line preceding that item. Please be open and honest in your responding.

VIA

Please answer each question as carefully as possible. Please choose one of the numbers to the right of each question to indicate your degree of agreement or disagreement. Many of these questions will refer to your heritage culture, meaning the culture that has influenced you most (other than American culture). It may be the culture of your birth, the culture in which you have been raised, or another culture that forms part of your background. If there are several such cultures, pick the one that has influenced you the most (e.g., Irish, Chinese, Mexican, Black). If you do not feel that you have been influenced by any other culture, please try to identify a culture that may have had an impact on previous generations of your family.

Your heritage culture (other than American) is: \_\_\_\_\_

Please choose one of the numbers to the right of each question to indicate your degree of agreement or disagreement.







sss

## Describe Yourself

Below is a listing of 50 adjectives. For each word, consider whether or not the term describes you. Each adjective is to be rated on a scale ranging from 0 = not at all descriptive of me to 6 = very much descriptive of me. Choose a number of each adjective to indicate how accurately the adjective describes you. There are no right or wrong answers. Please be thoughtful and honest. To what extend does the term \_\_\_\_\_ describe me?

22. self-conscious	○	○	○	○	○	○
23. dull	○	○	○	○	○	○
24. straightforward	○	○	○	○	○	○
25. casual	○	○	○	○	○	○
26. disagreeable	○	○	○	○	○	○
27. serious	○	○	○	○	○	○
28. prudent	○	○	○	○	○	○
29. humorous	○	○	○	○	○	○
30. sensible	○	○	○	○	○	○
31. embarrassed	○	○	○	○	○	○
32. outspoken	○	○	○	○	○	○
33. level-headed	○	○	○	○	○	○
34. responsible	○	○	○	○	○	○
35. romantic	○	○	○	○	○	○
36. polite	○	○	○	○	○	○
37. sympathetic	○	○	○	○	○	○
38. conservative	○	○	○	○	○	○
39. passionate	○	○	○	○	○	○
40. wise	○	○	○	○	○	○
41. inexperienced	○	○	○	○	○	○
42. stingy	○	○	○	○	○	○
43. superficial	○	○	○	○	○	○
44. warm	○	○	○	○	○	○
45. unromantic	○	○	○	○	○	○
46. good-natured	○	○	○	○	○	○
47. rude	○	○	○	○	○	○

SSDS

The following describe different situations in which people may or may not wish to discuss sexual matters. Imagine yourself in each of the situations listed below and circle that number which best shows how easy or difficult it would be for you to reveal sexual information in that situation.

1. If you were asked to complete an anonymous questionnaire containing personal questions on sexuality, the answers to which you had been told would never be publicly associated with you personally, how easy or difficult would this be in the following situation:

2. If you were asked personal questions in a private face-to-face situation (for instance, only you and an interviewer), the answers to which you had been told would never be revealed, how much difficulty or ease would you have in doing this in the following situations:

30 years) male interviewer	○	○	○	○	○	○
c. With an older (50 years and older) female interviewer	○	○	○	○	○	○
d. With an older (50 years and older) male interviewer	○	○	○	○	○	○
e. With a young (25- 35 years) female medical doctor	○	○	○	○	○	○
f. With a young (25- 35 years) male medical doctor	○	○	○	○	○	○
g. With an older (50+ years) female medical doctor	○	○	○	○	○	○
h. With an older (50+ years) male medical doctor	○	○	○	○	○	○

3. How difficult or easy would it be for you to discuss a personal sexual problem or difficulty in the following situation (assume you are in private circumstances)?

4. How easy or difficult would it be for you to openly discuss your sex life and history in a group of three to five people who are:

5. How easy or difficult would it be for you to discuss a personal sexual problem or difficulty with your parent, or if your parents are deceased, how easy or difficult would it have been to discuss such with them?

RWA-R

Please rate your agreement with the following statements.

any better or holier than those which other people follow.							
The majority of those who criticize proper authorities in government and religion only create useless doubts in people's mind.	○	○	○	○	○	○	○
There is absolutely nothing wrong with nudist camps.	○	○	○	○	○	○	○
There is no "ONE right way" to live life; everybody has to create their own way.	○	○	○	○	○	○	○
Homosexuals and feminists should be praised for being brave enough to defy "traditional family values."	○	○	○	○	○	○	○
The situation in our country is getting so serious, the strongest method would be justified if they	○	○	○	○	○	○	○

eliminated the troublemakers and got us back to our true path.							
Everyone should have their own lifestyle, religious beliefs, and sexual preferences, even if it makes them different from everyone else.	○	○	○	○	○	○	○
People should pay less attention to the Church, the Pope, and other religious figures, and instead develop their own personal standards of what is moral and immoral.	○	○	○	○	○	○	○
The only way our country can get through the crisis ahead is to get back to our traditional values, put some tough leader in power, and silence the troublemakers	○	○	○	○	○	○	○

spreading bad ideas.							
There is nothing wrong with premarital sexual intercourse.	○	○	○	○	○	○	○
It is good that nowadays young people have greater freedom "to make their own rules" and to protest against things they don't like.	○	○	○	○	○	○	○
What our country really needs instead of more "civil rights" is a good stiff dose of law and order.	○	○	○	○	○	○	○
Obedience and respect for authority are the most important values children should learn.	○	○	○	○	○	○	○
Once our government leaders give us the "go ahead," it will be the duty of every patriotic citizen to help stomp out the	○	○	○	○	○	○	○

rot that is poisoning our country from within.							
We should treat protestors and radicals with open arms and open minds, since new ideas are the lifeblood of progressive change.	○	○	○	○	○	○	○
What our country needs most is disciplined citizens, following national leaders in unity.	○	○	○	○	○	○	○
The fact on crime, sexual immorality and the recent public disorders all show we have to crack down harder on deviant groups and troublemakers, if we are going to save our moral standards and preserve law and order.	○	○	○	○	○	○	○
What our	○	○	○	○	○	○	○

country really needs is a strong, determined leader who will crush evil, and take us back to our true path.										
---	--	--	--	--	--	--	--	--	--	--

SDO.

There are many kinds of groups in the world: men and women, ethnic and religious groups, nationalities, political factions. How much do you support or oppose the ideas about groups in general? Next to each statement, choose a number from 1 to 10 to show your opinion.

	1. Extremely Oppose	2	3	4	5	6	7	8	9	10. Extremely Favor
1. In setting priorities, we must consider all groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. We should not push for group equality.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Group equality should be our ideal.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Superior groups should dominate inferior groups.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please rate your level of agreement with the following statements. PLEASE NOTE: We use the term "Arab/Chaldean" to refer generally to your heritage culture. Thus, answer based on what you consider to be your own heritage culture (i.e., Arab, Chaldean, or both).

	1 (Strongly Disagree)	2	3	4	5 (Strongly Agree)
1. I feel caught between the Arab/Chaldean and American cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. I feel like someone moving between two cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Being bicultural means having two cultural forces pulling on me at the same time.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. I do not feel trapped between the Arab/Chaldean and American cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. I feel conflicted between the American and Arab/Chaldean ways of doing things.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. I find it easy to balance both Arab/Chaldean and American cultures.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. I rarely feel conflicted about	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

being bicultural.

- |  |                       |                       |                       |                       |                       |
|--|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| 8. I feel torn<br>between<br>Arab/Chaldean<br>and American<br>cultures.  | <input type="radio"/> |
| 9. I feel that my<br>Arab/Chaldean<br>and American<br>cultures are<br>incompatible.  | <input type="radio"/> |
| 10. I find it easy<br>to harmonize<br>Arab/Chaldean<br>and American<br>cultures.   | <input type="radio"/> |
| 11. I feel<br>Arab/Chaldean-<br>American.  | <input type="radio"/> |
| 12. I feel<br>Arab/Chaldean<br>and American<br>at the same<br>time.  | <input type="radio"/> |
| 13. I relate<br>better to a<br>combined<br>Arab/Chaldean-<br>American<br>culture than to<br>Arab/Chaldean<br>or American<br>culture alone. | <input type="radio"/> |
| 14. I feel part of<br>a combined<br>culture.   | <input type="radio"/> |
| 15. I cannot<br>ignore the<br>Arab/Chaldean<br>or American<br>side of me.  | <input type="radio"/> |
| 16. I do not<br>blend my<br>Arab/Chaldean  | <input type="radio"/> |

or American  
cultures.

17. I keep  
Arab/Chaldean  
and American  
cultures  
separate.

18. I am simply  
an  
Arab/Chaldean  
who lives in  
North America.

19. I find it  
difficult to  
combine  
Arab/Chaldean  
and American  
cultures.

## **APPENDIX C: Informed Consent**

# [Behavioral] Research Informed Consent

## Title of Study: Arab American Women's Health Study

Principal Investigator (PI): Mark Lumley, PhD  
Department of Psychology  
313-577-2304

## Purpose

You are being asked to be in a research study of Arab American women's health because you are an Arab American woman between the ages of 18 and 35. This study is being conducted at Wayne State University. The estimated number of study participants to be enrolled at Wayne State University is about 150. **Please read this form and ask any questions you may have before agreeing to be in the study.**

In this research study, we are interested in learning more about Arab American women's physical, emotional, and sexual health. In particular, we would like to know how women's cultural values and sexual health are related to their physical and emotional health. We will also examine whether engaging in the health interview affects women's physical and emotional health.

### **Study Procedures**

If you agree to take part in this research study, you will be asked to complete two visits. At the first visit, you will complete several questionnaires. You will then be randomly assigned (like by the flip of a coin) to complete an interview either immediately during the first visit, or 5 weeks later. You will have a 2 of 3 chance of being interviewed immediately, and a 1 of 3 chance of being interviewed after 5 weeks. In the second visit, 5 weeks after visit 1, you will complete the same questionnaires as you did originally. Visit 1 will take about 45 minutes, and visit 2 will take about 30 minutes. The interview session will take an additional 60 minutes at either Visit 1 or Visit 2, depending on your random assignment. Thus, the entire study is expected to take 2 hours and 15 minutes over the course of 5 weeks.

The questionnaires will ask you questions about your health, culture, personality, and past stressful experiences. During the interview, you will be asked more questions about stress, culture, and health, with a focus on women's sexuality. This will include topics such as contraception, pregnancy, and sexual attitudes, behaviors, and experiences, including unwanted experiences, assault, and abuse. You may choose not to answer some of the questions in the

questionnaires and interview and still remain in the study. All interviews will be conducted by female graduate students in clinical psychology and will be audio recorded.

## **Benefits**

There are no expected direct benefits from this study.

## **Risks**

By taking part in this study, you may experience the following risks:

- Emotional risks: Some questions about past stressful events, current conflicts, and sensitive topics such as sexuality may cause some participants brief feelings of sadness or anxiety. No long-term risk is expected to occur. We will provide information about counseling resources at Wayne State and the community in case you feel the need to talk to someone about your feelings.
- Social/Economic risks: There is a small risk of breach of confidentiality. To protect against this, all identifying information, including audio recordings, will be kept on a hard drive that is only accessible from password-protected computers within the laboratory. The spreadsheet will also be password-protected. Following data collection, materials will be kept for no longer than 5 years, and all identifying information, including audio recordings, will be destroyed.

There may also be risks involved from taking part in this study that are not known to researchers at this time.

## **Study Costs**

- Participation in this study will be of no cost to you.

## **Compensation**

For taking part in this research study, you will choose to either receive 3.5 credits (hours) for psychology course participation (1 credit per hour spent, plus .5 credit for each in-person visit) OR be paid for your time and inconvenience a \$15 gift card after each questionnaire set, and a \$20 gift card after completion of the interview, for a total of \$50 for completing the entire study.

## **Confidentiality**

All information collected about you during the course of this study will be kept confidential to the extent permitted by law. You will be identified in the research records by a code name or number. Information that identifies you personally will not be released without your written permission. However, the study sponsor, the Institutional Review Board (IRB) at Wayne State University, or federal agencies with appropriate regulatory oversight [e.g., Food and Drug

Administration (FDA), Office for Human Research Protections (OHRP), Office of Civil Rights (OCR), etc.) may review your records.

When the results of this research are published or discussed in conferences, no information will be included that would reveal your identity.

If photographs, videos, or audiotape recordings of you will be used for research or educational purposes, your identity will be protected or disguised. All audio recordings will be stored on a hard drive on a password-protected computer at the Wayne State Stress and Health Lab, and will be destroyed upon termination of the study. Only the PI and trained key personnel on the study will have access to the tapes.

### **Voluntary Participation/Withdrawal**

Taking part in this study is voluntary. You have the right to choose not to take part in this study. If you decide to take part in the study you can later change your mind and withdraw from the study. You are free to only answer questions that you want to answer. You are free to withdraw from participation in this study at any time. Your decisions will not change any present or future relationship with Wayne State University or its affiliates, or other services you are entitled to receive.

The PI may stop your participation in this study without your consent. The PI will make the decision and let you know if it is not possible for you to continue. The decision that is made is to protect your health and safety, or because you did not follow the instructions to take part in the study.

The data that you provide may be collected and used by Qualtrics as per its privacy agreement. Additionally, participation in this research is for residents of the United States over the age of 18; if you are not a resident of the United States and/or under the age of 18, please do not complete this survey.

### **Questions**

If you have any questions about this study now or in the future, you may contact Mark Lumley or one of his research team members at the following phone number: 313-577-2304. If you have questions or concerns about your rights as a research participant, the Chair of the Institutional Review Board can be contacted at (313) 577-1628. If you are unable to contact the research staff, or if you want to talk to someone other than the research staff, you may also call the Wayne State Research Subject Advocate at (313) 577-1628 to discuss problems, obtain information, or offer input.

**Consent to Participate in a Research Study**

To voluntarily agree to take part in this study, you must sign on the line below. If you choose to take part in this study you may withdraw at any time. You are not giving up any of your legal rights by signing this form. Your signature below indicates that you have read, or had read to you, this entire consent form, including the risks and benefits, and have had all of your questions answered. You will be given a copy of this consent form.

---

Signature of participant

Date

---

Printed name of participant

Time

---

Signature of witness\*\*

Date

---

Printed name of witness\*\*

Time

---

Signature of person obtaining consent

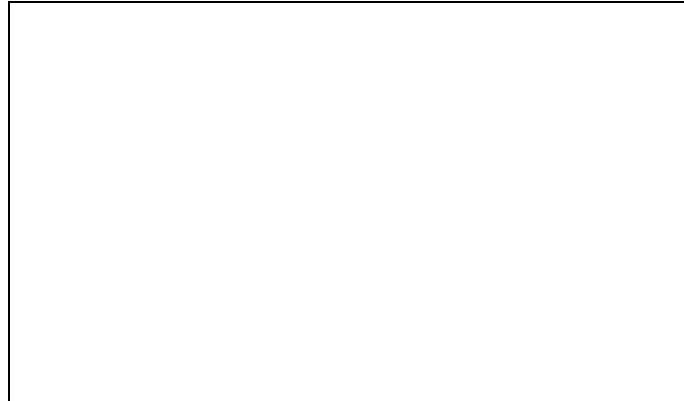
Date

---

Printed name of person obtaining consent

Time

\*\*Use when participant has had this consent form read to them (i.e., illiterate, legally blind, translated into foreign language).



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**ABSTRACT****ARAB AMERICAN WOMEN'S HEALTH STUDY: CORRELATIONAL AND EXPERIMENTAL EXAMINATION OF A SEXUAL HEALTH INTERVIEW**

by

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Arab Americans are a diverse group of Americans of Arab heritage or identity. Given the underrepresentation of Arab Americans in research and a taboo surrounding sexuality in Arab culture, it is not surprising that Arab American sexual health is understudied, even though sexuality is an important aspect of health. Arab American women face the challenging task of negotiating both their heritage and American culture, which may have implications for sexual health due to the two cultures' disparate views on sexuality. Given the conflict and taboo likely to surround the topic of sexuality among Arab American women, confidential discussion of these sensitive topics with a knowledgeable and empathic interviewer may yield beneficial effects. This correlational and experimental study aimed to fill the gap in the literature on Arab American sexual health by examining: a) how sexual health is associated with physical and psychological health and b) whether engaging in an interview about sexuality improves participants' sexual health.

In this study, 134 Arab American women ages 18-35 ( $M = 20.6$ ) were recruited from the university and community. Participants completed measures assessing sexual health and attitudes, somatic and psychological symptoms, and cultural identity, and then were randomized

to an interview or control (delayed interview) condition. The 60-minute interviews, conducted by female clinical psychology graduate students, inquired about sexual health, particularly relatively private attitudes and experiences. Five weeks later, all participants completed follow-up measures, and the control participants then completed the interview. Multiple regression analyses indicated that sexual self-esteem and unwanted sexual experiences were positively associated with somatic, depressive, and anxious symptoms, even after accounting for sociocultural variables and sexual experiences. Additionally, sexual satisfaction was inversely associated with psychological symptoms, and sexual self-schema was positively associated with somatic symptoms, also after accounting for those covariates. Bicultural identity integration moderated some of these relationships. These correlational findings suggest that sexual health is a key aspect of health and well-being and should be assessed among Arab American women. Analysis of covariance indicated that the interview condition led to significantly greater sexual satisfaction and marginally less discomfort with sexual self-disclosure at follow-up (adjusting for baseline), compared to controls. Moderation analyses revealed that these benefits extended to women with varying degrees of discomfort with sexual self-disclosure and extent of past sexual self-disclosure. These experimental findings suggest the value – rather than the risk – of openly discussing sexuality-related topics in a confidential, empathic setting with Arab American women.

**AUTOBIOGRAPHICAL STATEMENT**

Hannah Holmes completed her undergraduate degree in psychology at Cedarville University in 2013. She obtained her master's degree in Clinical Psychology from Wayne State University in 2016, where she is also completing her PhD in Clinical Psychology with a minor in Health Psychology. Currently, she is a clinical health psychology intern at The Ohio State University Wexner Medical Center in Columbus, Ohio. Broadly, Hannah's clinical and research interests focus on women's health and sexuality. She is interested in testing and implementing emotion-focused interventions to improve women's physical, psychological, and sexual health. Hannah plans to pursue a career as a researcher, clinician, and instructor in an academic setting. Next year, she will be a Visiting Assistant Professor in the Department of Psychology at Appalachian State University.