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Considerations in the provision of mental health services toward Arabs

Dalia Khoury

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Considerations in the provision of mental health services toward Arabs

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

by

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Abstract

CONSIDERATIONS IN THE PROVISION OF MENTAL HEALTH SERVICES TOWARD ARABS

Dalia Khoury, Ph.D.

A dissertation submitted in partial fulfillment of the requirements for the degree of Doctor of Philosophy at Virginia Commonwealth University.

Virginia Commonwealth University, 2016

Chair: Elizabeth M.Z. Farmer, Ph.D.
Professor and Associate Dean for Research, School of Social Work

Existing evidence suggests that disparities exist in the use of mental health services by Arabs in the U.S. However, the literature is sparse and little is known about what may account for potential disparities. While there are likely many factors that contribute, lack of cultural competence of mental health providers is one potentially important barrier for mental health service use among racial/ethnic minorities, including Arabs. The primary purpose of this study was to identify and examine factors related to the development and existence of cultural competence toward Arabs. Variables measuring demographics, professional characteristics, familiarity with Arabs, prior experience and knowledge of Arabs, and readiness for change were tested with a randomly selected sample of mental health providers in Northern Virginia.

In order to assess baseline levels of cultural competence toward Arabs, as well as further define the potential relationships of these variables to cultural competence, a new measure of cultural competence toward Arabs [CC-A] was developed and initially validated through a focus group and pilot test. It was subsequently administered to a group of mental health providers in Northern Virginia to further assess the validity of the underlying constructs being tested and to
explore relationships between this measure and other key factors. Factor analyses revealed that a unidimensional construct of cultural competence toward Arabs was being measured. Validity was established through Cronbach’s alpha and convergent validity with an existing measure.

Bivariate and multivariate analyses examined the way this measure related to these constructs. Regression analyses revealed that higher levels of cultural competence were significantly related to higher readiness for change, higher prior levels of knowledge toward Arabs, a greater degree of familiarity with Arabs, and utilizing books as a source of knowledge about Arabs. A model inclusive of these factors explained 19% of the variance in mean scores on the CC-A.

Implications of these findings for research, clinical practice, and graduate training are discussed. These include consideration of alternative models for cultural competence, an assessment of additional methodologies to measure cultural competence, and the development and implementation of cultural competence interventions.
Chapter 1: Introduction

The long-term goal of this research was to address and improve access, quality, and outcomes of mental health services for racial/ethnic minorities, with a particular focus on understudied groups, such as Arabs. One aspect of this research encompassed the manner in which mental health providers’ cultural competence may impact access, quality, and outcomes of mental health services.

Significant racial/ethnic disparities continue to exist in the U.S. with regard to access, quality, and outcomes related to mental health services. Racial/ethnic minorities in the United States bear a disproportionate burden of both physical and mental illness. There are a number of reasons why these disparities may exist among racial/ethnic minorities, including Arabs. These include client level factors, provider level factors, community level factors, and structural factors. Within this complex and multi-level framework, existing research indicates that a lack of provider cultural competence likely plays a role in the decision of racial/ethnic minorities to seek or remain in treatment. However, this assertion has yet to be explored with Arabs. This study has contributed to the understanding and provision of culturally competent and relevant mental health services toward Arabs, and could inform further studies on this population, other understudied groups, and racial/ethnic minorities.

This research explored the levels of cultural competence exhibited by a random sample of mental health providers (licensed clinical social workers, clinical psychologists, professional counselors) working in Northern Virginia, which has a relatively high concentration of Arabs. A descriptive, exploratory, and correlational study approach was utilized, with data collected via mail and electronic survey. The quantitative self-report measure was informed by a number of theories, including the tripartite model of cultural competence (knowledge, awareness, skills),
intersectionality, critical race theory, and the transtheoretical model, which assesses readiness for change. This measure consisted of questions on demographics, professional characteristics, levels of, and sources of, previous knowledge about Arabs, social closeness, evaluation of knowledge, awareness, and skills toward working with Arabs in a mental health setting, and an assessment of desire for change (via a framework derived from the transtheoretical model), specifically toward increased cultural competence. Preliminary psychometrics were assessed through the use of a focus group consisting of Arabs, followed by a pilot study. Focus group findings indicated that social desirability was a concern, particularly in that individuals may not want to identify or admit to negative perceptions of a particular group. Prior to the dissertation research, the measure was pilot tested with a sample of 19 mental health providers in central Virginia. Results revealed adequate internal consistency for the overall scale and three subscales, as well as convergent validity with an established measure.

This research is the first step in a long-term scholarly trajectory. The assessment of usual care practices can provide the groundwork for future work – specifically around intervention and implementation research. Assessing usual care practices can inform future research by providing baseline data prior to the implementation of any interventions, and by identifying gaps that may become the targets of future interventions (Garland, Bickman, & Chorpita, 2010). The measurement of usual care is integral to the future development of targeted improvements and interventions. Understanding what providers currently know, as well as what current practices toward Arab clients entail, are integral in the future development and evaluation of interventions (individual, professional, and organizational). The current study is a first step in a program of research that could, hopefully, contribute to the field’s understanding and efforts to address racial/ethnic disparities in mental health care, particularly among Arabs and other understudied
groups. See Figure 1. This current research fits into the foundation portion of this large-scale endeavor by identifying the status of a population of interest (mental health providers), by doing so with regards to a specific group (e.g. Arabs), by ascertaining what they know, their awareness of biases, and the level of skills they may possess when working with this population, by determining the sources of knowledge from which they gain information about this population, and by determining their readiness to change.
Professional commitment among mental health professions as well as a personal commitment among individual mental health providers.

Individual: Cultural competence trainings aimed at increasing knowledge, awareness, and skills.

Professional: adapting professional standards of practice that are more broadly encompassing of a diversity of strategies and skills.

Organizational: e.g. relocate mental health services in minority communities; hire more minority therapists

Knowledge: Increase in superficial knowledge of minority culture, values, and lifestyle

Skills: Increase in verbal/nonverbal counseling skills to be used with diverse populations

Awareness: Increase in level of psychological discomfort due to presentation with potential biases and stereotypes

Organizational: increase in numbers of minority mental health providers in workforce.

Organizational: increase in availability of mental health services in minority communities.

Assumptions
- Knowledge: being presented with facts about diverse groups will ensure retention
- Awareness: increased psychological discomfort may lead individuals to be resistant to discussing biases
- Different professions (counseling, social work, psychology) will be equally disposed and committed to enacting change
- Parts of the U.S. may be more/less favorably disposed toward minorities, including Arab Americans

Figure 1: Impact of addressing cultural competence toward racial/ethnic minority groups

Rev. 7/09; template from evaluation/evallogicmodelworksheets.html
The results of this study contributed to our understanding of what mental health providers know about Arabs, and identified those variables related to providers’ beliefs, attitudes and skills. Future interventions can subsequently be developed to specifically address the gaps in practitioner knowledge, awareness, and skills toward Arabs. In addition to potentially aiding in the development of effective and sustainable interventions, this study worked to develop an ethnic-specific measure of cultural competence, and determined which factors this measure was and was not related to.

**Background of the Study**

Due to the continued presence of significant disparities in health, access to health services, healthcare, and health outcomes, racial/ethnic minorities in the U.S. bear a disproportionate burden of both physical and mental illness. There are well-documented mental health service use disparities among racial and ethnic minorities (Abe-Kim et al., 2007; Carpenter-Song, Whitley, Lawson, Quimby, & Drake, 2011; Diala et al., 2001; D.W. Sue & Sue, 2003; S.Sue & Dhindsa, 2006; U.S. Department of Health and Human Services [USDHHS], 2001), including Arabs (Al-Krenawi & Graham, 2000; Al-Krenawi, 2005; Aloud & Rathur, 2009; Douki et al., 2007; Erickson & Al-Timimi, 2001; Nasser-McMillan & Hakim-Larson, 2003; Okasha, 2003; Sarsour, Tong, Jaber, Talbi, & Julliard, 2010). Culture and ethnicity are hypothesized to play a role in the patterns of mental health service use in the U.S. (USDHHS, 2001). Specifically, racial and ethnic minorities pursue treatment for mental illness and continue in treatment at a lower rate than Whites (Bauer, Chen, & Alegria, 2012; Carpenter-Song et al., 2012; Diala et al., 2001). Not only do racial and ethnic minorities tend to access professional mental health services at a lower rate than Whites, they tend to show less follow through with their treatment plan, and be less satisfied with services (Carpenter-Song et al.,
When they do receive treatment, there is also evidence of differential types of treatment. For example, racial/ethnic minorities meeting the criteria for depression are more often treated with higher levels of antipsychotic medications than antidepressant medication. These treatment disparities also extended diagnostically, in that minorities are more likely to be diagnosed with psychotic disorders compared to Whites (Carpenter-Song et al., 2012). Additionally, there is a relationship between the vast and far-reaching stigma associated with mental illness, and a denial of symptoms or lack of perception of need for treatment (Bauer, Chen, & Alegría, 2012; Corrigan, 2004).

The literature explicates a number of reasons for which mental health access, treatment, and service disparities may exist for minorities. These include individual level factors, such as: a lack of awareness of availability of mental health services, negative attitudes toward mental health services and service providers, a perceived dearth of culturally competent service providers, and cultural and religious views about the origins of mental illness (Aloud, 2004; Aloud & Rathur, 2009; Leong & Lau, 2001; Obasi & Leong, 2009), difficulty accurately identifying symptoms of mental illness (Al-Krenawi, 2002; Bauer, Chen, & Alegría, 2012; Leong & Lau, 2001), a desire to preserve self-esteem (Savaya, 1998), level of acculturation (Amer & Hovey, 2007; Jadalla & Lee, 2012) and experiences of racial and ethnic discrimination (Padela & Heisler, 2010; Padela, Gunter, Killaw, & Heisler, 2011). They also include community level and structural factors, such as: societal stigma associated with mental illness (Abdullah & Brown, 2011; Corrigan, 2004; Obasi & Leong, 2009; Wood & Newbold, 2011), inadequate resources and financial barriers (Lauber & Rössler, 2007; Obasi & Leong, 2009), particularly for immigrants (Wood & Newbold, 2011), a lack of availability of culturally competent mental health services (Al-Krenawi, 2005; Carpenter-Song et al., 2011; Graham,
Bradshaw, & Trew, 2009; Imel et al., 2011; Kulwicki, Miller, & Schim, 2000; Wood & Newbold, 2011), a lack of accessibility to mental health services (Al-Krenawi, 2005), a general mistrust of the mental health system (Al-Krenawi & Graham, 2000; Anglin, Alberti, Link, & Phelan, 2008; Lauber & Rössler, 2007; Obasi & Leong, 2009), and a lack of health insurance (Alegría et al., 2012). It is the level of cultural competence mental health providers exhibit toward Arabs that this study focused on. This could take the form of an individual, community, or structural factor.

The majority of research on mental health service use and access focuses on the four major racial/ethnic minority groups in the U.S.: African Americans, Asian Americans and Pacific Islanders, Native Americans and Alaska Natives, and Hispanics. There is significantly less attention and research afforded to the wide range of other groups within the US.

One of these understudied groups is Arabs. In the contemporary U.S., Arabs (both recent immigrants and long-standing citizens/residents who are of Arab descent) face unique challenges, stigma, and attention, which will be discussed shortly. However, they are also a poorly defined group and have received little attention in studies of minority groups. Part of the reason for this lack of attention may stem from the fact that Arabs have typically been categorized as White, and this mis-categorization almost certainly produces erroneous and misleading research (Abdullah & Brown, 2011, Naber, 2000; Soheilian & Inman, 2009). Ideally, Arab should be considered an ethnic group (as Hispanic currently is), rather than a racial one. The lack of official government recognition as a minority group prevents Arabs from being covered by hate crime protections (Moradi & Hasan, 2004). Additionally, previous studies have conflated the Arab and Muslim populations, failing to recognize that ethnicity and religion are two distinct dimensions that are not perfectly correlated. This has led to potential under-counting
and under-recognition of Arab Christians. (Amer & Hovey, 2012). Cainkar (2006) argues that Arabs are both “excluded from whiteness and from mainstream recognition as people of color” (Cainkar, 2006, p. 272).

In the U.S. today, Arabs are increasing in numbers (Arab American Institute Foundation, 2012; Nobles & Sciarra, 2000). Specifically, the Arab American Institute Foundation (2012) reports that between 2000 and 2010, individuals in the U.S. identified as possessing Arab-speaking ancestry grew by more than 72%. Today, the Arab American Institute Foundation (2012) estimates that there are approximately 3.6 million Arabs living in the United States. Additionally, Arabs face a unique set of challenges in the wake of 9-11 (Awad, 2010; Padela & Heisler, 2010). These challenges (including a substantial and overt increase in prejudicial and discriminatory behavior, hate crimes) (Abu-Raiya, Pargament, & Mahoney, 2011; Hanes & Machin, 2014; Ibish 2001, 2003, 2008) may contribute to the development or exacerbation of symptoms of mental illness (Abu-Ras & Abu-Bader, 2009; Abu-Ras & Suarez, 2009; Amer & Hovey, 2011; Moradi & Hasan, 2004; Padela & Heisler, 2010). Therefore, it is particularly relevant and timely to explore issues of cultural competence of mental health providers towards this population.

Who are Arabs?

Although Arabs are not identified as a separate racial or ethnic group in the U.S., Erickson & Al-Timimi (2001) argue that the term Arab refers to an ethnically mixed group of individuals and should be used as a cultural or linguistic term, rather than a racial one. Not everyone who lives in the Middle East and Northern Africa is considered an Arab. The most common definition of an Arab in the literature (Aloud & Rathur, 2009; Kakoti, 2012; Moradi & Hasan, 2004; Nasser-McMillan & Hakim-Larson, 2003) is an individual originating from one of
the 22 Arab League countries: Algeria, Bahrain, Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. However, the ethnic and religious makeup of Arab countries varies widely, and this has repercussions for any conclusions or implications that can be drawn from research with this population. Arabs can originate from many different countries, and exhibit substantial regional and national differences along the lines of country of origin, politics, religion, and language (Erickson & Al-Timimi, 2001). This results in a diffuse sense of Arab identity, and also necessitates an awareness and intention behind making assumptions or broad generalizations about Arabs. Erickson & Al-Timimi (2001) suggest that religion may be the factor that differentiates Arabs most from one another, as opposed to nationality, occupation, or marital status. This tremendous religious, geographic, and political heterogeneity among Arabs may contribute to a diffuse identity, a problem exacerbated by the lack of recognition of Arabs as an identified minority group in the U.S., as well as differing levels of acculturation, experiences of racism and discrimination, and societal stigma (Erickson & Al-Timimi, 2001). These patterns are similar to the only recognized ethnic group in the U.S.: Hispanics.

Due to this remarkable diversity, one way to classify Arabs has been to identify immigration trends. There have been three distinct waves of Arab immigration since the late 1880’s (Erickson & Al-Timimi, 2001). The first wave emerged between 1880 and WWI, and consisted mostly of Arab individuals of Syrian and Lebanese descent, who were mainly Christians emigrating for economic opportunities. The second major wave began in 1948 and included Palestinian refugees. Arabs emigrating during this wave consisted mostly of Muslims, and were less likely to assimilate into American culture than those who emigrated in the first
wave. The third distinct wave of immigration began in 1967. This wave, which is currently ongoing, consists of those Arabs attempting to escape daily experiences of war and political instability, or those searching for economic opportunities. This wave includes, most recently, refugees from countries such as Syria, Iraq, and other individuals displaced by war. The Arab American Institute Foundation (2012) estimates that the largest number of recent Arab immigrants come from Iraq, Egypt, and Lebanon. Individuals emigrating in the third wave and beyond are most likely to experience a negative reception in the U.S., and have assimilated the least into American society. As evidenced by the three distinct waves, acculturation of Arabs into U.S. society varies widely, and is specifically impacted by country of origin, length of time in the U.S., reason for emigration, and long term plans to stay in the U.S. (Erickson & Al-Timimi, 2001). Al-Krenawi & Graham (2000) argue that Arabs tend to retain more of their identity rather than assimilating, compared with other ethnic minority cultures.

While the estimated 3.6 million Arabs in the U.S. are dispersed among all 50 states, 94% of Arabs live in metropolitan areas, including Los Angeles, Detroit, New York, Chicago, Washington, D.C., and Northeastern New Jersey. Although the majority of Arabs worldwide are Muslim, the majority of Arabs in the U.S. are Christian (Erickson & Al-Timimi, 2001; Nasser-McMillan & Hakim-Larson, 2003; Padela et al., 2011). In the U.S., 77% of Arab Americans are Christian (Catholic, Orthodox, Protestant), and 23% are Muslim (Sunni, Shi’a, Druze) (Zogby, 2001).

**Arab culture.** Culture can be viewed as a part of one’s identity that he or she has in common with others who possess a shared foundation. Although within-group differences are acknowledged and validated, there does exist a stable constellation of traits, behaviors, and expectations that can be conceptualized and shared (Williams, 2006). Despite the tremendous
within group variation among Arabs, there exist shared cultural characteristics. Aspects of this common culture include experiences of immigration, acculturation patterns, the integral role of the nuclear and extended family, family honor, respect for authority and elders, importance of hospitality, importance of religion, and the patriarchal and collectivistic nature of the Arab culture (Abdullah & Brown, 2011; Al-Krenawi & Graham, 2000, Inhorn & Serour, 2011; Erickson & Al-Timimi, 2001; Amer & Hovey, 2007; Nobles & Sciarra, 2000).

Depending on acculturation level, culture may manifest more strongly through aspects of religious life, family life, and community engagement. However, regardless of religion, the core of Arab culture – family cohesion, honor, and loyalty – remains a strong influence on the individual (Erickson & Al-Timimi, 2001; Nasser-McMillan & Hakim-Larson, 2003). Due to the collectivistic nature of the Arab culture, individual decisions (such as the decision to seek mental health treatment) are often made with the potential impact on family honor and legacy in mind (Erickson & Al-Timimi, 2001).

Summary

In summary, although population-based studies have not documented the actual level of mental health needs among Arabs (Amer & Hovey, 2012), accumulating research both pre and post 9-11 suggests that Arabs have faced increased experiences of oppression and discrimination, leading to greater psychological distress and an increased need for mental health services in the U.S. today (Abu-Ras & Bader, 2009, Amer & Hovey, 2012, Ibish, 2001, 2003, 2008; Moradi & Hasan, 2004, Padela & Heisler, 2010; Singh, 2002). Additionally, due to Arab categorization as White in the U.S., they have largely been ignored or misrepresented in research. And finally, a projected increase in need for mental health services is purported to exist, particularly among those Arabs belonging to the most recent wave of immigration. This is due to the fact that there
is some sort of protracted violent conflict in 85% (15 of 22) Arab League countries (Musani & Shaikh, 2008) resulting in increased exposure to trauma and violence, which could contribute to or exacerbate symptoms of mental illness.

**Cultural Competence**

Among the factors that play a role in access to and provision of equitable mental health services toward racial/ethnic minorities (including Arabs), the cultural competence of the provider plays an integral role in addressing the existence of racial/ethnic disparities in health and mental health. The use of cultural competence trainings has been found to positively affect disparities in mental health services. Wade & Bernstein (1991) found that African American female clients’ perceptions of counselors and the counseling process were affected more by culture sensitivity training of the counselors than by counselor race. In this case, it appears that attending cultural competence training had a more significant impact than ethnic or cultural match. Clients assigned to counselors in the culture sensitivity training group returned for more follow-up sessions (the intervention group was three times more likely to attend a third session) and reported greater satisfaction with the counseling process than did clients assigned to counselors in the control group.

A lack of cultural competence among mental health providers can reify systems of oppression and experiences of discrimination for the racial/ethnic minority client. This may contribute to a number of undesirable patient level outcomes, including premature termination of therapy, unintentional harming as a result of neglect or miscommunication, and potentially long term or permanent harm resulting from unethical or harmful treatment based on a lack of knowledge, awareness, or skills. Sue (2001) enumerates three ways in which counseling or therapy can act as an instrument of oppression: Counseling can define the lifestyles of the
culturally different clients as deviant or abnormal; counseling can impose culture bound (i.e. Western) solutions on racial/ethnic minority clients; and counseling can engage in victim blaming. Sue (2001) argues that the field of psychology has not adequately addressed the role that discrimination, racism, and bias have played in the development or contribution of psychological distress among racial/ethnic minorities. Addressing provider multicultural competence is one avenue through which racial/ethnic disparities in mental health services can be addressed. Sue (2001) defines cultural competence as:

…the counselor’s acquisition of awareness, knowledge and skills needed to function effectively in a pluralistic democratic society (ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds), and on an organizational/societal level, advocating effectively to develop new theories, practices, policies and organizational structures that are more responsive to all groups (p. 802).

With regard to health care, increasing cultural competence on both an individual provider level as well as an organizational level has been hypothesized to not only improve quality of services, but to begin ameliorating racial/ethnic disparities in health care (Betancourt, Green, Carillo, & Park, 2003; Brach & Fraser, 2000). Specifically, nine techniques within the realm of cultural competence are hypothesized to positively address racial/ethnic disparities in health care by influencing both provider level cultural competence and organizational level cultural competence. These nine techniques, enumerated by Brach & Fraser (2000), include: the provision of interpreter services, recruitment and retention policies aimed at racial/ethnic minority providers, cultural competency training, increased coordination with indigenous or traditional healers, increased use of community health workers, increased promotion of culturally competent health, increased inclusion of family and community members into health services,
immersing oneself in another culture, and providing administrative and organizational accommodations.

Regarding the role that cultural competence in mental health services can play in the amelioration of racial/ethnic disparities in mental health care, it is important to note that many, if not all, of the nine techniques can be adapted for use with mental health services. For example, increasing the number of racial/ethnic minority mental health providers may increase the likelihood that a racial/ethnic minority client may receive services from another racial/ethnic minority provider. However, the literature around ethnic match and client level outcomes is mixed. Sue, Fujino, Hu, Takeuchi, & Zane (1991) found that provider-client ethnic match was significantly related to increased session attendance for African Americans and Whites. However, treatment outcomes for African Americans and Whites were not related to ethnic match overall. Regarding ethnic specific services, Takeuchi, Sue, & Yeh (2005) found that clients attending ethnic specific programs had lower dropout rates and remained in programs longer than mainstream services, although treatment level outcomes were still mixed. Sue (1998) suggested that cognitive match between provider and client may be of greater import than ethnic match, at least for some racial/ethnic minority clients.

Another technique relevant to mental health services encompasses a potential increase in consultation with indigenous or traditional healers. Al-Krenawi & Graham (2000) argued that Arabs, particularly those of Muslim descent, are likely to seek out treatment for mental health symptoms with a traditional or faith healer (such as an Imam) prior to seeking formal mental health services. Al-Krenawi (2002) found that Arabs in Israel experiencing symptoms of mental illness were most likely to first seek assistance from family members, then traditional healers, and as a last resort, from physicians (not mental health specialists). Aloud & Rathur (2009)
found that, among Arab Muslims living in the U.S., individuals will often attempt to access multiple sources of support, including traditional or religious healers, prior to seeking assistance from formal mental health providers. Specifically, these individuals were first likely to seek assistance from a medical doctor (33%) for help with mental health problems, family members (21.6%), a Sheik (19%), mental health practitioners (11%), and friends (9%).

There are three main arguments that continue to justify the focus on cultural competence as an integral factor to be further investigated and understood. First, the shifting demographic makeup in the U.S. is moving toward inclusivity and appreciation of diversity (Krentzman & Townsend, 2008; Whaley & Davis, 2007). According to United States Census Bureau data (2012), 63% of Americans identified as White (not Hispanic or Latino). United States Census Bureau projections (2012) indicate that between 2012 and 2060, the non-Hispanic White group will no longer be the majority (this switch will take place in about 2043). In 2060, racial ethnic minorities, currently comprising 37% of the U.S. population, will make up 57% of the population. These statistics delineate that the differential needs of a more multicultural, diverse population will need to be met.

The second argument justifying the focus on cultural competence is related to barriers to service use and access (Whaley & Davis, 2007). Research, as well as governmental reports, indicate that there exist significant mental health care disparities in the U.S., specifically by race and ethnicity (Abdullah & Brown, 2011; Carpenter-Song et al., 2011; Diala et al., 2001; Smedley, Stith, & Nelson, 2003; USDHHS, 2001). This underutilization is hypothesized to be a case of unmet need (Whaley & Davis, 2007).

The third and final argument justifying the focus on cultural competence is one that is centered on the main crux of the social work profession: the goal of working toward social
justice (Krentzman & Townsend, 2008; Whaley & Davis, 2007). Morris (2002) defines social justice as:

…the right of each person to have the opportunity—the resources and power—to develop a threshold level of capabilities in order to live a fully human life and to have the social responsibility to respect the dignity of each and every person in her or his own pursuit of achieving the same end (p. 371).

The same end, in this case, being equal access to consistent, competent, and effective mental health services, not just for racial/ethnic minorities, but for all citizens. As Sue et al. (1982) argue, “The history and experiences of the culturally different have been the history of oppression, discrimination, and racism” (p. 47). Social work must work to address the injustices that diverse populations face when seeking mental health services. The identity of social work as a profession is predicated upon a social justice framework and is one of the stated core values of the profession (National Association of Social Workers [NASW], 1996, 2008). This mandate toward cultural competence is found in both the Council on Social Work Education [CSWE] Educational Policy and Accreditation Standards [EPAS] as well as the NASW code of ethics, specifically principle 1.05, Cultural Competence and Social Diversity. The notion of multicultural competency is inherently undergirded by an understanding of, and movement toward, social justice. Sue (2001) summates and draws attention to this inextricable linkage: “Multicultural counseling competence must be about social justice – providing equal access and opportunity, being inclusive, and removing individual and systemic barriers to fair mental health services” (p. 801). Social work is required to work toward maximizing the potential of all individuals to lead healthy, dynamic, and accomplished lives.
Purpose of the Study

This study explored the relationship between different variables and mental health provider levels of knowledge, awareness, and skills toward Arabs. These variables included demographic variables, such as age, race/ethnicity, religious affiliation, and sex, as well as professional characteristics, such as field and number of clients. There is a great degree of variation in the manner with which mental health providers approach their work with clients, particularly those clients who are members of a different group. There have been a few studies that have examined the role of race/ethnicity in the therapeutic relationship (for example, see Wade & Bernstein, 1991; Imel et al., 2011) but there have been few (if any) to examine the role of other factors. Other variables examined in this study included social closeness questions around interactions with Arabs, travel to and time spent in the Middle East, variables intended to isolate the origins of knowledge about Arabs (including television, books, internet), and self-reported levels of previous knowledge. Further elucidating the role variables such as these may play in the therapeutic encounter has helped to increase an understanding of factors that are related to observed variations in cultural competence. Additionally, provider readiness for change was examined in order to explore its role in the development of cultural competence toward Arabs. This has previously been looked at via a proxy of White racial identity development (Middleton et al., 2005).

The following research questions and hypotheses were used to guide the development of a deeper and more nuanced understanding.
Research Questions and Hypotheses

1. What is the overall level of cultural competence (awareness, knowledge, and skills) that mental health providers (licensed clinical social workers, licensed clinical psychologists, licensed professional counselors) hold toward Arabs?
   - Since this was an exploratory question, no hypothesis was warranted.

2. What is the relationship between certain demographic variables (age, race/ethnicity, religious affiliation, sex) and cultural competence toward Arabs among mental health providers?
   - Mental health providers who are members of a racial/ethnic, cultural, or religious minority group should exhibit higher levels of awareness toward Arabs.

3. Are there relationships between certain professional characteristics (such as profession, role, previous work with Arab clients, general client type) and cultural competence toward Arabs among mental health providers?
   - There is little literature guiding these topics, and as such, no a priori hypotheses were presented.

4. What is the influence or extent of previous knowledge and exposure to Arabs (e.g. via travel to the Middle East, overall knowledge, sources of knowledge)?
   - Those providers who reported prior travel to the Middle East should exhibit higher levels of cultural competence than those who reported no prior travel to the region.
   - Mental health providers who received previous knowledge of Arabs from television should exhibit low levels of cultural competence toward Arabs.
5. Is social closeness, as a form of familiarity toward Arabs, related to cultural competence among mental health providers?
   - Those providers reporting close interactions with Arabs should exhibit the highest levels of cultural competence.

6. What role does readiness or desire for change play in the existence or development of cultural competence toward Arabs?
   - Mental health providers who present a low readiness for change should exhibit the lowest levels of cultural competence toward Arabs.

**Significance and Implications of Study**

Given the growth of the Arab population in the U.S. and continued experiences of racism and discrimination against individuals perceived to be Arab and/or Muslim, it is important to further identify and understand the ways in which Arabs are perceived in U.S. society. It is vital to note, however, that mental health problems have a variety of biological, psychological, and social factors influencing their development and expression. Understanding the link between experiences of racism and discrimination, and negative health and mental health consequences, can contribute to a greater understanding of the manner in which mental illness may manifest with this population. This includes increasing our understanding of the manner in which they are perceived and treated by mental health providers, as this can have implications on their willingness not only to seek mental health services, but remain and participate in services as necessary.
Chapter 2: Review of the Literature

Racial/Ethnic Disparities in Health and Healthcare

Several years ago, the Institute of Medicine released the report *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care* (Smedley et al., 2003), which documented the existence of racial/ethnic disparities in the diagnosis and treatment of health conditions, even after controlling for socioeconomic status, age, comorbidity, and health insurance status. Findings of this report indicated that racial/ethnic disparities in health were relatively consistent across conditions and quality and appropriateness of services. Disparities can affect a wide range of diseases and disorders, including mental illness, cardiovascular disease, diabetes, asthma, cancer, and end stage renal disease (Smedley et al., 2003).

The origins of these disparities are myriad, with social determinants potentially playing a large role (Betancourt et al., 2003). These include factors that racial/ethnic minorities in the U.S. experience at a higher rate, including lower socioeconomic status, inadequate proximity to health services, inadequate access to transportation, higher proximity to environmental hazards, greater incidences of occupational hazards, experiences of discrimination, and lower levels of education.

Discrimination is viewed as a potential key determinant of health (Edge & Newbold, 2013). For example, Williams, Neighbors, & Jackson (2003) found that experiences of racial/ethnic discrimination were associated with poorer physical health, ranging from self-reports to diagnoses of hypertension, cardiovascular disease, and respiratory illnesses, as well as mental health outcomes, such as experiences of anxiety and depression, and higher rates of risky behaviors, such as smoking. Smedley (2012) argued that in order to more accurately and comprehensively understand determinants of health, one must take an intersectional approach, taking into account the interaction of race with sex, SES, and geographical location, to start with.
Given concerns about lack of insurance as one factor that influences disparities, there has been hope that the advent of the Affordable Care Act [ACA], intended to increase access to health insurance (among other things), may be an important step toward addressing racial/ethnic disparities in health care (Hasnain-Wynia & Beal, 2012). Concerns about disparities have been recognized in the ACA. For instance, Clemans-Cope, Kenny, Buettgens, Carroll, & Blavin, (2012) argue that the ACA will reduce differences in un-insurance rates by race and ethnicity. However, they indicate that African Americans and Hispanics are still projected to be more likely to be uninsured, even post-implementation.

Although increasing access to health insurance is a formidable and necessary step, it has not and will not eradicate disparities in mental health service use and access among racial/ethnic minorities. For example, according to the CDC (National Health Interview Survey, 2015), un-insurance rates dropped from 16% in 2010 to 9.1% in 2015. According to the same survey, in 2015, 19.5% of Hispanics remained uninsured, 10% of non-Hispanic Black people remained uninsured, and 6.3% of non-Hispanic White people remained uninsured.

A lack of insurance continues to disproportionately affect racial/ethnic minorities, even after the advent of the ACA. This illustrates that racial/ethnic disparities have been recognized among policy makers, and as such, the ACA has included provisions that recognize the importance of provider cultural competence. Echoing the recommendations of McGuire & Miranda (2008), Smedley (2008) asserts that cultural and linguistic competence should be promoted in healthcare settings, as should an increase in diversity among health care professionals.

The impact of cultural competence on racial/ethnic disparities in health/healthcare.

There exists an unstated assumption that increasing levels of provider cultural competence will
intrinsically improve patient level quality of care, regardless of group or type of service
(Betancourt et al., 2003; Smedley et al., 2002). With regards to the potential impact of provider
cultural competence trainings on racial/ethnic minority patient level outcomes in the realm of
health, research indicates an overall neutral or positive effect (Lie, Lee-Rey, Gomez, Bereknyei,
& Braddock, 2010). Mazor, Hampers, Chande, & Krug (2002) found that teaching medical
Spanish language and Latino culture training (i.e. a type of cultural competency training) to
emergency room physicians resulted in increased patient satisfaction and decreased use of
to nurses and home health workers, and found a moderate improvement in patient use of social
resources and functional capacity. McElmurry, McCready, et al. (2009) provided Spanish
immersion and cultural workshops to providers of allied health professions, and found a positive
impact on Latino patients with Type II diabetes self-care behavior.

In addition to looking at patient level outcomes in their systematic review of cultural
competence interventions in healthcare, Truong, Paradies, & Priest (2014) examined provider-
related outcomes and health service access and utilization outcomes. Patient level outcomes
included blood glucose, weight, blood pressure, patient satisfaction/trust, knowledge of cancer
screening and other health conditions, dietary/exercise behaviors, and participation in cancer
treatment. Seven of the nine reviews that examined patient/client related outcomes indicated that
there was evidence of improvement in health outcomes. Truong et al. (2014) concluded that there
was moderate improvement in provider outcomes and health care access and utilization
outcomes. A recent Cochrane review (Horvat, Horey, & Kis-Rigo, 2014) drew similar
conclusions, in that there was positive evidence indicative of improvements in patient level
outcomes following cultural competency training. They do note an inability to draw
generalizable conclusions from these studies, due to the vast heterogeneity among interventions. However, at present, there is a need for more rigorous studies, because existing studies lack methodological rigor and sufficient information about the broad range of populations, conditions, and interventions.

**Racial/Ethnic Disparities in Mental Health and Mental Healthcare**

Mental health disparities exhibit different and subtler patterns than other health disparities (McGuire & Miranda, 2008). When looking at racial/ethnic disparities in healthcare, it is important to consider that more racial/ethnic minorities (than Whites) receive their mental health services from a primary care setting (McGuire & Miranda, 2008). Regarding mental illness, racial/ethnic minorities exhibit lower rates of disorders, but experience a higher number of symptoms, and are more likely to be persistently and chronically mentally ill (McGuire & Miranda, 2008).

Not only is there broad underutilization of mental health services in the United States, but research has shown that only a minority (ranging from 8% to 25% to 40%) of individuals in the U.S. suffering from a mental illness receive treatment (Aloud, 2004; Pescosolido & Boyer, 1999; Soheilian & Inman, 2009). Living with an untreated mental illness can make it challenging to attain life goals, contribute meaningfully to society, or live a fulfilled life. It may also result or contribute to loss, the development of addiction, or even death (Prince et al., 2007). This underutilization is further elongated among minority groups in the U.S., particularly African Americans (Diala et al., 2000, 2001; Kessler, Mickelson, & Williams, 1999). Factors associated with racial/ethnic disparities in mental health services include financial/economic factors, diagnosis differentials (Diala et al., 2000), as well access to health insurance, attribution of mental health symptoms to religious or cultural beliefs, and a lack of availability of culturally
competent mental health providers (Chow, Jaffee, & Snowden, 2003). Diala et al. (2000) found that although African Americans were more likely to possess positive attitudes toward formal mental health services when compared with their White counterparts, they were less likely to utilize these services. However, following any utilization, African Americans were subsequently found to be less positive about formal mental health services than Whites. Additionally, experiences of racial/ethnic discrimination have been linked to poorer mental health. For example, in a study of Korean immigrants in Canada, Noh & Kasper (2003) found a positive relationship between perceptions of discrimination and symptoms of depression. DeMaio & Kemp (2010) also found that physically visible minorities who experience discrimination based on that status were more likely to report declines in both health and mental health status. In their systematic review of the link between racial/ethnic discrimination and health, Williams et al. (2003) found that in those studies examining mental health outcomes, 80% reported a positive relationship between discrimination and mental distress. In addition to experiences of psychological distress, experiences of racial/ethnic discrimination are hypothesized to play a role in mental health service use patterns. For example, Spencer, Chen, Gee, Fabian, & Takeuchi (2010) found that, among Asian Americans, experiences of discrimination were linked with higher use of informal mental health services, but not with a decrease in the use of formal mental health services.

There exists a complex relationship between race/ethnicity, mental illness, and poverty. Specifically, racial/ethnic minorities tend to be overrepresented among individuals living in poverty, and individuals with mental illness tend to be overrepresented in low poverty areas (Chow et al., 2003). However, in their examination of patterns of mental health service use among Whites, Blacks, Hispanics, and Asians in high and low poverty areas in New York, Chow
et al. (2003) found that racial/ethnic disparities in mental health service use were more significant in low poverty neighborhoods than in high poverty neighborhoods. Mental health services in low poverty neighborhoods were less likely to be voluntary, and emergency and inpatient hospitalizations were more likely to be found for racial/ethnic minorities than Whites in low poverty areas. The higher prevalence of disparities in low poverty areas may be due to the presence of safety net clinics in low poverty areas, as well as social selection theory, which posits that Whites will attempt to avoid living in high poverty areas, leaving those Whites that have serious mental illnesses to remain in high poverty areas (Chow et al., 2003). Research shows that the presence of a mental health clinic (or safety net clinic) in the community is associated with increased access to mental health services, as it augments geographic accessibility and reduces logistic and transportation barriers (Alegría et al., 2012).

McGuire & Miranda (2008) made a number of recommendations aimed at ameliorating racial/ethnic disparities in mental health service use and access, focusing at the policy level. These included promoting and increasing diversity in the mental health workforce. Many of these recommendations are consistent with Brach & Fraser’s (2000) recommendations for addressing racial/ethnic disparities in healthcare. Having more practitioners who are members of diverse groups themselves is hypothesized to address concerns about trust, increase the presence of culturally appropriate treatment, and increase the ability to meet a patient’s cultural and linguistic needs. Additionally, McGuire & Miranda (2008) recommended that mental health practitioners receive culturally appropriate education. Although this push toward provider cultural competence is well-intentioned and likely to benefit members of diverse groups, it also has the potential to be harmful (Carpenter-Song et al, 2011). Designed incorrectly or without purpose, cultural competency interventions can emphasize learning population level patterns of
behavior, which could place blame on a patient’s culture as the source of disparities, and ultimately reify discriminatory practices. The goal with cultural competency interventions is to be attuned to diversity within groups of people. A final mental health policy recommendation made by McGuire & Miranda (2008) was to focus on quality improvement, and on addressing the variation in quality of services available to individuals based on different factors, such as geographic location, proximity to a bus line, access to transportation, English proficiency, and access to insurance, among others.

**The impact of cultural competence on racial/ethnic disparities in mental health.**

The situation in mental health is similar, but more extreme, than that found in health, specifically in that the research is even more sparse regarding potential effects on patient level mental health outcomes as a result of cultural competency interventions. The relatively sparse literature in this area suggests potential benefits, but is much too limited to guide practice.

Wade & Bernstein (1991) found that clients assigned to counselors who had completed culture sensitivity training showed greater continuation of treatment (the intervention group was three times more likely to attend a third session) and reported greater satisfaction with the counseling process than did clients assigned to counselors in the control group. Clients rated counselors in the intervention group more highly in expertness, trustworthiness, empathy, and unconditional regard. Way, Stone, Schwager, Wagoner, & Bassman (2002) conducted a pre/post field study of a required mental health cultural competency training at state inpatient hospitals. After the intervention, they found that mental health inpatients reported greater perceived positive environmental changes and a greater affinity with staff. La Roche, Gualdron, D’Angelo, & Leavell (2006) tested the hypothesis that Latinos, among which an allocentric self-orientation is hypothesized to be prevalent (a tendency to define oneself in relationship to others) with
symptoms of anxiety, would be more likely to benefit from a cultural competency intervention that was designed according to the allocentric orientation. The underlying assumption found therein is that patients were more likely to adhere to and benefit from interventions that are consistent with their culture and beliefs. The authors found that although there was correlational evidence to support this theory, causality could not be inferred. In addition, in order to potentially streamline the evaluation of mental health cultural competency interventions at the patient level, Cornelius, Booker, Arthur, Reeves, & Morgan (2004) developed and validated a consumer based cultural competency inventory, to be administered to mental health consumers (i.e. patient, clients) in order to determine whether mental health consumer level outcomes were changed as a result of a cultural competency intervention. They found that this measure exhibited good psychometric properties, and could potentially be used as a clinical tool in assessing provider cultural competence.

**Arab Disparities in Health and Healthcare**

Specific health concerns documented among Arabs are related to unique experiences of immigration, acculturation, and discrimination (El-Sayed & Galea, 2009). In their review of the literature around health, El-Sayed & Galea (2009) found that prevalence of tobacco use among Arabs was higher than the general U.S. population. They also suggest that prevalence of diabetes among Arabs was higher (5-33%) relative to the general U.S. population. In their review of ethnic inequalities in mortality among Arabs, El-Sayed, Tracy, Scarborough, & Galea (2011) found that Arabs exhibited a higher mortality risk (after controlling for age) compared with non-Arab and non-Hispanic Whites in the U.S. Specifically, they found that Arabs, despite possessing more education and higher incomes, can be expected to live two years less than non-Arab and non-Hispanic Whites in the U.S. These rates are attributed to higher rates of high
burden chronic disease as well as infectious disease among Arabs (El-Sayed et al., 2011). Experiences of discrimination are hypothesized to influence health outcomes among Arabs (El Sayed & Galea, 2009). For example, Lauderdale (2006) found that the relative risk of poor birth outcomes (preterm birth and low birth weight) was significantly higher for women possessing Arabic last names as compared with any other group. In a review of the unique healthcare needs of older Arabs in Australia, Al Abed, Davidson, & Hickman (2013) found that experiences of stereotyping had the potential to change health seeking behaviors and treatment among older Arabs in Australia. Looking at sex differences in health, Read & Reynolds (2012) found that female Middle Eastern immigrants are significantly less healthy than their male counterparts, with regards to both self-reported health as well as hypertension diagnoses.

**Arab Disparities in Mental Health and Mental Healthcare**

Although population-based studies have yet to document the actual level of mental health needs among Arabs (Amer & Hovey, 2012), recent reports suggest that Arabs have faced increased oppression and discrimination in the U.S., leading to greater psychological distress and an increased need for mental health services (Abu Ras & Bader, 2009; Amer & Hovey, 2012; Moradi & Hasan, 2004; Padela & Heisler, 2010). Prior to examining the landscape of anti-Arab discrimination in the U.S., it is important to look at rates of mental health distress among Arabs. Due to Arab mis-categorization as White, the literature in this area is scant. Amer & Hovey (2012) examined levels of anxiety and depression with Arabs. When compared with normative samples, Arabs presented significantly higher levels of anxiety and depression. Putting these results into context, it is of import to note that this was a highly educated sample, possessing high SES, with about half born and raised in the U.S., rendering potential immigration stressors a non sequitur. Amer & Hovey hypothesized that these high rates of anxiety and depression were
more likely tied to stressors specific to Arabs, rather than low SES. These stressors included
discrimination, socio-political, and acculturation related stressors.

Discrimination and prejudice against Arabs (or those perceived to be such) did not begin
post 9-11. In analyzing the results of a randomized poll of Americans, Slade (1981) found that a
large minority (between 40-50%) of respondents endorsed characterizations of Arabs that
portrayed Arabs as anti-Christian and anti-Semitic. Among the sample, women and Catholics,
as well as those who were younger and those less educated, tended to view Arabs in a more
negative light, and to endorse negative stereotypes (Slade, 1981). In their 1998-2000 Report on
Hate Crimes and Discrimination Against Arab Americans, the American-Arab Anti-
Discrimination Committee [ADC] documented all incidents of anti-Arab sentiment, which often
escalated into discrimination, particularly in the realms of employment, immigration, profiling
during air travel, and hate crimes (Ibish, 2001).

Although discrimination and violence against Arabs and Muslims is long-standing and
continues at an elevated level to this day (Federal Bureau of Investigation [FBI], 2014), there
was an immediate spike following 9-11 (Singh, 2002). In a 2002 Human Rights Watch report,
Singh (2002) argued that “unlike previous hate crime waves…the September 11 backlash
distinguished itself by its ferocity and extent” (pp. 14-15). Swahn et al. (2003) reviewed
newspaper articles for the month following 9-11, and documented 99 instances of violent hate
crimes against Arabs, or those perceived to be Arabs. They also noted that the majority (77 out
of 99) of the attacks took place within the first ten days after 9-11. Additionally, in this first
month post 9-11, the ADC reported over 800 incidents of workplace discrimination toward
Arabs (Ibish, 2003). In the first nine weeks following 9-11, the ADC documented over 700
violent acts aimed at Arabs (Ibish, 2003). In the first six months following 9-11, the ADC
received four times the typical amount of reports documenting discrimination toward Arabs (Ibish, 2003). Although the FBI does not track anti-Arab hate crimes, they do track anti-Muslim hate crimes. However, in a recent press release from November 2015, (retrieved from https://www.fbi.gov/news/stories/2015/november/latest-hate-crime-statistics-available), beginning in January 2015, the FBI will be collecting information on anti-Arab bias, under the race/ethnicity/ancestry category. However, current data reflects anti-Muslim bias. For example, between 2000 and 2001, the FBI (2002) tracked a 1600% increase in hate crimes against Muslims – from 28 incidents in 2000, to 481 in 2001. The most recent statistics from the FBI (2014) reported 154 anti-Muslim hate crimes, still elevated from pre 9-11 levels (i.e. 28 incidents in 2000), and elevated from 2013 levels (i.e.135).

Consistent with the FBI statistics, in their 2003-2008 Report on Hate Crimes and Discrimination Against Arab Americans, the ADC indicated that although the level of hate crimes and discrimination against Arabs continued to decline from the immediate post 9-11 backlash, they were still at a higher level than that prior to 9-11 (Ibish, 2008). The most frequently reported instances of discrimination against Arabs reported were related to employment, followed by immigration (ADC legal Report, 2010). Disha, Cavendish, & King (2011) tracked FBI hate crime statistics both pre and post 9-11, and found that although the incidents of anti-Arab/Muslim hate crimes rose significantly immediately after 9-11, the majority of hate crimes against other racial/ethnic groups declined post 9-11.

Data are also available on Arab Americans’ views on these issues. An early October 2001 poll of 508 Arab Americans found that 32% reported that they had personally experienced some form of discrimination (Zogby, 2001). A similar poll was administered almost one year later, in September of 2002, and revealed an increased concern among Arabs as to how the aftermath of
9-11 was impacting the Arab community (Zogby, 2002). Compared to a year prior, Arabs felt that workplace discrimination had increased (Zogby, 2002). Regarding discrimination enacted via email, Bushman & Bonacci (2004) found that individuals who were prejudiced would discriminate against Arabs, as long as they remained anonymous. With regards to attitudes toward Muslims in the U.S., a 2006 USA today/Gallup research poll revealed that 39% of Americans admitted to having at least some prejudice toward Muslims. Additionally, 22% indicated that they would not want a Muslim as a neighbor, and 41% favored heightened security checks for Muslims. More favorable views were expressed by those who indicated they personally knew somebody who was Muslim (Saad, 2006).

In addition to simply documenting rates of psychological distress and attitudinal shifts among Arabs, the empirical link between discrimination based on race/ethnicity and poorer health and mental health outcomes should be considered, particularly among Arabs. Although these types of discrimination may have immediate tangible effects, they may also have a psychological impact that is more difficult to observe and quantify.

Moradi and Hasan (2004) explored the relationship between discrimination and mental health among Arabs. They examined the mediating, or intervening, role that one’s personal sense of control can take in the relationship between experiences of discrimination and psychological distress. They found that reports of recent discriminatory experiences were significantly positively related to psychological distress, and significantly negatively related to self-esteem and environmental mastery. Further analyses revealed that personal control fully mediated the relationship between discrimination experiences and self-esteem, and partially mediated the relationship between discrimination and psychological distress for Arabs. In other
words, among Arabs (less than two years after 9-11), experiences of discrimination led them to feel less in control, therefore lowering self-esteem, leading to greater psychological distress.

Abu-Ras & Abu-Bader (2009) found significantly high levels of depression and PTSD symptomology within a large sample of Arabs. They attributed these levels to incidents of post 9-11 discrimination experienced by the participants. In fact, 77% of their sample of 350 reported some negative experiences related to being Arab. Among those sampled, those who indicated that their lives had changed as a result of 9-11, as well as those who reported anxiety as a result of 9-11, exhibited higher levels of depression and PTSD.

In their secondary analysis of associations between post 9-11 abuse and discrimination with psychological distress, levels of happiness, and health status among Arabs, Padela & Heisler (2010) found that 25% of Arabs reported some incidence of post 9-11 abuse, either personally or within their family. Muslim Arabs reported higher rates of abuse and discrimination than Christian Arabs. These perceptions of abuse and discrimination were associated with higher rates of psychological distress, lower levels of happiness, and poorer physical health status. Using this same data set, Abdulrahim, James, Yarmout & Baker (2012) found that although incidents of discrimination were more frequently reported by Muslim Arabs, there was a stronger association between discrimination and psychological distress among Christian Arabs, those who identify as White, those who possess darker skin tones, and those living outside of an ethnic community. In other words, those Arabs who are more likely to identify as White may experience fewer discriminatory acts, but are more negatively affected by them when they occur. Awad (2010) also reported that although Muslim Arabs reported higher levels of discrimination than Christian Arabs, their level of acculturation moderated this finding. Specifically, Muslims who were highly immersed (higher acculturation) in U.S. society reported
higher levels of discrimination. However, Arabs who were less immersed (lower acculturation) in U.S. culture reported the highest levels of discrimination. Additionally, Amer & Hovey (2007) reported unique acculturation patterns for Christian Arabs and Muslim Arabs. Specifically, Christian Arabs were more likely to be assimilated and integrated into U.S. culture, whereas Muslim Arabs were more likely to be separated. There exist more visible markers of Muslim Arabs, including beards for men, and the hijab for women (Awad, 2010). As a result of contextual and environmental factors that were exacerbated post 9-11, a unique set of stressors remain in place, rendering Arabs in need of adequate, competent, effective, and timely mental health services.

Arab Culture and Mental Health Considerations

There are different cultural, religious, and political factors within the countries in the Middle East. Arabs exhibit tremendous religious, geographic, and political heterogeneity (Erickson & Al-Timimi, 2001). However, there are certain core considerations of the Arab culture that are likely to be common across Arabs, albeit to varying degrees.

Arab culture as a whole generally values family honor, patriarchy, the concealment of emotions, and respect for authority (Abdullah & Brown, 2011). The family (both nuclear and extended) is the central mainstay of Arab culture and plays an integral role in the development of individual and collective identity. One may be discouraged from individuating away from their family or community (Erickson & Al-Timimi, 2001). One may be taught to consider the family’s well-being prior to considering one’s own well-being. By extension, any behavior or decision of an individual may reflect on his or her family and community. An individual with a mental illness may reflect negatively on his or her entire family. As a result, the family may be motivated to hide the symptoms or deny their existence, and may be reluctant to seek treatment.
Women in particular may experience stigmatizing beliefs, specifically related to damage to marital prospects (Al-Krenawi & Graham, 2000). The majority of Arabs view mental health services in a negative light, with exceptions being for individuals who are highly acculturated and individuals who are more highly educated (Al-Krenawi & Graham, 2000). Arabs may view formal mental health services with mistrust, partially due to the apparent disregard for religious values. Christian Arabs may be less likely to focus on religious values or religious explanations for mental illness and may be more willing to seek out mental health services than Muslim Arabs (Al-Krenawi & Graham, 2011).

Religion is a consideration, apart from culture. Although Muslims and Christians share an Arab culture in common (Al-Krenawi & Graham, 2001), they differ along ethnic, linguistic, sectarian, familial, tribal, regional, and socioeconomic lines (Al-Krenawi, Graham, Al-Bedah, Kadri, & Sehwail, 2009). Cultural and religious factors can be a factor in one’s willingness to seek mental health services or even identify symptoms of mental illness. Cultural factors can be manifested through sex differences in the Arab culture, or through a propensity to seek help for mental illness with traditional faith healers or religious leaders. An overarching factor that likely influences one’s decision to access mental health services is the negative stigma associated with mental illness that is prevalent in the Middle East (Al-Krenawi & Graham, 2000). In order to avoid this stigma, Arabs may somaticize their psychological problems and express them in terms of physical ailments (Al-Krenawi, 2005).

When looking specifically at Arabs living in the U.S., level of acculturation is an integral facet of the picture. Factors that affect acculturation experiences include: country of origin, length of time in U.S., reasons for immigration, presence of family in the Middle East, ability to return to the Middle East, long-term plans to remain in the U.S., level of English proficiency,
presence of a discernible Middle Eastern accent, and family educational and economic status in the Middle East (Erickson & Al-Timimi, 2001). Decisions on whether to seek mental health treatment are likely mediated by level of acculturation (Al-Krenawi et al., 2009).

With Arabs living in the U.S., it is important to take into account a number of different variables that are exhibited to different degrees depending on the individual. Country of origin, religion (as well as level of religiosity), sex, age, degree of acculturation, and educational level are important factors that must be considered whenever interpreting any results. While one can extrapolate from research done on Arabs in the Middle East, there are no direct lines of interpretation between the two populations. Arabs living in the U.S. do possess an Arab culture that is similar to Arabs in the Middle East, but issues of acculturation (as related to sex, religion, culture, and ethnicity), structural access, and a higher availability of mental health services in the U.S. deem this a distinct population. A limitation of much of the research that has been conducted around Arabs and mental health is that most of it has been conducted in the Middle East. As a result, inferences to Arabs living in the U.S. must be drawn with care and intention.

**Differential Patterns of Mental Health Service Use Among Arabs**

It is well known that significant mental health care disparities continue to exist in the U.S., specifically by race and ethnicity (Abdullah & Brown, 2011; Carpenter-Song, et al., 2011; Diala et al., 2001; Smedley, Stith, & Nelson, 2003; USDHHS, 2001). The underrepresentation of minorities is further intensified when it comes to Arabs, in part due to their official categorization as White (Abdullah & Brown, 2011; Naber, 2000, Soheilian & Inman, 2009), in that it has been difficult to differentiate between Arabs and Caucasians with regards to rates of service use.
Due to the vast amount of variation among different countries within the Middle East, the expectation is that certain subgroups of Arabs will exhibit differential patterns of mental health service use, specifically along country of origin, sex, and religious affiliation lines. Due to the concentration of research among only a few countries (Israel, Egypt, Palestine), it is difficult to draw inferences to Arabs living in the U.S. However, there have been studies looking specifically differential patterns of mental health service use of subgroups of Arabs, including women, as well as Christians and Muslims.

In general, in their countries of origin, Arabs tend to underutilize health services, and this is extended to mental health services (Aloud & Rathur, 2009; Al-Krenawi, 2002; Al-Krenawi, 2005; Al-Krenawi et al., 2009; Al-Rowaie, 2005). For example, as of 1992, Arabs in Israel made up 19% of the population, but only utilized approximately 2.8% of in-clinic mental health services (Feinson et al., 1992, as cited by Al-Krenawi, 2002). This statistic leads to the following question: is this a case of lower incidence of mental illness among this Arab population, or a case of underutilization? Al-Krenawi (2002) argued that because epidemiological data on mental illness among this Arab population is not known, only provisional answers could be provided, mainly based on the latter. Al-Krenawi hypothesized that the pattern observed among Arabs may be due to the influence of the cultural over the professional (i.e. the tendency to seek support from family, community, or traditional healers), a lack of Arab mental health practitioners in Israel (pointing to the potential importance of ethnic or cultural match with the provider), Arab attitudes toward mental health, and gender role constructions in Arab society.

There exist different attitudes toward mental illness as well as differential rates of mental health service use along sex and religious lines within the Arab population (Al-Krenawi, 2002;
Al-Krenawi & Graham, 2000; Al-Krenawi & Graham, 2011; Bener & Ghuloum, 2011). Al-Krenawi (2002) found that Arab women in Israel utilize mental health services at a lower rate than Arab men in Israel. Specifically, among individuals already receiving ambulatory mental health services, the majority (62.8%) consisted of men. Findings indicated that this trend was not only higher but was also reversed for Israelis, with women utilizing services at a rate of 51.8% compared to men at 48.2%.

Looking at attitudes toward mental health services, Al-Krenawi and Graham (2009) conducted a multi-country study across Arabs in Egypt, Palestine, Kuwait, and Israel in order to determine whether perceptions toward mental health help-seeking processes differed among students in these four countries. Results varied based on nationality, sex, and level of education. There were similarities between Palestinian and Israeli Arabs in that both groups were more open than Arabs in Egypt and Kuwait toward mental health treatment. This was hypothesized to be due to the plethora of non-profit organizations and western providers that exist in that part of the world. In a U.S. sample, Aloud & Rathur (2009) looked at Arab Muslims’ attitudes toward mental health services, and found that individuals were most likely to be affected by cultural beliefs about the origin of mental health problems, familiarity with mental health services, perceived societal stigma, and the use of informal indigenous resources.

Looking at awareness and knowledge of mental illness, Bener and Ghuloum (2011) examined the potential relationship between sex and mental health literacy among Arabs living in Qatar. They found that women tended to retain more traditional (i.e. less scientific) beliefs about the origin of mental illness. More women believed that traditional healers could treat mental illness, and were less willing than men to visit a psychiatrist. However, both women and men reported a certain willingness to visit a psychiatrist if needed, at a rate of 76.8% and 81.9%,
respectively. Arab women were also more likely to hold negative attitudes toward individuals with mental illness, and their common knowledge about mental illness was less than that exhibited by Arab men. A lack of knowledge of common mental disorders was found among both women and men, with schizophrenia being the most recognized, at a rate of 24.8% and 31.1% respectively. The authors hypothesized that the level of knowledge (and comfort) around mental illness could be affected by level of education, as well as potential exposure to media and awareness campaigns.

In their study looking at mental health help-seeking behaviors among Arab students in Israel as differentiated by religion, Al-Krenawi & Graham (2011) found that Christians scored higher on interpersonal openness, were less likely to use traditional healing systems (such as indigenous healers or religious clergy), and did not perceive mental health services as stigmatizing as their Muslim counterparts. Christians were more ready to use mental health systems than Muslims.

**Role of Cultural Competence in Mental Health Services**

As previously mentioned, several factors can be extrapolated to play a role in the decision to seek mental health services for all racial/ethnic minority groups, including Arabs. Additionally, specific to Arabs, underutilization is hypothesized to at least partially stem from their propensity to seek assistance through informal resources prior to seeking formal mental health services (Aloud & Rathur, 2009). Those factors salient to Arabs included a lack of culturally competent service providers, the presence of mental health stigma, experiences of racial/ethnic discrimination, attitudes toward mental health services, and a higher level of comfort with seeking mental health services from informal resources over formal. Related to a lack of cultural competence toward Arabs, Sabbah, Dinsmore, & Hof (2009) conducted a study in which 52
mental health practitioners in the state of Nebraska were asked about the importance of cultural competence toward Arab Americans relative to other racial/ethnic minority groups. The practitioners were also asked about their own cultural competence toward Arabs compared with other racial/ethnic minority groups. Results revealed that this sample of practitioners perceived themselves as being less competent toward Arabs than any other major racial/ethnic minority group in the U.S. One significant limitation in the study was the lack of definition around the term mental health practitioner. Additionally, it is important to consider that Nebraska is not a state in which large numbers of Arabs reside. The Arab American Institute (2012) estimates that Arabs comprise .46% of the total population of the state.

**Multidimensional model of cultural competence.** The movement toward cultural competence in practice and education is growing in professions such as social work, psychology, nursing, and psychiatry. Cultural competence has become a fundamental piece of practitioner training and worldview, and as such, requires a valid and reliable way in which to measure it. Much of the research is centered on the conceptualization of cultural competence, with different professions taking slightly different approaches (Abrams & Moio, 20009; Arredondo et al., 1996; Garran & Rozas, 2013; Kohli, Huber & Faul, 2010; Sue, 2001; Sue, 2006; Williams, 2006). Specifically, psychology, nursing, and social work have all begun to move toward unique, yet overlapping conceptualizations of cultural competence. A model stemming from counseling psychology, developed by Derald Wing Sue and colleagues (Sue et al., 1982; Sue, Arredondo, & McDavis, 1992; Sue, 2001) presents a 3X4X5 model designed to assess cultural competence, titled the Multidimensional model of Cultural Competence [MDCC] (Sue, 2001). This multidimensional model looks at three dimensions: race and culture specific attributes of cultural competence (African American, Asian American, Latino American, Native American,
European American), components of cultural competence (awareness of attitudes/beliefs, knowledge, skills), and foci of cultural competence (societal, organizational, professional, individual). Additionally, Sue et al. (1992) argued that the model may be applicable to other minority groups. Over the last decade, other models and conceptualizations have built upon this model, yet the core tripartite conceptualization continues to proliferate the literature (Krentzman & Townsend, 2008; Smith & Trimble, 2016; Worthington, Soth-McNett, & Moreno, 2007). Sue (2006) defined cultural competence as:

…the service provider’s acquisition of awareness, knowledge, and skills needed to function effectively in a democratic society (ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds), and on an organizational/societal level, advocating effectively to develop new theories, practices, policies, and organizational; structures that are more responsive to all groups (p. 29).

Another often used definition of cultural competence in the literature comes from Cross et al. (1989) and encompasses a broader definition of cultural competence as: “a set of congruent behaviors, attitudes, and policies that come together in a system, agency, or amongst professionals and enables that system, agency, or those professionals to work effectively in cross-cultural situations” (p. 7). Cultural competence is an endeavor that takes place at the professional, organizational, and societal level (Sue, 2001).

There is currently a movement toward establishing, operationalizing, and assessing multicultural counseling competencies (Arredondo & Tovar-Blank, 2014; Sue, 2001; Sue, Arredondo & McDavis, 1992; Sue et al., 1982) in order to hold practitioners to a higher, more ethical standard when treating all minorities. For example, whether one decides to seek mental health treatment is related to the perception of need, and this may differ depending on context, as
It is socially constructed (Bauer et al., 2012). As a result, perceptions of need may differ based on ethnic or racial background, as that provides the social backdrop behind which one identifies problem behaviors or symptoms. A culturally competent mental health professional should recognize that manifestations of mental illness might not be consistent across individuals or groups. One must remain cautious when conferring western standards of mental illness on a non-western population. These include standards for mental illness diagnoses, treatment plans, and strategies intended to increase awareness and reduce stigma.

An inherent contradiction that must be attended to when advocating for cultural competence is the tendency to classify different cultures into categories that may perpetuate or reify stereotypes, rather than endorse the uniqueness of the individual (Johnson & Munch, 2009). This perspective aids the provider in moving beyond the power position of knowing what the clients don’t know, ultimately allowing them to meet the client where he or she stands. A personal and professional approach to cultural competence includes an understanding and awareness of one’s own background, including one’s race/ethnicity, an acknowledgement of the client’s own culture, values, beliefs, and behaviors, which may differ from the provider, a recognition that cultural difference does not equal cultural inferiority, and a willingness to learn about the client’s culture.

**Contradictions in cultural competence.** There exist a number of critiques of the notion of cultural competence. The emphasis on a priori knowledge may be troubling (Johnson & Munch, 2009). It is important to note that this emphasis on a priori knowledge is only the beginning of the process. It is about beginning to understand the core of the common cultural or ethnic identity, while also recognizing that immense divergence and differentiation can exist among individuals. A culturally competent professional can begin to know that common core. At the
same time, one must honor and respect these collective, core values and balance this knowledge with individual values and the larger context.

This leads to another critique of cultural competence involving the merits of the classification system used to interpret difference (Johnson & Munch, 2009). This explicates the contradiction between the universal vs. specific; the focus on communalities vs. differences (Johnson & Munch, 2009). Focusing on one solely to the detriment of the other may result in the proliferation of negative stereotypes about a particular group. It should be a balance of both what is common across individuals, as well as what is unique about an individual.

An additional critique of cultural competence is that cultural competence is not attainable (Johnson & Munch, 2009). Cultural competence does not consist of a finite endeavor that ends with one learning everything there is to know about a culture. It is an approach to working with clients from a position of not knowing while simultaneously going through the process of learning about a common core of cultural values and beliefs.

And finally, some critique cultural competence in that it privileges group differences over individual self-worth (Johnson & Munch, 2009). Social work is predicated on individual self-worth – consistent with the goals of social justice, which require that individuals utilize self-determination and dignity when pursuing opportunities and life goals (Morris, 2002). When individuals are oppressed, they no longer have the ability to make informed life choices to self-actualize and reach their goals. From this perspective, mental health practice appears a very individualistic endeavor, in which providers work to empower individuals to gain resources, utilize their power in order to exercise self-determination and dignity in their pursuit of choices and goals. However, this individualistic view may be at odds with the values and beliefs of diverse groups that come from collectivistic societies. Arabs are a collectivistic people in which
the family is the main unit to work with. Arab culture is also patriarchal, in which women are not always provided equal opportunities. What would a western social worker do when faced with a female Arab client whose goals are in direct contradiction with the inherent goals of social work regarding individual self-determination? The social worker needs to balance respect for the client and the client’s culture at all times, while also remaining true to the goals of social work and social justice. Although this may be difficult, it does comprise a piece of engaging in culturally competent practice.

Summary

Clearly, the movement toward understanding the cultural competence of service providers is a positive step toward addressing racial and ethnic health and mental health disparities, and a crucial move toward social justice for disenfranchised groups. Cultural competence must go beyond a knowledge and awareness of superficial differences in order to include a comprehension of significant oppression and discrimination. Arabs comprise one such disenfranchised group, perhaps made even more so by their relative invisibility mandated by the U.S. government in their classification as White (Naber, 2000).

Theoretical Framework: Cultural Competence Toward Racial/Ethnic Minorities

Recognition of the systematic and institutional barriers and oppression faced by racial/ethnic minorities on a daily basis justifies viewing cultural competence within a critical race theory framework, as well as a consideration of intersectionality. Abrams & Moio (2009) argued that practice must include a critical comprehension of the ways in which racism has affected the lives of oppressed individuals at the personal, institutional, and global levels. It is also of import to consider the integration of provider readiness into the conceptualization of cultural competence toward racial/ethnic minorities. Although the tripartite core of knowledge,
awareness, and skills remains intact, integrating the tenets of critical race theory, intersectionality, and provider readiness as encapsulated through the transtheoretical model can inform a more comprehensive, integrated, and valid conceptualization of multicultural competence toward racial and ethnic minorities, including Arabs (Figure 2):

**Critical race theory.** Historically, cultural competence has considered only racial and ethnic minorities, but its conceptualization has evolved to encompass any group difference, including those pertaining to sex, sexuality, religion, age, ability, language, nationality, among others. Although this increase in inclusivity is positive, one unintended consequence is the ensuing tendency to equalize oppressions under a multicultural umbrella, which may lead to the implementation of a color blind mentality that does not adequately recognize the existence of institutionalized oppression due to race (Abrams & Moio, 2009). This is also a strength of this
emerging theory, in that it recognizes that institutional discrimination can be based on factors other than race. Using critical race theory as the lens through which to view cultural competence enables one to address issues of institutionalized racism on multiple levels: individual, societal, institutional, and global. The mission of critical race theory is to examine, critique and transform the relationship between race, racism, and power (Abrams & Moio, 2009). There are six basic tenets of critical race theory (Abrams & Moio, 2009). First, there is an acknowledgement that endemic racism exists. Additionally, the notion of race is seen as a social construction developed and perpetuated by those in power. Differential racialization exists, according to critical race theory. This can be seen through a historical lens, noting the different ways in which individuals and groups were racialized according to the societal mores in place at the time. Interest convergence is the fourth tenet of critical race theory, arguing that change will only occur when the interests of those in power converge with those of the oppressed. Fifth, critical race theory advocates for a revising of history to represent the voices of people of color. Finally, an acknowledgement of the importance of intersectionality is paramount.

**Intersectionality.** Davis (2008) defines intersectionality as “the interaction between gender, race, and other categories of difference in individual lives, social practices, institutional arrangements, and cultural ideologies and the outcomes of these interactions in terms of power” (p. 68). Intersectionality argues that individuals are more than just one characteristic – they exhibit an array of characteristics that result in a unique pattern of intersecting privileges and oppressions, based on race, sex, sexual orientation, and ability, just to name a few. Individuals are perceived to be simultaneously privileged and oppressed. This infinite combination of intersecting characteristics necessitates that cultural competence be an ongoing endeavor. Utilizing critical race theory in conjunction with intersectionality to conceptualize cultural
competence is consistent with the goals of social justice. Specifically, the presence of differential patterns of mental health service access and use are an issue of social justice that is linked to a lack of provider cultural competence.

**Provider readiness for change.** One noted gap in the literature, specifically in the measurement of cultural competence, is a lack of attention to provider readiness for change as a moderating variable of provider cultural competence (Krentzman & Townsend, 2008). The transtheoretical model (DiClemente & Prochaska, 1982; Prochaska, DiClemente, & Norcross, 1992) was initially used with smoking cessation and other addictive behaviors. However, it has been applied worldwide to a plethora of areas to assess individual readiness for change. Although variations of the transtheoretical model exist, the most common iteration consists of five steps: precontemplation, contemplation, preparation, action, and maintenance. In this case, the targeted behavior for change is cultural competence. Assessing which stage the provider may currently be situating and how this relates to his or her current level of cultural competence may be useful to help explain the role that level of readiness plays in the development of cultural competence. This will also be an integral factor in the development of targeted interventions, which can be specific to the stage of change the provider is currently in.

To further explicate the five stages of change, precontemplation occurs when one has yet to acknowledge that a problem behavior exists (such as a lack of cultural competence). The contemplation stage acknowledges that a problem may exist, but the individual may not yet be ready to make a change. The preparation stage occurs when the individual is preparing him or herself to change (for example, researching trainings). This stage signifies a move from ambivalence about change, to committing to a change. Action takes place when behavior change occurs, along with overt modifications (such as actually attending trainings, reading books,
attending cultural events, interacting with individuals from other groups). The final stage, maintenance, is about maintaining the behavior change. This stage is particularly important with cultural competence, as cultural competence is an ongoing goal which the individual must continuously enact to maintain. In this study, the preparation and action stages were combined to facilitate interpretation of results.

White racial identity development can be thought of as a proxy for White provider readiness for change. Therein lies an important assumption that is validated by reality: the majority of mental health service providers are White (Santiago & Miranda, 2014). In fact, the only mental health profession that has adequate representation of one minority (Asian) is psychiatry (Santiago & Miranda, 2014). In reviewing progress made toward improving mental health services for racial/ethnic minorities, Santiago & Miranda (2014) found that while mental health professions did increase the number of racial/ethnic minority providers, it was not enough. Specifically, between 1999 and 2006, racial/ethnic minority psychiatrists increased from 17.6% to 21.4%; racial/ethnic minority social workers increased from 8.2% to 12.9%; and racial/ethnic minority psychologists increased from 6.6% to 7.8%. A 2004 survey of 10,000 licensed social workers indicated that the overwhelming majority (85%) were non-Hispanic Whites (Center for Health Workforce Studies & NASW Center for Workforce Studies, 2006). Because the majority of mental health providers in the U.S. remain members of the White majority, using a model of White racial identity development as a proxy for provider readiness for change is relatively useful. This link may not be as clear for non-White providers, but it provides a foundation from which to move.

Middleton et al. (2005) looked at White racial identity development and multicultural counseling competence. Consistent with previously presented hypotheses that providers who are
further along the readiness for change continuum would exhibit higher levels of cultural competence, Middleton et al. (2005) found that those mental health providers who possessed a more advanced status of racial identity development were correlated with higher levels of self-reported multicultural competence, as measured by knowledge, awareness, and skills.

Summary

Health and mental health disparities are present among racial/ethnic groups, including Arabs. However, due to their classification as White, the prevalence and rates of access and use of health and mental health services among Arabs is not well understood. Racial/ethnic disparities in mental health care are attributed to a number of factors, including a lack of cultural competence among service providers. As such, further exploration of those factors related to provider cultural competence is warranted.
Chapter 3: Research Methodology

This present study examined overall levels of knowledge, skills, and awareness held by mental health providers toward Arabs. It then explored the extent to which various characteristics of individuals, their experiences, and their relationships might be related to self-reported levels of cultural competence among mental health providers (licensed clinical social workers, licensed clinical psychologists, and licensed professional counselors) working in Northern Virginia. Specifically, the research questions explored in this study included the following: 1) What is the level of knowledge, awareness, and skills (cultural competence) that mental health providers hold toward Arabs; 2) What is the relationship between certain demographic factors and levels of cultural competence among these mental health providers; 3) Are there relationships between certain professional variables and levels of cultural competence among mental health providers; 4) What is the influence or extent of previous knowledge and exposure to Arabs (for example, via travel to the Middle East, overall knowledge, sources of knowledge) on cultural competence; 5) Is social closeness, as a form of familiarity, to Arabs related to cultural competence; and 6) How does readiness/desire for change relate to cultural competence?

This chapter sets forth the current study’s research methodology. The following sections describe the preliminary validation steps, including a focus group and pilot study, as well as the current study’s research design, methodology by which participants were selected, participant characteristics, the study’s data collection procedures, description of research instruments used, the study’s anticipated data analyses, as well as limitations of the methodology.

Preliminary Measure Validation

In order to provide an initial, preliminary validation for a measure of knowledge, awareness, and skills toward Arabs, this researcher engaged a focus group of Arabs to give
feedback on the measure, and piloted it with a group of mental health providers in the Richmond, VA area (Khoury & Manuel, 2016). A three stage process was utilized to develop and validate a self-administered measure of multicultural competency toward Arabs, informed by the MDCC’s tripartite foci of knowledge, awareness, and skills, and based on competencies set forth in the literature (Arredondo et al., 1996). This measure was also informed by the precepts of critical race theory, intersectionality, and the transtheoretical model for change. The first step consisted of drafting the initial pool of items. The second step consisted of administering these items to a focus group of Arabs. The third step consisted of administering the scale to a small sample of providers (N=19) in order to ascertain nascent reliability and validity characteristics, as well as potential trends in the data.

**Drafting initial item pool.** These competencies (Arredondo et al., 1996) informed both the structure of the scale as well as the content of the questions, thereby lending the measure face and content validity. These competencies are based on the tripartite framework of cultural competence as knowledge, awareness, and skills. Sue, Arredondo, & McDavis (1992) depict these sections as: counselor awareness of own assumptions, values and biases; understanding the worldview of the culturally different client; and developing appropriate intervention strategies and techniques. Under the umbrella of awareness fall such precepts as counselor recognition of his or her own biases, values, and stereotypes, as well as a recognition of the counselor’s own limits, and a sensitivity to his or her own cultural heritage and background, and how this may or may not play a role in the counseling relationship. Under the umbrella of knowledge falls knowledge of racial identity development, of the values, history, experiences, and lifestyles of diverse groups, as well as knowledge of discriminatory structures, and institutional oppression and barriers. Under the umbrella of skills falls a range of culturally specific strategies, including
appropriate use and interpretation of verbal and nonverbal responses, as well as willingness to seek multicultural training.

**Focus group.** Focus groups have become an increasingly popular methodology in research, intended to garner the opinions and attitudes of a select population. Focus groups can be particularly helpful when working with culturally and linguistically diverse populations whose worldviews, beliefs, and attitudes may differ from the prevailing Western norm (Halcomb, Gholizadeh, DiGiacomo, Phillips, & Davidson, 2007). Focus group participants were recruited through membership in a Coptic Christian church in central Virginia. Five women and one man attended, which was within the ideal group size of five to ten (Halcomb et al., 2007), with ages ranging from twenty-six to fifty-six. Participants gave verbal consent to participate upon hearing the rationale for the focus group, as well as the manner in which results would be utilized. The participants were all originally from Egypt, but represented a wide range of acculturation levels, with residence in the U.S. varying from one year to twenty-nine years. All participants were Coptic Christian and highly educated: four possessed a BS degree, one a BSW, and one a PhD.

Based on the literature surrounding best practices for conducting focus group research with culturally and linguistically diverse groups (Halcomb et al., 2007), the author incorporated several measures to increase methodological rigor. First, bilingual moderators were used to help promote engagement and facilitate any issues that arose. The facilitator (first author) was bilingual in English and Arabic. Secondly, guidelines indicated that each focus group should consist of a homogenous subsample of participants in order to avoid power differentials and increase comfort. The focus group consisted entirely of Coptic Christian Arabs from Egypt who attended the same church. Within the Arab culture, there exists significant heterogeneity within
groups, particularly based on religion and country of origin. Limiting the group to individuals from one country (Egypt), and not only one religion (Christianity), but also one specific sect (Coptic), further increased the homogeneity of the sample. Therefore, the sample recruited was not necessarily representative of the entire population of Arabs.

Participants were concerned about the social desirability of specific items, particularly involving a reluctance to admit to holding stereotypes or biases of Arabs. They felt that a few of the items sounded accusatory, with a bias assumed from the outset. They suggested either removing the items or finding a way to ask about bias and stereotyping indirectly rather than directly. They recommended adding specific questions about working with Muslim women in traditional dress, particularly related to the difficulty of seeing facial expressions. They advised that questions with a specific focus on opposite-sex relationships (particularly a female patient with a male therapist) be included. The group also suggested adding a section on working with translators in a counseling setting.

**Administration to mental health providers.** In addition to the revised measure (based on focus group feedback), the Multicultural Counseling Knowledge and Awareness Scale [MCKAS] (Ponterotto, Gretchen, Utsey, Riegger, & Austin, 2002) was included to assess convergent validity. The MCKAS exhibits alpha reliability estimates for the full scale and the knowledge and awareness subscales ranging from .75 to .91 (Ponterotto et al., 2002). Additional information on this scale can be found further in the chapter.

This complete measure was subsequently piloted among mental health practitioners at five agencies in the central Virginia community. These organizations were identified through recommendations from faculty members and students at Virginia Commonwealth University’s School of Social Work. Three email reminders containing an online link to the survey were sent
to the agency (via the contact individual) throughout a two month period. Participants could
elect to enter into a lottery to win one of two $25 bank cards. SPSS 22 was used to conduct
reliability and validity analyses to identify the underlying item structure and convergent validity
with the MCKAS. Additionally, bivariate analyses were conducted to explore relationships
between key demographic variables and knowledge, awareness, and skills. Due to an
insufficiently powered sample, no significant relationships were uncovered. However, the
following descriptive data was collected.

Demographics of the 19 participants indicated that 84% were females, 68% white, 11%
African American, and 21% multiracial. Additionally, 42% had less than 5 years of clinical
experience and 32% were younger than 35. Furthermore, 68% of respondents indicated that their
graduate program did not provide specific coursework on Arabs. Regarding origins of prior
information, the majority of participants indicated (strongly or somewhat agreed) that their
knowledge and experience with Arabs came from social interactions (55.6%) as compared with
44.4% from TV and movies, 41.2% from the Internet, and 33.3% from books.

Given the small sample size (N=19), exploratory analyses were run in order to identify
characteristics of subscales, including alphas, means, and standard deviations. Overall, three
subscales emerged: Awareness, Knowledge, Skills, consisting of 15 items in total, an alpha of
.75, and a mean and standard deviation of 2.12 and .46. Overall scale convergent validity of this
measure with the MCKAS (Ponterotto et al., 2002) was found r(19)=.61, p<.01.

The results of the focus group and pilot study helped shape the design and decisions for
the dissertation, which identified and further explored variables related to provider cultural
competence toward Arabs, utilizing a larger sample. That methodology is presented below.
Dissertation Study Methodology

**Design.** This was an exploratory, descriptive, correlational study that examined the existence and potential role of factors that may be related to cultural competence toward Arabs, specifically among a sample of mental health providers working in Northern Virginia. These factors included demographic and professional variables, variables delineating sources and extent of previous knowledge, social closeness, as well as determinations of provider desire for change. This was not an experimental design, and as such, causal determinations could not be made. However, because this is a nascent area in the social work research literature, this type of design was warranted. Descriptive research designs are often used in studies aimed at collecting additional information or gaining knowledge in a novel area. Due to the lack of attention and research that has been conducted with Arabs and provider cultural competence, an exploratory, descriptive, correlational, cross-sectional design was warranted. This type of design allows for efficiency in data collection, specifically, for a large amount of information to be collected from a large, diverse group of participants at one time. This type of design can also facilitate objectivity in analysis and interpretation of results.

The field has moved forward on conceptualizing and operationalizing cultural competence as an amalgamation of knowledge, awareness, and skills. However, the literature has remained rather stagnant through discussions of conceptualizations and arguments over linguistics, and few culture specific notions of cultural competence toward any racial/ethnic minority group have been theoretically explored theoretically yet. There have been a few studies to look at assessing levels of cultural competence toward a specific racial/ethnic minority group (e.g. Sabbah et al., 2009; Wade & Bernstein, 1991).
Participants and sampling method. This study was approved under the VCU IRB as exempt [HM20000170], meaning that, given the non-sensitive nature of the topic and the minimal risk to participants, a formal written consent was waived. Requiring a formal consent may have compromised anonymity, as participants would have been required to share names or other personally identifying information. Retaining anonymity was potentially important in this study due to the fact that individuals may be less likely to admit to a lack of knowledge, awareness, or skills, particularly in the sense that these may be perceived to be related to their effectiveness as mental health providers. Any participant's response could not be linked in any way to his or her identity. While no personally identifying information was requested, some information of a personal nature was included, such as religious affiliation, age, sex, level of education, etc. All survey responses remained confidential, with access provided only to the researcher and a graduate research assistant. A cover letter provided an overview of the purpose of the study, potential risks and benefits, contact information from the investigators, information around the voluntary nature of the study, and confidentiality information. Completion of the questionnaire indicated voluntary consent to participate in the study.

The available sampling frame consisted of the following licensed mental health practitioners residing in Northern Virginia: clinical social workers, psychologists, and counselors. The sampling frame, or the source from which this sample was drawn, consisted of names and addresses received from the State of Virginia Licensing Board for all three professions. These included 5074 licensed clinical social workers, 2509 licensed clinical psychologists, and 3657 licensed professional counselors throughout the state of Virginia. It would have been possible to randomly sample from this state-wide data base. However, there was a concern that, because Arab residents are sparse in parts of the state, assessing cultural
competence of providers who had very little likelihood of treating an Arab client might limit the practical implications of findings. As a result, the sample was restricted to providers working in Northern Virginia, due to the higher population of Arabs residing in that area. According to the Arab American Institute Foundation (2011), Virginia is ranked #11 of states with high Arab populations, with an estimate just under 57,000 Arab residents. The top five counties in Virginia where Arabs live are in Northern Virginia (Fairfax, Loudon, Arlington, Prince William, and Alexandria). Therefore, the study was limited to this geographic region, given that providers working in Northern Virginia would be in closer proximity to concentrations of Arab residents and have more potential to interact with Arab residents, whether in practice or otherwise.

Subsequently, those with zip codes outside of Northern Virginia were removed. Northern Virginia consists of the following: Arlington County, Alexandria City, Fairfax County, Falls Church City, Fairfax City, Loudoun County, Prince William County, and the outlying counties of Stafford, Spotsylvania, Fauquier, Culpeper, and Clarke. The resulting Northern Virginia sampling frame consisted of 1811 licensed clinical social workers (35.7% of the initial count of 5074), 1089 licensed clinical psychologists (43.4% of initial count of 2509), and 841 licensed professional counselors (23% of initial count of 3657). From this sampling frame, 1001 individuals were randomly selected across the three professions to participate in the study (334 LCSWs, 334 Psychologists, 333 LPCs).

Once these 1001 names were randomly selected, mailing labels for each were printed. All 1001 individuals were mailed a survey packet, which included a copy of the quantitative survey (Appendix D), an unattached cover letter (Appendix B) that they could retain, and a prepaid, self-addressed envelope. This cover letter also included a link to the survey via Redcap, so that the participant could choose to complete the survey online or in the paper format. Redcap
is specifically designed to capture data online, and allows investigators to build, manage, and store online data. Redcap has provisions to ensure the anonymity of the data collected, and no login information was required to access the survey.

**Response rates.** A number of meta-analyses have shown that the topic of the survey and its salience to the particular population is one of the most important factors influencing response rates (Cook, Heath, & Thompson, 2000; Sheehan, 2001). Cultural competence is hypothesized to be a topic of interest to providers, particularly in the professions of social work and counseling psychology. The respective ethical guidelines have been adapted to reflect a focus on cultural competence, and research regarding cultural competence in mental health services continues to be published at a consistent and high quality level (Chu, Leino, Pflum, & Sue, 2016; Dillon, Odera, Fons-Scheyd, Sheu, Ebersole, & Spanierman, 2016; Good & Hannah, 2015; Horvat et al., 2014, Huey, Tilley, Jones, & Smith, 2014; Smith & Trimble, 2016; Tao, Owen, Pace, & Imel, 2015). Additionally, continuing education coursework options continue to reflect the importance of addressing cultural competence.

Research shows that mail surveys tend to have approximately 20% higher response rates than email surveys, hypothesized to be a function of population type and use of follow up reminders (Shih & Fan, 2009). The current focal population, due to their educational level as well as their experience and exposure to research, is hypothesized to be more highly receptive to surveys and research than the general population. Because surveys were mailed out with two options for return (mail and online), this is considered to be a mixed mode survey. Dillman et al. (2009) found that switching to another mode of data collection (e.g. mail and online) was an effective way to improve response rates. According to a meta-analysis conducted by Shih & Fan (2009), mail surveys remain “superior to e-mail survey[s] in terms of obtaining higher
response rate[s].” (p. 26). However, Stern, Bilgen, & Dillman (2014) delineate some limitations that accompany mail based surveys: lengthier response time, higher survey costs, less capability of reaching a large sample of respondents, less flexibility in using branching or probing questions, and lack of knowledge of whether a survey had been delivered to the correct address.

The initial request for participation was done via mail. However, since email addresses were not included in the information from the licensing board, the investigator searched the internet for the emails for all 1001 names, and identified 180 emails total (44 LCSWs, 74 LPCs, 62 psychologists). A follow up request to these individuals was sent via email, approximately four weeks later. Email was chosen as the medium for follow-up for financial reasons, as the cost of a second mailing would have been prohibitive. Since any previously mailed completed measures were anonymous, there was no way to remove the names of the individuals who had previously returned mail surveys from the email list. As a result, some individuals may have received an email reminder, despite the fact that they had already mailed back a survey. Of the 180 emails that were sent, 8 were returned as undeliverable, meaning that 172 follow up emails were sent. Thus, 17.2% of the sample received a follow up request. Please see Appendix C for a copy of the email. The final response rate (calculation of which will be explained further in Chapter 4) was determined to fall within a range of 14.3% to 15.6%.

There are several factors that could hypothetically contribute to a low response rate, specifically related to measurement. This survey is considered to be a sequential mixed-mode survey, due to its reliance on more than one mode of data collection (mail and follow up email). This characteristic has actually been shown to increase response rates (Dillman et al., 2009). However, this may not have been applicable in this survey, given that only a small portion of the sample (17.2%) received a follow up. In addition, this survey is also a mixed-mode survey, in
that it provided a concurrent web option as well as the mailed survey. Research has shown that these concurrent mixed-mode surveys are associated with a significant reduction in response rates (Medway & Fulton, 2012, Porter & Whitcomb, 2007). Medway & Fulton (2012) present three hypotheses to account for this finding: participants do not want to have to make a choice between two modes; participants intend to respond via the Internet but do not; and participants responding online may get frustrated due to technical or computer issues. However, given that such a small percentage of this sample (1.3%) came from the online Redcap survey, the latter hypothesis appears improbable. And given the highly computer literate population this was purported to be, it was hypothesized that being forced to make a choice would not present an impediment to survey completion. An intent to respond via Internet may have contributed to a low response rate, particularly since the website would have to be typed into the computer (rather than being clicked upon).

While a potential limitation of Internet-based surveys is a lack of inclusion of those without online access (Weimiao & Zheng, 2010), it is anticipated that this was a highly computer literate population that regularly uses email and Internet. Another limitation was the increased use of spamming filters, which may prevent participants from receiving the email (Weimiao & Zheng, 2010). However, given that this email originated with the investigator, and not from an online survey company, spamming was unlikely to occur.

Additional characteristics of surveys (specifically mail surveys) that could impact response size include: the fact that some groups (e.g. younger people) are less inclined to utilize mail surveys; individuals in transition (relocating) may be more difficult to reach; individuals residing in new construction may be more difficult to reach; and illiterate and/or ESL populations may be more difficult to reach. Additionally, mail surveys can be misconstrued as
junk mail if they are not labeled appropriately (Stern, Bilgen, & Dillman, 2014). In order to
address the final concern and increase name recognition, official VCU envelopes were utilized,
as was VCU letterhead and VCU prepaid return envelopes. In their meta-analysis of issues
associated with mail survey response rates, Fox, Crask, & Kim (1998) found that several factors
significantly increase mail survey response rates: prenotification by letter (which was not done in
this study), university sponsorship, stamped return postage (instead of the business reply
envelopes used in this study), use of postcard follow up (which was not done in this study), using
first class mail (which was done in this study), and printing the survey on colored paper (which
was not done in this study). Of those factors that were not completed in this study, most were a
result of financial limitations. However, the use of colored paper could have been pursued and
was not.

Due to financial limitations and concerns regarding the maintenance of anonymity for
participants, as well as mixed research indicating that the use of incentives did not necessarily
significantly improve survey response rates, both online and otherwise, (Bosnjak & Tuten, 2003;
Dykema, Stevenson, Klein, Kim, & Day, 2012; Porter & Whitcomb, 2003; Trussel & Lavrakas,
2004) no monetary incentives were provided.

However, even taking these considerations into account, this level of participation is
considered low, and non-response bias is assumed to pose a significant threat to validity. In their
meta-analysis of mail and web survey response rates, Shih & Fan (2009) found that the average
unweighted response rate of a mail survey was 53%, compared with 33% in web based surveys.
In addition to those factors that are purported to impact mail survey response rates, one
hypothesis for this low level of participation has to do with the complex socio-political
environment around this population. However, given that participants were not asked about political affiliation, it is difficult to know if any relationship of that nature existed.

Random sampling improves the potential generalizability of the results and conclusions. To look at preliminary a priori sample size justification, G*Power (3.1.9.2) was used to determine sample size calculations for a t-test, with alpha set at .01 (two-tailed), power at .80, with a moderate effect size of .50. The small alpha value was chose in order to account for alpha inflation due to multiple statistical testing. This suggested that a sample size of 164 would be sufficient to conduct bivariate tests assessing the potential relationship between variables. Ultimately, the sample size in this study was 156. However, thirteen (13) cases were removed due to participants indicating that they did not see clients in a clinical capacity. These participants were removed from all subsequent analyses, resulting in a final sample of 143. This sample size is below the ideal calculated above, which may limit the statistical power of analyses, and potentially result in an inflation of alpha.

Measure Development and Revisions

A new conceptualization of cultural competence toward racial/ethnic minorities was presented in Chapter 2, taking the amalgamation of knowledge, awareness, and skills a step further by looking at the role of race/ethnicity through the use of critical race theory, adopting an intersectional standpoint toward personal identity, and advocating for the importance of individual provider readiness for change as a variable impacting the development of cultural competence. Based on this theoretical orientation, a measure was developed and pilot tested.

The measure consisted of closed-ended questions on demographics, professional characteristics, sources of knowledge about Arabs, social closeness to Arabs, previous exposure to Arabs, determination of knowledge, awareness, and skills toward working with Arabs in a
mental health setting, and a determination of desire for change, specifically toward increased cultural competence. Additionally, the Multicultural Counseling Knowledge and Awareness Scale [MCKAS] (Ponterotto et al., 2002) was administered for convergent validity purposes.

The purpose of this measure was to gain a deeper, more comprehensive understanding of the knowledge, awareness, and skills (cultural competence) that mental health providers hold toward Arab clients. Additionally, further information on the role of certain demographic variables, professional variables, previous knowledge and exposure to Arabs, sources of information, and social closeness variables was collected. As previously mentioned, the competencies initially put forth by Arredondo et al. (1996), and subsequently expanded upon by Sue (2006) were the basis of both the structure of the scale as well as the content of the questions. Please see Appendix D for the final measure.

**Demographics.** These four items asked participants about their sex, racial/ethnic background, age, and religious affiliation (if any).

**Professional characteristics.** These four items (and five sub-items) asked participants about their professional characteristics, including: number of clients, number of past or current Arab clients, type of agency, professional role, client type, highest degree, field, and year of graduation.

**Previous knowledge and exposure.** This section consisted of five items aimed at identifying amount and source of knowledge. This included asking participants about their own rating of overall knowledge of Arab culture, values, and practices, about any previous travel experience to the Middle East, and to what extent their knowledge comes from the following: television, internet, and books. Although these options were rather broad, they provided a preliminary determination of the general area from which individuals learn about Arabs.
Social closeness variables. This section consisted of one item (with six subsets) querying participants on the extent to which Arabs are or are not in specific social spheres. This included the following: immediate family, extended family, professional environment, community/neighborhood, professional colleagues, and client population. Relevant to this and the previous section, research and theory suggest that personal interactions (also known as cultural encounters) may render one more likely to think favorably, or more accurately, of a particular group (Campinha-Bacote, 2002; Chiu, Gelfand, Yamagishi, Shteynberg, & Wan, 2010; Yang, Kinshuk, Yu, Chen, & Huang, 2014). Specifically, the more personal (i.e. socially close) the relationship, the more favorable the disposition would be hypothesized to be.

Self-assessment of cultural competence toward Arabs – awareness. This section consisted of seven items aimed at uncovering any biases or preconceptions the providers may hold toward Arabs. It is aimed at understanding whether the providers recognized the potential role their own race/ethnicity may play in the therapeutic encounter, as well as understanding the role that oppression can play in personal racial/ethnic identity development. Three items were reverse scored. The questions were asked using a five-point Likert scale with options ranging from strongly agree to strongly disagree, with lower scores reflecting higher levels of cultural competence. See Table 1 for a presentation of each awareness items, followed by Sue’s competencies (2006).

Table 1
Awareness items and competencies

<table>
<thead>
<tr>
<th>Item</th>
<th>Competency</th>
</tr>
</thead>
<tbody>
<tr>
<td>If I had a new client who was Arab, I would feel more comfortable referring him or her elsewhere than working with him or her myself.</td>
<td>Sue’s competencies (2006)</td>
</tr>
<tr>
<td>My own racial/ethnic background may play a role in the therapeutic encounter with an Arab client.</td>
<td></td>
</tr>
<tr>
<td>Many people may hold negative attitudes, preconceived notions, and biases toward Arabs.</td>
<td></td>
</tr>
</tbody>
</table>
I respect the religious beliefs and practices that clients may have, even if I feel that they are interfering with the therapeutic relationship.

I believe that Arabs can be simultaneously privileged and oppressed.

It is most effective for an Arab client to receive treatment from an Arab provider.

I am aware of the historical oppression Arabs have experienced.

Awareness component of cultural competence (Sue, 2006)

Be sensitive to circumstances that may dictate referral of the client to a member of his or her own socio-demographic group or to another more appropriate professional.

Be aware of one’s own values and biases and of how they may affect culturally diverse groups.

Acknowledge and be aware of one’s own racist, sexist, heterosexist, and other detrimental attitudes, beliefs, feelings.

Have comfort with differences that exist between provider and client in terms of race, gender, sexual orientation, and other demographic variables.

Be sensitive to circumstances that may dictate referral of the client to a member of his or her own socio-demographic group or to another more appropriate professional.

Move from being culturally unaware to being aware and sensitive to one’s own cultural heritage and to valuing and respecting difference.

**Self-assessment of cultural competence toward Arabs - knowledge.** This section consisted of seven items aimed at determining the level of concrete, accurate knowledge a provider may or may not have about Arabs, as well as Arab culture and the role culture may play in the therapeutic encounter. Two items were reverse scored. The scale was a five-point Likert scale with options ranging from *strongly agree* to *strongly disagree*, with lower scores reflecting higher levels of cultural competence. See Table 2 for a presentation of each item, followed by Sue’s competencies (Sue, 2006).
I have had little to no personal or social interactions with Arabs.

An Arab client may be more amenable to receiving mental health services from indigenous healers or religious figures.

I would be cognizant of the role physical distance may play with an Arab client.

I do not think it is appropriate for an Arab client to offer me small gifts.

I would be able to tell if an individual was Arab from his or her name.

I would be able to tell if an individual was Arab from his or her physical appearance.

All Arabs are Muslim.

Knowledge component of cultural competence (Sue, 2006)

| Possess specific knowledge and information about the particular group with whom one is working. |
| Possess knowledge of the sociopolitical system in the U.S., particularly with respect to its treatment of marginalized groups. |
| Possess knowledge and understanding of the generic characteristics of counseling, clinical work, and therapy. |
| Possess of institutional barriers preventing some diverse clients from using social services. |

**Self-Assessment of Cultural Competence toward Arabs - Skills.** This section consisted of six items aimed at determining whether the provider is, has historically been, and would be, willing and able to, seek out additional training and/or skills development to work with Arabs. It looked at whether the provider is, has historically been, or would be open to alternative approaches to working with Arab clients. Three items were reverse scored. The scale provided was a five-point Likert scale with options ranging from *strongly agree* to *strongly disagree*, with lower scores reflecting higher levels of cultural competence. See Table 3 for a presentation of each item, followed by Sue’s competencies (2006).
I would encourage my Arab clients to differentiate their individual identities from that of their families.

I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab client.

Family should be integrated in many levels of treatment with Arabs.

When working with Arabs, I would tend to focus on building a working relationship than solving a concrete problem.

I would find it challenging to work with an Arab female dressed in clothing where I would not see her facial features or read her body language.

I would be comfortable engaging the services of a third party certified translator to communicate more effectively with an Arab client.  *(Note: this item utilized a six point scale with an additional option of N/A: I already speak Arabic).*

Skills component of cultural competence (Sue, 2006)

Send and receive both verbal and nonverbal messages accurately and appropriately.

Exercise institutional intervention skills on behalf of one’s client when appropriate.

Generate a wide variety of verbal and nonverbal responses.

Play helping roles characterized by an active systemic focus, which leads to environmental interventions.

Possess an awareness of one’s own helping style, recognition of limitations, and anticipation of the impact of said style on culturally diverse clients.

**Readiness for change.** This section consisted of 16 items, and utilized the transtheoretical model to determine the provider’s readiness or desire for change (i.e. to increase or address cultural competence). No items were reverse scored. The scale provided was a five-point Likert scale with options ranging from *strongly agree* to *strongly disagree*. Scores were interpreted based on stage of change. Lower scores within a particular stage of change mean that the individual is more firmly grounded in that stage. Please see Table 4 for an item breakdown.
### Table 4

**Readiness for Change items**

<table>
<thead>
<tr>
<th>Readiness for change items</th>
<th>Stage of Change reflected in item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Once I have learned something about a racial/ethnic group, I use that knowledge when interacting with any member of that group.</td>
<td>Precontemplation</td>
</tr>
<tr>
<td>As a mental health provider, I try to engage in color blind behaviors.</td>
<td>Precontemplation</td>
</tr>
<tr>
<td>I am aware of the role that privilege and oppression have played in the development of my own sense of self</td>
<td>Precontemplation</td>
</tr>
<tr>
<td>I am aware of the impact privilege and oppression can potentially have on one’s racial/ethnic identity.</td>
<td>Precontemplation</td>
</tr>
<tr>
<td>I am unsure of what to do to begin to address the effects of privilege and oppression.</td>
<td>Contemplation</td>
</tr>
<tr>
<td>I am unsure of how to use any knowledge I have of the historical legacy of racism and oppression in the therapeutic encounter.</td>
<td>Contemplation</td>
</tr>
<tr>
<td>I am unsure how to address the role that my own racial/ethnic background may play with a client (regardless of whether it is the same background as the client, or different).</td>
<td>Contemplation</td>
</tr>
<tr>
<td>I am aware of any biases that I hold about minority groups.</td>
<td>Contemplation</td>
</tr>
<tr>
<td>I am ready to explore and clarify the origins of any biases and/or stereotypes I may hold about individuals from minority groups.</td>
<td>Preparation/Action</td>
</tr>
<tr>
<td>I am ready to meet with members of minority groups in order to learn more about their culture.</td>
<td>Preparation/Action</td>
</tr>
<tr>
<td>I will seek out continuing education seminars, workshops, and trainings to further refine awareness of the experiences of minority groups.</td>
<td>Preparation/Action</td>
</tr>
</tbody>
</table>
I will try to have conversations with peers about the importance of cultural competence.  
Preparation/Action

I attend trainings, seminars, and continuing education workshops in order to maintain my familiarity with minority groups. 
Maintenance

I interact with members of minority groups in community and neighborhood settings. 
Maintenance

I know that I will never be able to know everything about a particular minority group. 
Maintenance

I will endeavor to continue to approach new experiences with humility. 
Maintenance

**Multicultural Counseling Knowledge and Awareness Scale [MCKAS].** The MCKAS (Ponterotto et al., 2002) was administered to assess convergent validity with the measure of cultural competence. The MCKAS has exhibited alpha reliability estimates for the full scale and the knowledge and awareness subscales ranging from .75 to .91 (Ponterotto et al., 2002). This scale has been utilized in both counseling psychology and social work, with evidence of reliability and validity across a number of studies (Krentzman & Townsend, 2008, Ponterotto & Portere, 2003). This includes validity evidence based on test content (Ponterotto et al., 1996), evidence based on internal structure, as validated through factor analyses (Ponterotto et al., 1996), convergent and discriminant validity, particularly in relation to other self-report measures of cultural competence (Constantine & Ladany, 2000; Constantine & Ladany, 2001; Kocarek, Talbot, Batka, & Anderson, 2001; Ponterotto et al., 2002; Pope-Davis & Dings, 1994, Ponterotto et al., 1996).

**Data Analysis Plan**

The IBM Statistical Package for the Social Sciences (SPSS) version 23 was used to carry out statistical analyses, which are described in additional detail in Chapter 4. Descriptive
statistics were used to describe the sample and items, including frequency distributions, indices of variability and measures of central tendency.

Subsequently, a factor analysis was preformed to determine whether the structure of the cultural competence scale would emerge as hypothesized: into three subscales delineating knowledge, awareness, and skills. Following this, an item analysis was completed in order to ascertain the internal consistency of the scale. This process was completed with regards to the readiness for change scale as well.

This was followed by bivariate analyses (ANOVA, t-test, correlation) focused on exploring any subgroup differentiation based on demographic, professional, previous knowledge/exposure, social closeness, and readiness variables. These analyses utilized the scale version that was modified through the use of factor analysis and item analysis.

Subsequent multivariate analyses (specifically, hierarchical multiple regression) were employed to predict the role certain independent variables may play in predicting levels of cultural competence. Multiple regression is used to predict or estimate the value of an unknown dependent variable (i.e. scores on a self-report measure of cultural competence toward Arabs) corresponding to a set of predictors, or independent variables (e.g. age, sex, travel to Middle East, self-assessment of previous knowledge, etc.). Multiple regression can also be used to understand the relationship between a dependent variable and independent variables, in order to identify the cause of the variation in the dependent variable. For this study however, multiple regression was chosen to fulfill the former goal of estimation or prediction. Establishing causation was not a goal of this study. Because this study aspired to understand and identify the baseline status of a specific subgroup of providers, it was important to identify the potential role, influence, and existence of potential contributing or influencing factors. Hierarchical multiple
regression was chosen to test the contribution of a set of variables to changes in levels of cultural competence. These models corresponded with the previously mentioned research questions. For example, cultural competence (dependent variable) was initially regressed on a number of combinations of predictors, including: demographic variables (sex, age, religious affiliation, race/ethnicity). This initial model was a baseline model, and included only participant demographics. Next, cultural competence was regressed on predictor variables specific to professional characteristics (such as number of Arab clients, types of clients, and field). These variables were all related to professional experience, exposure, and knowledge. The next model began to look at variables specific to cultural competence, and to Arabs. In this model, cultural competence was regressed onto variables intended to measure social closeness to Arabs. Social closeness variables were also analyzed using Guttman scaling, a type of cumulative scale, in which an endorsement on one item implies affirmation of all previous items. Specifically, those individuals who indicated that Arabs were a part of their immediate families should also indicate that Arabs were a part of their extended family, a part of their professional environment, and community/neighborhood. As a result, responses were contingent upon the degree to which an individual adheres to the underlying construct (i.e. social closeness). In theory, Guttman scales are deterministic, in that one response can predict other item responses (Gothwal, Wright, Lamoureux, & Pesudovs, 2009; DeVellis, 2012; Guttman, 1944, 1957). The next model added additional nuance, specifically related to previous experience with Arabs, including self-reported levels of experience, and sources of said experience. And finally, the last model added readiness for change, as hypothesized in the conceptual model and theoretical orientation.
Limitations of the Methodology

As previously mentioned, there are a number of limitations associated with the use of both mail and online surveys. Additionally, although this was a randomly selected sample, it was restricted to one geographic area, thereby limiting the generalizability of results.

In addition, there continue to be significant issues with the reliability and validity of self-report measures of multicultural competence, particularly around social desirability and a lack of connection to demonstrated cultural competence in the clinical encounter (Constantine & Ladany, 2000; Sehgal et al., 2011). Specifically, Constantine & Ladany (2000) enumerated the following critiques of self-report multicultural counseling competence scales: they measure anticipated rather than actual behaviors or attitudes; they are often conflated with social desirability; and they may lack uniformity as to the underlying constructs being evaluated.

Limitations will be presented further in Chapter 5.
Chapter 4: Results

Introduction

This chapter presents the results, data analysis, and interpretation of data collected and is organized as follows: 1) response rate and sample size; 2) description of the initial treatment of the data; 3) descriptive statistics on participant demographics; 4) descriptive statistics on professional characteristics; 5) descriptive statistics on the extent of and sources of previous knowledge; 6) descriptive statistics on social closeness variables; 7) dimension reduction and reliability analyses regarding the dependent variable of cultural competence; 8) dimension reduction and reliability analyses regarding the independent variable readiness for change; and 8) presentation of bivariate and multivariate results by research question.

Response Rate and Sample Size

A total of 1001 surveys were mailed to the randomly selected mental health providers in Northern Virginia (334 LCSWs, 334 Psychologists, 333 LPCs). Of these, some were returned as undeliverable. Of the 334 LCSWs, 40 surveys were not delivered, resulting in an effective sample size of 294. Of the 334 psychologists, 22 surveys were not delivered, resulting in an effective sample size of 312. Of the 333 LPCs, 21 surveys were not delivered, resulting in an effective sample size of 312. Taking into account those letters that were not delivered, the denominator of potential respondents was reduced from 1001 to 918. As a result, the response rate was calculated in two ways: using the total random sample (n=1001) as the denominator; and using the number of sample members who actually received the initial mailing (n=918) as the denominator. Because it was not known whether the individuals whose letters were returned as undeliverable were actually eligible for the study (e.g., still in the area, still alive), it was
assumed that these two denominators provide parameters within which the actual response rate falls.

Data returned via Redcap (n=12) was exported into Excel. Data returned via return mail (n=144) was entered into Excel, and combined with the online data. This resulted in a total potential sample size of 156. However, 13 cases were removed from subsequent analyses because participants indicated that they did not see clients in a clinical capacity, resulting in a final N of 143. Thus, taking into account those surveys that were not deliverable, the initial response rate ranged from 15.6% to 17.0%, and was subsequently reduced to a range of 14.3% to 15.6%. Because responses were anonymous, it was not possible to further break down the response rate by demographic or professional characteristic. Additionally, non-response bias, a source of sampling error, could not be calculated. Non-response bias refers to error due to differences between characteristics of individuals who responded to the survey compared with those who did not. This is due to the fact that the licensing data (from which the sample was drawn) provided no demographic or professional information (outside of name, address, and profession). It is possible that the low response rate with this data could be indicative of non-response bias, in that individuals with certain characteristics simply did not respond to the survey. As a result, generalization can be compromised due to an inability to assess representativeness of the sample. While having a low response rate may negatively affect the ability to generalize to a larger group, it doesn’t affect the ability to study variation in this sample, with the caveat that, due to the influence of self-selection, the full range of variation within this sample may not be present. These limitations will be further addressed in Chapter 5.
Data Cleaning

SPSS (v. 23) was utilized to conduct all analyses. Data cleaning consisted of initially searching for and fixing any data entry mistakes. There were four identified data entry errors (entered incorrectly) that were re-coded as missing. This included the identification of values that were not actually options. For example, a value of 5 had been entered, when the range of options included 0 or 1. One variable, which asked participants about their willingness or ability to utilize a translator as necessary, provided respondents with 3 answer choices: 0=no, 1=yes, 2=N/A because I speak Arabic. Two respondents selected “2” as their response to this question. Because the question was technically not applicable for them, they were recoded to “missing” for this item.

Next, negatively worded items were reverse coded. It is helpful to reverse code negatively worded items in order to streamline interpretation of results, in that low values on the scale will always indicate the same type of response on each item (i.e. higher levels of cultural competence). Eight items were reverse coded in the new measure, and nine items were reverse coded in the Multicultural Counseling Knowledge and Awareness Scale [MCKAS] (Ponterotto, et al., 2002). The overall scale was coded to reflect lower scores being indicative of higher cultural competence. This was done in order to remain consistent with the view that the goal is to ascertain how significant a problem a lack of cultural competence is, in order to provide a problem-solving framework. Additionally, this coding scheme is consistent with that of the MCKAS, simplifying the comparison of results, particularly for convergent validity purposes.

Pre-Screening Data

Missing data and outliers. Data pre-screening for assumptions began with the identification of any patterns in missing data, which could be a source of systematic error. There
was one contingency question that was not included in missing data analysis. This was the item following the question asking participants whether they had ever traveled to the Middle East. If they answered no, they could not answer the subsequent question, asking about length of time spent in the Middle East. Therefore, the item asking about length of time in Middle East was removed from the overall missing data analysis. Missing value pattern analysis for the whole data set indicated that, of the total 17,589 data values (123 variables * 143 respondents), 326 (or 1.853%) were missing. Given this low number, further analyses looking at patterns in missing data were not undertaken. For those variables used in the primary analyses, missing data ranged from 0-8, with the highest number for age, with 12 (8.4%) missing. It is important to note, however, that all of the missing data stemmed from demographics, not other predictor variables. All subsequent analyses were run with existing data, and no data imputation occurred. Next, the data were inspected for outliers, and no outliers were identified. Outliers are defined as extreme values that have a disproportionate impact on results, in that they may skew means in particular.

**Demographic Variables**

Demographic variables in this survey included age, race/ethnicity, religious affiliation, and sex. The following section will discuss how these variables may have been manipulated prior to analysis, and present descriptive statistics generated from the 143 respondents who saw clients in a professional capacity.

**Age.** Age, a continuous variable, ranged from 28 to 82, with a mean 52.3 and a standard deviation of 12.9. See Figure 3 for a frequency distribution.
Sex. Of the 143 respondents, the majority (88.9%) was female.

Race/Ethnicity. Participants were given the option of selecting more than one category for race/ethnicity. As a result, there was overlap between responses. 78.4% of the sample indicated only White race/ethnicity, and 83.8% indicated White race/ethnicity, in addition to at least one other. 21.6% of this sample self-identified as a racial/ethnic minority. However, the number of racial/ethnic minorities in each individual subgroup was very small. Subsequently, race/ethnicity was dichotomized into White and non-White, in order to ensure that the number of non-Whites was large enough to result in analyses from which inferences could be drawn.

Religious affiliation. With regards to religious affiliation, 50.4% of this sample identified as Christian, with the remaining identifying as None, Atheist, Jewish, Agnostic, Buddhist, Muslim, and Hindu, in decreasing order of frequency. Participants could choose only one option. Due to the small number of individuals in each subgroup, the variable was subsequently categorized into Christian, non-Christian (Jewish, Buddhist, Muslim, Hindu), and
no religion (None, Atheist, Agnostic). Please see Table 5 for a final distribution of all
demographic variables.

Table 5  
Demographic characteristics of participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (continuous)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range: 28-82</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD): 52.3 (12.9)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>11.1%</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
<td>88.9%</td>
</tr>
<tr>
<td>Race/Ethnicity*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>114</td>
<td>83.8%</td>
</tr>
<tr>
<td>Black</td>
<td>6</td>
<td>4.5%</td>
</tr>
<tr>
<td>Asian</td>
<td>4</td>
<td>3.0%</td>
</tr>
<tr>
<td>Native American</td>
<td>5</td>
<td>3.7%</td>
</tr>
<tr>
<td>Pacific Islander</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>9</td>
<td>6.7%</td>
</tr>
<tr>
<td>Arab</td>
<td>4</td>
<td>3.0%</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>3.0%</td>
</tr>
<tr>
<td>Race/Ethnicity (dichotomous)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>White (only)</td>
<td>105</td>
<td>73.4%</td>
</tr>
<tr>
<td>Non-White (only)</td>
<td>29</td>
<td>21.6%</td>
</tr>
<tr>
<td>Religious Affiliation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>68</td>
<td>50.4%</td>
</tr>
<tr>
<td>Muslim</td>
<td>2</td>
<td>1.5%</td>
</tr>
<tr>
<td>Jewish</td>
<td>8</td>
<td>5.6%</td>
</tr>
<tr>
<td>Buddhist</td>
<td>3</td>
<td>2.2%</td>
</tr>
<tr>
<td>Hindu</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Atheist</td>
<td>8</td>
<td>5.9%</td>
</tr>
<tr>
<td>Agnostic</td>
<td>5</td>
<td>3.7%</td>
</tr>
<tr>
<td>Other</td>
<td>13</td>
<td>9.6%</td>
</tr>
<tr>
<td>None</td>
<td>27</td>
<td>20%</td>
</tr>
<tr>
<td>Religious Affiliation (combined</td>
<td>68</td>
<td>55.7%</td>
</tr>
<tr>
<td>categories)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Christian</td>
<td>14</td>
<td>11.5%</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>40</td>
<td>32.8%</td>
</tr>
</tbody>
</table>

*Can select more than one category
Professional Variables

Professional variables in this sample included number of clients during any given week, number of Arab clients (during one’s career), type of client (adults, children, families, couples), field, type of agency, role, and highest degree.

Number of clients. The number of clients on participants’ caseloads (during any given week) ranged from 2-60, with a mean of 18.5 (SD=10.3).

Number of Arab clients. This variable originally contained five categories, in which over half of the sample (56%) indicated that they had worked with six or more Arab clients during their career. Only 7.8% reported that they had never worked with an Arab client. This suggests that these participants, as a whole, are at least superficially familiar with this population, particularly in a professional capacity. Due to the small number of individuals in the “none” group, and in order to make group sizes more equal, this variable was dichotomized into two groups: 0-5, and more than six. See Table 6 for the two distributions.

Table 6
Number of Arab clients

<table>
<thead>
<tr>
<th>No. of Arab clients (dichotomous)</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>62</td>
<td>44%</td>
</tr>
<tr>
<td>6+</td>
<td>79</td>
<td>56%</td>
</tr>
</tbody>
</table>

Type of client. Participants were asked about the types of clients they worked with: children/adolescents, adults, couples, and families. Participants were allowed to select more than one option. 46.8% reported working with children/adolescents, 89.4% with adults, and 41.8% with couples/families. These items were subsequently manipulated in order to reflect those
individuals who worked only with one group: those who worked only with children/adolescents, those who worked only with adults, and those who worked only with families (there were no individuals who worked only with couples). When these data were isolated to reflect respondents who only selected on type of client, results indicated that 4.2% of the sample worked only with children, 24.5% of the sample worked only with adults, and 1.4% worked only with couples. Due to the small group sizes in the unique variables, and the difficulty drawing inferences from the overlapping groups, these variables were not utilized in subsequent analyses.

**Field.** This sample included practitioners in Social Work (30.1%), Clinical Psychology (23.8%), Mental Health Counseling (23.1%), Counseling Psychology (14.7%), and Marriage and Family Therapy (2.8%). However, due to the small number of individuals identifying as marriage and family therapists (N=4), and to the fact that it is difficult to know which field to collapse this category into (marriage and family therapists could have degrees in a number of different fields), this group was not included subsequent analyses. Please see Table 7.

<table>
<thead>
<tr>
<th>Field</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Work</td>
<td>43</td>
<td>32.8%</td>
</tr>
<tr>
<td>Clinical Psychology</td>
<td>34</td>
<td>26.0%</td>
</tr>
<tr>
<td>Counseling Psychology</td>
<td>21</td>
<td>16.0%</td>
</tr>
<tr>
<td>Mental Health Counseling</td>
<td>33</td>
<td>25.2%</td>
</tr>
</tbody>
</table>

**Type of agency.** The largest group of practitioners reported working in a private practice setting (38%), followed by private agencies and community based mental health agencies.

**Role.** The majority of participants (85.2%) self-identified as therapists/clinicians. The remaining 14.8% were made up of individuals identifying as case managers, other, and administrators. Because this sample was restricted to those working with clients in a clinical
capacity, it is hypothesized that there may have been some confusion as to what a participant might identify as their primary role (i.e. administrator), while still working with clients in a secondary capacity.

**Highest degree.** The majority of participants were practicing with a Master’s Degree (67.1%) followed by those practicing with a Doctorate (29.4%).

Table 8  
*Professional characteristics of participants*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of clients in any given week</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Range: 2-60</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD): 18.5 (10.3)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No. of Arab clients (during career)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>11</td>
<td>7.8%</td>
</tr>
<tr>
<td>1-5</td>
<td>51</td>
<td>36.2%</td>
</tr>
<tr>
<td>6-10</td>
<td>33</td>
<td>23.4%</td>
</tr>
<tr>
<td>10+</td>
<td>46</td>
<td>32.6%</td>
</tr>
<tr>
<td>No. of Arab clients (during career) dichotomous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>62</td>
<td>44%</td>
</tr>
<tr>
<td>6+</td>
<td>79</td>
<td>56%</td>
</tr>
<tr>
<td>Type of Agency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Private</td>
<td>38</td>
<td>26.8%</td>
</tr>
<tr>
<td>Non-Profit</td>
<td>13</td>
<td>9.2%</td>
</tr>
<tr>
<td>Public Agency</td>
<td>10</td>
<td>7.0%</td>
</tr>
<tr>
<td>Community Based Mental Health</td>
<td>16</td>
<td>11.3%</td>
</tr>
<tr>
<td>Agency</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Private Practice</td>
<td>54</td>
<td>38.0%</td>
</tr>
<tr>
<td>University Counseling Center</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Forensic Setting</td>
<td>2</td>
<td>1.4%</td>
</tr>
<tr>
<td>Veterans Administration</td>
<td>1</td>
<td>.7%</td>
</tr>
<tr>
<td>Other</td>
<td>5</td>
<td>3.5%</td>
</tr>
<tr>
<td>Role</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case Manager</td>
<td>9</td>
<td>6.3%</td>
</tr>
<tr>
<td>Administrator</td>
<td>4</td>
<td>2.8%</td>
</tr>
<tr>
<td>Therapist/Clinician</td>
<td>121</td>
<td>85.2%</td>
</tr>
<tr>
<td>Other</td>
<td>8</td>
<td>5.6%</td>
</tr>
<tr>
<td>Client type (unique)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children/adolescents only</td>
<td>6</td>
<td>4.2%</td>
</tr>
<tr>
<td>Adults only</td>
<td>35</td>
<td>24.55</td>
</tr>
</tbody>
</table>
Couples/Families only 2 1.4%

Client type (not unique)*

Children/adolescents 75 46.8%
Adults 126 89.4%
Couples/Families 59 41.8%

Degree

Master’s 96 67.1%
Doctorate 42 29.4%

Field

Social Work 43 32.8%
Clinical Psychology 34 26.0%
Counseling Psychology 21 16.0%
Mental Health Counseling 33 26.2%

*Can select more than one category

**Previous Knowledge Variables**

Previous knowledge variables in this sample included participant self-reports about levels of overall knowledge of Arabs, whether one had traveled to the Middle East, and questions around sources of knowledge of Arabs (television, internet, or books).

**Overall knowledge of Arabs.** To look at overall variability within the sample, this item asked participants about their overall knowledge of Arabs. Specifically, the item asked, “In general, how would you rate your level of overall knowledge of Arab culture, values, and practices?” Results indicated that a majority of this sample (66.7%) self-reported at least moderate knowledge of Arabs. Due to the small number of individuals in the extremely low and extremely high groups, the distribution was collapsed to represent three groups: Low (consisting of extremely low and somewhat low), Moderate, and High (consisting of extremely high and somewhat high). See Table 9.

**Table 9**

*Overall knowledge of Arabs*

<table>
<thead>
<tr>
<th>Overall knowledge of Arabs</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Low</td>
<td>12</td>
<td>8.7%</td>
</tr>
<tr>
<td>Somewhat Low</td>
<td>34</td>
<td>24.6%</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Travel to the Middle East. In addition, this sample reported having some exposure to the Middle East through previous travel, with 23.8% reporting some level of travel to the Middle East. Of these individuals, approximately half (53%) indicated that they were there for one month or less. This implies a more superficial visit to the region, rather than an immersive trip. Additionally, of the 34 individuals who answered yes to having traveled to the Middle East, all but one person responded to the follow-up question, with 53% reporting that they had spent one month or less in the Middle East.

Table 10
Travel to Middle East

<table>
<thead>
<tr>
<th>Travel to Middle East</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
<td>34</td>
<td>23.8%</td>
</tr>
<tr>
<td>No</td>
<td>104</td>
<td>72.7%</td>
</tr>
<tr>
<td>Time in Middle East</td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1 month</td>
<td>21</td>
<td>52.5%</td>
</tr>
<tr>
<td>1-6 months</td>
<td>10</td>
<td>25%</td>
</tr>
<tr>
<td>6-12 months</td>
<td>3</td>
<td>7.5%</td>
</tr>
<tr>
<td>&gt;12 months</td>
<td>6</td>
<td>15.0%</td>
</tr>
</tbody>
</table>

Sources of previous knowledge. Participants were asked about sources of knowledge of Arabs. Specifically, they were questioned about the level to which they gained information from television, internet, and books. In order to more effectively capture meaningful information in these variables, responses were dichotomized into low interaction groups (comprised of ‘not at all’, and ‘a little’) and substantial interaction groups (comprised of ‘somewhat’ and ‘a great
extent’). The number of individuals receiving substantial knowledge from television and the internet were fairly consistent (15.4% and 14.7%, respectively). However, this number increased in reference to participants receiving a substantial source of knowledge from books (39.2%). Books were utilized as a substantial source of information more so than internet and television.

Additionally, a variable was created to reflect multimedia users, i.e. those participants who used more than one modality (at a substantial level) to gain information on Arabs. Data revealed that 16.1% of the sample utilized more than one source substantially. However, almost half of the sample (49%) did not report using any source of information at a substantial level.

Table 11  
Sources of previous knowledge

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous Knowledge – TV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>42</td>
<td>29.4%</td>
</tr>
<tr>
<td>A little</td>
<td>79</td>
<td>55.2%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>17</td>
<td>11.9%</td>
</tr>
<tr>
<td>A great extent</td>
<td>5</td>
<td>3.5%</td>
</tr>
<tr>
<td>Previous Knowledge – TV – dichotomous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>121</td>
<td>84.6%</td>
</tr>
<tr>
<td>Substantial</td>
<td>22</td>
<td>15.4%</td>
</tr>
<tr>
<td>Previous Knowledge – Internet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>63</td>
<td>44.1%</td>
</tr>
<tr>
<td>A little</td>
<td>59</td>
<td>41.3%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>18</td>
<td>12.6%</td>
</tr>
<tr>
<td>A great extent</td>
<td>3</td>
<td>2.1%</td>
</tr>
<tr>
<td>Previous Knowledge – Internet – dichotomous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>122</td>
<td>85.3%</td>
</tr>
<tr>
<td>Substantial</td>
<td>21</td>
<td>14.7%</td>
</tr>
<tr>
<td>Previous Knowledge – Books</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not at all</td>
<td>31</td>
<td>21.7%</td>
</tr>
<tr>
<td>A little</td>
<td>56</td>
<td>39.2%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>47</td>
<td>32.9%</td>
</tr>
<tr>
<td>A great extent</td>
<td>9</td>
<td>6.3%</td>
</tr>
<tr>
<td>Previous Knowledge – Books – dichotomous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>87</td>
<td>60.8%</td>
</tr>
<tr>
<td>Substantial</td>
<td>56</td>
<td>39.2%</td>
</tr>
</tbody>
</table>
Subsequently, any inter-correlations between television, internet, and books were explored. There was a correlation between television and internet serving as sources of knowledge about Arabs, $r(143) = .37$, $p<.01$. There was no correlation between television and books as sources of knowledge [$r(143) = .06$, $p=.51$], or between internet and books as sources of knowledge [$r(143)= .03$, $p=.71$].

**Social Closeness Variables**

Social closeness variables were comprised of items asking participants about the extent to which they know Arabs in their immediate family, extended family, professional community, neighborhood/community, broader professional community, or as clients.

The six levels of social closeness were hypothesized to follow the cumulative tenets of Guttman scaling (DeVellis, 2012; Guttman, 1944, 1957). If a participant responded *yes* to a question reflecting a greater degree of social closeness, such as having an Arab in his or her immediate family, he or she should have responded in the same fashion to each of the subsequent questions, each reflecting further social closeness. The items inquiring about one’s professional colleagues and one’s broader professional network were correlated ($r=.53$, $p<.01$). As a result, only the former question was included in analyses. Additionally, the client group was removed, as this was hypothesized to represent a different type of relationship than those in other groups. Specifically, the provider-client relationship is one in which hierarchies, prescribed roles, and boundaries may exist that are not found in the other groups. Finally, social closeness items inquiring about one’s immediate family and extended family including Arabs were also highly correlated ($r=.72$, $p<.01$). This distinction between the two was not made clear, and as a result, both questions remained in the analyses in order to maximize interpretation of data.
### Table 12

*Social closeness to Arabs*

<table>
<thead>
<tr>
<th>Social closeness – Immediate Family</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>133</td>
<td>93.0%</td>
</tr>
<tr>
<td>A little</td>
<td>3</td>
<td>2.1%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>3</td>
<td>2.1%</td>
</tr>
<tr>
<td>A great extent</td>
<td>4</td>
<td>2.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social closeness – Extended Family</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>124</td>
<td>86.7%</td>
</tr>
<tr>
<td>A little</td>
<td>10</td>
<td>7.0%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>4</td>
<td>2.8%</td>
</tr>
<tr>
<td>A great extent</td>
<td>5</td>
<td>3.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social closeness – Professional</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>61</td>
<td>42.7%</td>
</tr>
<tr>
<td>A little</td>
<td>43</td>
<td>30.1%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>37</td>
<td>25.9%</td>
</tr>
<tr>
<td>A great extent</td>
<td>2</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social closeness – Community</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>17</td>
<td>11.9%</td>
</tr>
<tr>
<td>A little</td>
<td>52</td>
<td>36.4%</td>
</tr>
<tr>
<td>Somewhat</td>
<td>59</td>
<td>41.3%</td>
</tr>
<tr>
<td>A great extent</td>
<td>15</td>
<td>10.5%</td>
</tr>
</tbody>
</table>

In order to test the hypothesis that participants responding *yes* to close social closeness should respond accordingly to increasingly broad instances of social closeness, these variables were dichotomized, with one option reflecting a greater degree of social closeness. A greater degree of social closeness was indicated when respondents chose the response of either *somewhat* or *a great extent*. An indicator was created, in which the number of times participants responded *yes* to having a great degree of social closeness was summed up. Those participants with higher scores on the social closeness level variable were deemed to have a higher degree of overall social closeness to Arabs. This final social closeness level score is equal to the highest (i.e. most specific) item with which the participant agreed. From this value, if the scale follows the tenets of Guttman scaling, one can hypothetically predict all the other items the participant
should have agreed with.

Results indicated that no participant had a score of four (i.e. no participants indicated a high degree of social closeness to each of the four levels). Approximately 26% of participants reported two or three levels of social closeness. No participants indicated four levels of social closeness (the maximum). However, 37.8% of the sample indicated no level of social closeness toward Arabs at all. Due to concerns as to the small number of individuals in the three levels of social closeness group, this group was combined with ‘two’ to create ‘two or more’.

Table 13
Levels of social closeness

<table>
<thead>
<tr>
<th>Level of social closeness</th>
<th>Frequency</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zero</td>
<td>54</td>
<td>37.8%</td>
</tr>
<tr>
<td>One</td>
<td>51</td>
<td>35.7%</td>
</tr>
<tr>
<td>Two</td>
<td>36</td>
<td>25.2%</td>
</tr>
<tr>
<td>Three</td>
<td>2</td>
<td>1.4%</td>
</tr>
</tbody>
</table>

It appears that these data do not follow the tenets of Guttman scaling. As categories expand (become more broad, i.e. lower degrees of social closeness), the denominator (i.e. number of people indicating a high degree of social closeness) also expands. As a result, in-group affiliations are likely to be watered down.

Table 14
Social closeness - dichotomous

<table>
<thead>
<tr>
<th>Social closeness – immediate family – dichotomous</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low interaction</td>
<td>136</td>
<td>95.1%</td>
</tr>
<tr>
<td>Substantial interaction</td>
<td>7</td>
<td>4.9%</td>
</tr>
<tr>
<td>Social closeness – extended family – dichotomous</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low interaction</td>
<td>134</td>
<td>93.7%</td>
</tr>
</tbody>
</table>
Substantial interaction 9 6.3%
Social closeness – professional – dichotomous
Low interaction 104 72.7%
Substantial interaction 39 27.3%
Social closeness – community – dichotomous
Low interaction 69 48.3%
Substantial interaction 74 51.7%

Item Distributions – Cultural Competence Scale

Table 15 shows frequencies for all the items in the scale. Response options consisted of a five-point Likert scale, with options including strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, and strongly disagree. Except for those reverse coded items (which will be indicated as such), higher cultural competence is reflected by higher selections among strongly agree and somewhat agree. For those reverse coded items, higher cultural competence is reflected by higher selections among strongly disagree and somewhat disagree options. There were no options to reflect an answer of “I don’t know”, or “I prefer not to answer.”

Table 15
Item frequencies – cultural competence scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have had little to no personal or social interactions with Arabs/Arab Americans.*</td>
<td>15%</td>
<td>18%</td>
<td>6%</td>
<td>34%</td>
<td>27%</td>
</tr>
<tr>
<td>If I had a new client who was Arab/Arab American, I would feel more comfortable referring him or her elsewhere than working with him or her myself.*</td>
<td>3%</td>
<td>1%</td>
<td>13%</td>
<td>28%</td>
<td>54%</td>
</tr>
<tr>
<td>My own racial/ethnic background may play a role in the</td>
<td>14%</td>
<td>34%</td>
<td>11%</td>
<td>21%</td>
<td>20%</td>
</tr>
</tbody>
</table>
therapeutic encounter with an Arab/Arab American client. Many people may hold negative attitudes, stereotypes, preconceived notions, and biases toward Arabs/Arab Americans. An Arab/Arab American client may be more amenable to receiving mental health services from indigenous healers or religious figures. I respect the religious beliefs and practices that clients may have, even if I feel that they are interfering with the therapeutic relationship. I believe that Arabs/Arab Americans can be simultaneously privileged and oppressed. It is most effective for an Arab/Arab American client to receive treatment from an Arab/Arab American provider.* I am aware of the historical oppression Arabs/Arab Americans may have experienced. I would encourage my Arab/Arab American clients to differentiate their individual identities from that of their families.* I am cognizant of the role physical distance may play with an Arab/Arab American client. I do not think it is appropriate for an Arab/Arab American client to offer me small gifts. I would be able to tell if an individual was Arab/Arab American from his or her name. I would be able to tell if an individual was Arab/Arab American from his or her physical appearance. All Arabs are Muslim.* I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab/Arab American client. Family should be integrated in many levels of treatment with Arabs/Arab Americans. When working with Arabs/Arab Americans, I would tend to focus on building a working relationship rather than solving a concrete problem.* I would find it challenging to work with an Arab/Arab American female dressed in clothing where I could not see her facial features or read her body language.* I would be comfortable engaging the services of a third party certified translator to communicate more effectively with an Arab/Arab American client.

*reverse coded items
Readiness for Change

And finally, participants were questioned about their readiness to address cultural competence in general (not necessarily specific to Arabs). A scale to measure readiness for change was developed. Readiness for change was conceptualized as an independent variable consisting of one construct made up of four stages: pre-contemplation, contemplation, preparation/action, and maintenance.

Item distributions – readiness scale. Table 16 shows frequencies for all items in the readiness scale. Response options also consisted of a five-point Likert scale, with options including strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, and strongly disagree. Higher levels of readiness for change are reflected by a greater number of selections among strongly agree and somewhat agree. There were no items that were reverse coded. There were no options to reflect an answer of “I don’t know”, or “I prefer not to answer.”

Table 16
Item frequencies – readiness scale

<table>
<thead>
<tr>
<th>Precontemplation: Once I have learned something about a racial/ethnic group, I use that knowledge when interacting with any member of that group.</th>
<th>Strongly agree</th>
<th>Somewhat agree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>17%</td>
<td>40%</td>
<td>17%</td>
<td>18%</td>
<td>8%</td>
</tr>
<tr>
<td>Precontemplation: As a mental health provider, I try to engage in color blind behaviors.</td>
<td>25%</td>
<td>23%</td>
<td>14%</td>
<td>22%</td>
<td>14%</td>
</tr>
<tr>
<td>Precontemplation: I am aware of the role that privilege and oppression have played in the development of my own sense of self.</td>
<td>47%</td>
<td>44%</td>
<td>4%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>
**Precontemplation:** I am aware of the impact privilege and oppression can potentially have on one’s racial/ethnic identity.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>44% 43% 4% 4% 1%</td>
</tr>
</tbody>
</table>

**Contemplation:** I am unsure of how to use any knowledge I have of the historical legacy of racism and oppression in the therapeutic encounter.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contemplation</td>
<td>1% 21% 9% 42% 26%</td>
</tr>
</tbody>
</table>

**Contemplation:** I am unsure of what to do to begin to address the effects of privilege and oppression.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contemplation</td>
<td>5% 26% 15% 32% 19%</td>
</tr>
</tbody>
</table>

**Contemplation:** I am unsure how to address the role that my own racial/ethnic background may play with a client (regardless of whether it is the same background as the client, or different).

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contemplation</td>
<td>2% 18% 11% 41% 27%</td>
</tr>
</tbody>
</table>

**Contemplation:** I am aware of any biases that I hold about minority groups.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contemplation</td>
<td>22% 56% 8% 10% 4%</td>
</tr>
</tbody>
</table>

**Preparation/Action:** I am ready to meet with members of minority groups in order to learn more about their culture.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation/Action</td>
<td>28% 42% 14% 14% 1%</td>
</tr>
</tbody>
</table>

**Preparation/Action:** I am ready to explore and clarify the origins of any biases and/or stereotypes I may hold about individuals from minority groups.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation/Action</td>
<td>56% 37% 5% 0% .7%</td>
</tr>
</tbody>
</table>

**Preparation/Action:** I will seek out continuing education seminars, workshops, and trainings to further refine awareness of the experiences of minority groups.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation/Action</td>
<td>38% 36% 13% 8% 4%</td>
</tr>
</tbody>
</table>

**Preparation/Action:** I will try to have conversations with peers about the importance of cultural competence.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation/Action</td>
<td>55% 34% 10% .7% 0%</td>
</tr>
</tbody>
</table>

**Maintenance:** I know that I will never be able to know everything about a particular minority group.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>79% 14% 1% 2% 2%</td>
</tr>
</tbody>
</table>

**Maintenance:** I attend trainings, seminars, and continuing education workshops in order to maintain my familiarity with minority groups.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>26% 46% 11% 15% 1%</td>
</tr>
</tbody>
</table>

**Maintenance:** I interact with members of minority groups in community and neighborhood settings.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>60% 34% 4% .7% .7%</td>
</tr>
</tbody>
</table>

**Maintenance:** I will endeavor to continue to approach new experiences with humility.

<table>
<thead>
<tr>
<th>Perception</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintenance</td>
<td>73% 22% 2% .7% 0%</td>
</tr>
</tbody>
</table>

**Factor Analyses**

In order to identify whether items in a hypothesized scale measured an underlying latent construct, factor analyses were performed for both the dependent variable measuring level of cultural competence, and the predictor variable measuring readiness for change. This was done to determine the underlying structure of the measures, and the manner in which they could be used in subsequent analyses, if at all. In addition, factor analyses provide evidence of construct
and measurement validity. The final measure(s) should ideally control randomized and systematic error to a greater extent than had the measure been utilized as administered.

There are limitations to factor analyses. Factor analyses are sensitive to sample size. The sample size in this study (N=143), while adequate, will likely limit the effectiveness of the factor analysis. In general, factor analyses require at least 300 cases (Tabachnik & Fidell, 2001). Additionally, interpreting the meaning of factors is a subjective task, and can be construed differently across circumstances. And finally, no causal inferences can be made from factor analyses.

**Measure of cultural competence.** Cultural competence was hypothesized to consist of three subscales: knowledge, awareness, and skills. Results include the presentation of progressive factor analyses, each representing a different number of hypothesized factors in the measure. Results also include the reporting of communalities, factor loadings, and factor names intended to capture the essence of the items loading on each factor. Following the presentation of each factor analysis, results of reliability analyses will be discussed, and subsequent decisions explicated. Finally, a composite scale will be presented, based upon the most parsimonious and interpretable solution.

**Factor analysis one.** Initially, a quasi-confirmatory principal axis factoring (PAF) factor analysis was performed using a direct Oblimin rotation, resulting in oblique (correlated) factors. It was determined that factors should be artificially limited due to the fact that this scale was created with three subscales in mind. Subscales were hypothesized to be correlated due to the fact that all three subscales are measuring theoretical aspects of cultural competence that have not been consistently empirically validated. Additionally, direct Oblimin rotations will also reveal orthogonal solutions, if present.
A quasi-confirmatory factor analysis answers three questions: 1) how the factors underlie participant responses; 2) whether items load on their intended factors; and 3) the direction and magnitude of the factor correlation. To answer questions 1 & 2, factor loadings in the pattern matrix and structure matrix were examined, with a .4 threshold. Given the novel nature of the topic, as well as the fact that it was a first attempt to develop a measure, efforts were made to be as inclusive as possible with regards to item inclusion. To answer question 3, factor correlations were examined to determine the magnitude and direction of correlations, if present. If factors were determined not to be correlated, this would be indicative of an orthogonal solution. With oblique rotations, the total amount of variance explained by each of the factors cannot be obtained by adding the eigenvalues. This is due to the fact that these factors overlap and share some of the total variance explained in the items.

Prior to conducting the factor analysis, correlations between each item were examined. Correlations indicate whether the items are performing as expected, in that items that overlapped conceptually were correlated. Two items were highly correlated, indicating that they were likely providing redundant information. These were the following items: *I would be able to tell if an individual was Arab/Arab American from his or her name,* and *I would be able to tell if an individual was Arab/Arab American from his or her physical appearance.* The inter-item correlation was .65 (p<.01). Upon further inspection of these items, it was determined that nuances in both items may lead to a perception of any response being indicative of high or low cultural competence. As a result, both items were removed from subsequent analyses.

**Number of factors.** Three quasi-confirmatory factor analyses were run in order to determine which provided the most interpretable and parsimonious solution. These included factor analyses with factors limited to two, three, and four. Although the number of factors was
hypothesized to be three, additional factor analyses were run in order to determine whether the data may better fit fewer (two) or more (four) factors. Given that this is an initial measure development, running additional factor analyses was determined to be more inclusive and thorough.

All solutions revealed that the factors were not highly correlated, indicating that an orthogonal (uncorrelated) solution was most likely present. In the three-factor solution (the most interpretable and parsimonious solution), the inter-correlations were .136, -.073, and -.077.

**Factor analysis two.** Due the presence of low correlations between factors in the above analyses, the factor analysis was re-run using a Varimax (orthogonal) rotation, in which factors are hypothesized to be uncorrelated. The number of factors was limited to three, reflecting the most interpretable solution produced with the initial factor analysis.

Using data obtained from the cultural competence measure (dependent variable), a principal components factor analysis (PCFA) with Varimax rotation was executed using SPSS. This rotation produces a solution containing orthogonal (uncorrelated) factors. The value of KMO measure, representing the homogeneity of the variables, was 0.57.

Because this was not an exploratory factor analysis, a scree plot could not be used to determine number of factors. However, it did provide visual confirmation. A scree plot is a graphical representation of the magnitude of each Eigenvalue against the factor number. Eigenvalues are intended to describe the importance of a given factor, and represent the total amount of variance in the set of items explained by a given factor. Additionally, the total amount of variance in the measure explained by the three factors (individually and collectively) can be explored with orthogonal solutions. Figure 4 reveals that a three-factor solution may be most representative of the underlying structure of the data.
Additionally, communalities were considered. Communalities are representative of the strength of the relationship between a single item and all the factors. As summarized in Table 17, communalities suggest that the set of three factors (i.e. three-factor model) explain at least 30% of the variance in 10 of the 18 items.

*Factor loadings.* Using a factor loading threshold of .4, four items were removed from the final measure. This threshold was justified due to the fact that neither the model of cultural competence providing the basis for this measure, nor the actual measure, had been previously utilized. Additionally, because this scale was still being refined, this more inclusive threshold was justified. Factor loadings describe the strength of the relationship (correlation) between each item and a particular factor. Additionally, one item was removed due to equal loadings on more than one factor. The item, *all Arabs are Muslim*, loaded equally on Factor 2 (.43) and Factor 3 (.42) and was therefore removed. Additionally, the item, *I do not think it is appropriate for an Arab/Arab American client to offer me small gifts*, was removed due to incongruous wording that
reveals no clear or consistent culturally competent response. This is potentially due to the use of the word *offer* instead of *accept*, the undefined use of the word *small*, and the professional standards that exist prohibiting acceptance of gifts. See table 17 for an explanation of the specific items that were removed, the domains from which they originated, highest factor loading, and communality.

Table 17  
*Items eliminated in scale (factor loadings < .4)*

<table>
<thead>
<tr>
<th>Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>My own racial/ethnic background may play a role in the therapeutic encounter with an Arab/Arab American client</td>
<td>-.37</td>
<td>.26</td>
</tr>
<tr>
<td>Awareness</td>
<td>Many people may hold negative attitudes, stereotypes, preconceived notions, and biases towards Arabs/Arab Americans</td>
<td>.32</td>
<td>.17</td>
</tr>
<tr>
<td>Knowledge</td>
<td>I would encourage my Arab/Arab American clients to differentiate their individual identities from that of their families (<em>reverse coded</em>)</td>
<td>.38</td>
<td>.24</td>
</tr>
<tr>
<td>Skills</td>
<td>When working with Arabs/Arab Americans, I would tend to focus on building a working relationship than solving a concrete problem (<em>reverse coded</em>)</td>
<td>-.31</td>
<td>.15</td>
</tr>
<tr>
<td>Knowledge</td>
<td>All Arabs are Muslim (<em>reverse coded</em>)</td>
<td>.43 and .42</td>
<td>.37</td>
</tr>
<tr>
<td>Knowledge</td>
<td>I do not think it is appropriate for an Arab/Arab American client to offer me small gifts.</td>
<td>-.44</td>
<td>.23</td>
</tr>
</tbody>
</table>

Using this factor loading threshold of 0.4, Factor One consisted of five items and was named Skills; explaining 13.1% of the variance. Factor Two consisted of four items and was named Awareness, explaining 11.5% of the variance. Factor Three consisted of three items and was named Knowledge and resources, explaining 8.3% of the variance. According to this three-factor solution, cultural competence toward Arabs consists of three dimensions, and explains
30.9% of the variance in the measure. Conceptually speaking, it appears, however, that Factor Three does not hang together effectively. See Table 18 for a summary of the items remaining in the scale, the domain from which they originated, factor loadings, and communalities.

Table 18
*Items remaining in scale – factor loadings > .4*

<table>
<thead>
<tr>
<th>Current Domain</th>
<th>Initial Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills (1)</td>
<td>Knowledge</td>
<td>I am cognizant of the role physical distance may play with an Arab/Arab American client.</td>
<td>.63</td>
<td>.44</td>
</tr>
<tr>
<td>Skills (1)</td>
<td>Skills</td>
<td>I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab/Arab American client.</td>
<td>.52</td>
<td>.31</td>
</tr>
<tr>
<td>Skills (1)</td>
<td>Skills</td>
<td>Family should be integrated in many levels of treatment with Arabs/Arab Americans.</td>
<td>.73</td>
<td>.58</td>
</tr>
<tr>
<td>Skills (1)</td>
<td>Skills</td>
<td>I would be comfortable engaging the services of a third party certified translator to communicate more effectively with an Arab/Arab American client.</td>
<td>.50</td>
<td>.28</td>
</tr>
<tr>
<td>Skills (1)</td>
<td>Awareness</td>
<td>I respect the religious beliefs and practices that clients may have, even if I feel that they are interfering with the therapeutic relationship.</td>
<td>.41</td>
<td>.25</td>
</tr>
<tr>
<td>Awareness (2)</td>
<td>Knowledge</td>
<td>I have had little to no personal or social interactions with Arabs/Arab Americans <em>(reverse coded)</em></td>
<td>.55</td>
<td>.32</td>
</tr>
<tr>
<td>Awareness (2)</td>
<td>Awareness</td>
<td>If I had a new client who was Arab/Arab American, I would feel more comfortable referring him or her elsewhere rather than working with him or her myself. <em>(reverse coded)</em></td>
<td>.55</td>
<td>.36</td>
</tr>
<tr>
<td>Awareness (2)</td>
<td>Awareness</td>
<td>I believe that Arabs/Arab Americans can be simultaneously privileged and oppressed.</td>
<td>.42</td>
<td>.22</td>
</tr>
<tr>
<td>Awareness (2)</td>
<td>Awareness</td>
<td>I am aware of the historical oppression Arabs/Arab Americans have experienced.</td>
<td>.65</td>
<td>.53</td>
</tr>
<tr>
<td>Knowledge and</td>
<td>Knowledge</td>
<td>An Arab/Arab American client may be more amenable to receiving mental</td>
<td>-.60</td>
<td>.39</td>
</tr>
<tr>
<td>Resources (3)</td>
<td>health services from indigenous healers or religious figures.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------</td>
<td>---------------------------------------------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge and Resources (3)</td>
<td>It is most effective for an Arab/Arab American client to receive treatment from an Arab/Arab American provider. <em>(reverse coded)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge and Resources (3)</td>
<td>I would find it challenging to work with an Arab/Arab American female dressed in clothing where I could not see her facial features or read her body language. <em>(reverse coded)</em></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.63  .50</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>.44  .31</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The amalgamation of statistical evidence for this measure was average to below average (KMO measure, total variance explained, communalities, factor loadings). Subsequent reliability analyses and item analyses were useful in refining the final structure of this measure.

**Reliability analyses.** After identifying the three uncorrelated factors underlying responses to these 12 items, an item analysis was conducted to assess the reliability of each subscale, as well as the overall measure. It is important to note that a high alpha does not always denote unidimensionality. This is due to the fact that, because alpha is a measure of common variance across items, it can be high when an item shares variance with at least some items, but not necessarily all. Conversely, a low alpha is not necessarily indicative of a lack of unidimensionality. If a scale is measuring multiple factors, alpha may be low (Gardner, 1995).

Regarding Factor One, Skills, Cronbach’s alpha was .56. Cronbach’s alpha for Factor Two, awareness, was .51. Factor Three, Knowledge and resources, had an alpha of -.10. Alpha for the overall scale was .54. What these low alphas mean (particularly the negative alpha) is that there exists only weak to moderate (and sometimes negative) correlations between variables. More important than the sign is the small magnitude of the relationships between items. Due to the inconsistent, incongruous, and weak findings across both the factor analysis and the
reliability analyses, this three factor structure was deemed an inaccurate representation of any underlying structure.

**Factor analysis three.** Therefore, an additional factor analysis was conducted, with factors limited to two.

**Factor loadings.** Using a factor loading threshold of .4, six items were removed from the final measure. However, the item, *I do not think it is appropriate for an Arab/Arab American client to offer me small gifts*, loaded negatively on Factor One, and was also removed for the same reasons as described above. Factor One consisted of six items, explaining 12.9% of the variance, and Factor Two consisted of five items, explaining 12.2% of the variance. See table 19 for an explanation of the specific items that were removed, the domains from which they originated, highest factor loading, and communality.

**Table 19**  
**Items eliminated in scale (Factor Loadings < .4)**

<table>
<thead>
<tr>
<th>Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>My own racial/ethnic background may play a role in the therapeutic encounter with an Arab/Arab American client</td>
<td>-.22</td>
<td>.06</td>
</tr>
<tr>
<td>Awareness</td>
<td>Many people may hold negative attitudes, stereotypes, preconceived notions, and biases towards Arabs/Arab Americans</td>
<td>.29</td>
<td>.17</td>
</tr>
<tr>
<td>Awareness</td>
<td>I believe that Arabs/Arab Americans can be simultaneously privileged and oppressed.</td>
<td>.36</td>
<td>.05</td>
</tr>
<tr>
<td>Knowledge</td>
<td>I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab/Arab American</td>
<td>.23</td>
<td>.06</td>
</tr>
<tr>
<td>Skills</td>
<td>When working with Arabs/Arab Americans, I would tend to focus on building a working relationship than solving a concrete problem <em>(reverse coded)</em></td>
<td>-.21</td>
<td>.05</td>
</tr>
<tr>
<td>Skills</td>
<td>I would find it challenging to work</td>
<td>.29</td>
<td>.14</td>
</tr>
</tbody>
</table>
with an Arab/Arab American female dressed in clothing where I could not see her facial features or read her body language. (*reverse coded*).

I do not think it is appropriate for an Arab/Arab American client to offer me small gifts. 

Using this factor loading threshold of 0.4, 11 items were retained. However, there is little conceptual differentiation between the two factors, and it was deemed difficult to name each factor as a result. See Table 20 for a summary of the items remaining in the scale, the domain from which they originated, factor loadings, and communalities.

Table 20
*Items remaining in scale (factor loadings >.4)*

<table>
<thead>
<tr>
<th>Current Domain (factor #)</th>
<th>Initial Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Factor 1 Knowledge</td>
<td>Knowledge</td>
<td>I have had little to no personal or social interactions with Arabs/Arab Americans (<em>reverse coded</em>)</td>
<td>.56</td>
<td>.31</td>
</tr>
<tr>
<td>Factor 1 Awareness</td>
<td>Awareness</td>
<td>I respect the religious beliefs and practices that clients may have, even if I feel that they are interfering with the therapeutic relationship.</td>
<td>.44</td>
<td>.21</td>
</tr>
<tr>
<td>Factor 1 Knowledge</td>
<td>Knowledge</td>
<td>I am cognizant of the role physical distance may play with an Arab/Arab American client.</td>
<td>.58</td>
<td>.34</td>
</tr>
<tr>
<td>Factor 1 Skills</td>
<td>Skills</td>
<td>I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab/Arab American client.</td>
<td>.49</td>
<td>.30</td>
</tr>
<tr>
<td>Factor 1 Skills</td>
<td>Skills</td>
<td>Family should be integrated in many levels of treatment with Arabs/Arab Americans.</td>
<td>.71</td>
<td>.52</td>
</tr>
<tr>
<td>Factor 1 Skills</td>
<td>Skills</td>
<td>I would be comfortable engaging the services of a third party certified translator to communicate more effectively with an Arab/Arab American client.</td>
<td>.52</td>
<td>.28</td>
</tr>
<tr>
<td>Factor 2 Awareness</td>
<td>Awareness</td>
<td>If I had a new client who was Arab/Arab</td>
<td>.55</td>
<td>.35</td>
</tr>
</tbody>
</table>
American, I would feel more comfortable referring him or her elsewhere rather than working with him or her myself. (*reverse coded*)

<table>
<thead>
<tr>
<th>Factor 2</th>
<th>Awareness</th>
<th>Item</th>
<th>Cronbach's Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>I am aware of the historical oppression Arabs/Arab Americans have experienced.</td>
<td>.64</td>
<td>.50</td>
</tr>
<tr>
<td></td>
<td>It is most effective for an Arab/Arab American client to receive treatment from an Arab/Arab American provider. (<em>reverse coded</em>)</td>
<td>.44</td>
<td>.30</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Knowledge</td>
<td>All Arabs are Muslim.</td>
<td>.56</td>
</tr>
<tr>
<td>Factor 2</td>
<td>Knowledge</td>
<td>I would encourage my Arab/Arab American clients to differentiate their individual identities from that of their families (<em>reverse coded</em>)</td>
<td>.41</td>
</tr>
</tbody>
</table>

*Reliability analyses.* After identifying the two uncorrelated factors underlying responses to these 11 items, an item analysis was conducted to assess the reliability of items for each subscale, as well as the overall measure of cultural competence.

Regarding the unnamed Factor One, alpha was .47. Factor Two also revealed an alpha of .47. Alpha for the overall scale was revealed to be .56. What these low alphas mean is that there exists only weak to moderate correlations between variables. Due to the inconsistent, incongruous, and weak statistical and conceptual findings across both the factor analysis and the reliability analyses, this two factor structure was deemed an inaccurate representation of any underlying structure.

As a result of the large number of changes resulting from different factor analyses, as well as the weak statistical evidence for an underlying multi-subscale measure, it became clear that individual subscales were potentially inconsistent and inaccurate. This was due to the weak inter-correlations between items, as well as a function of small sample size. Items did not seem to be behaving as expected, which was potentially a result of ambiguous wording, pro-social bias, and/or ignorance (in addition to other unknown factors).
As a result, a unidimensional structure was considered. Three items were not included in the consideration (as a result of previous analyses explicated above): *I would be able to tell if an individual was Arab/Arab American from his or her appearance; I would be able to tell if an individual was Arab/Arab American from his or her name; and I do not think it is appropriate for an Arab/Arab American client to offer me small gifts.*

**Factor analysis four.** Using data obtained from the cultural competence measure (dependent variable), a principal components factor analysis (PCFA) was executed using SPSS. No rotation was selected due to factors being limited to one (to reflect a unidimensional structure).

**Factor loadings.** Using a factor loading threshold of .3, five items were removed from the final measure. The one factor explained 14.9% of the variance. See table 21 for an explanation of the specific items that were removed, the domains from which they originated, highest factor loading, and communality.

<table>
<thead>
<tr>
<th>Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness</td>
<td>My own racial/ethnic background may play a role in the therapeutic encounter with an Arab/Arab American client</td>
<td>-.11</td>
<td>.01</td>
</tr>
<tr>
<td>Awareness</td>
<td>If I had a new client who was Arab/Arab American, I would feel more comfortable referring him or her elsewhere rather than working with him or her myself. <em>(reverse coded)</em></td>
<td>.19</td>
<td>.04</td>
</tr>
<tr>
<td>Awareness</td>
<td>It is most effective for an Arab/Arab American client to receive treatment from an Arab/Arab American provider. <em>(reverse coded)</em></td>
<td>.08</td>
<td>.01</td>
</tr>
<tr>
<td>Knowledge</td>
<td>I am comfortable seeking</td>
<td>.09</td>
<td>.01</td>
</tr>
</tbody>
</table>
consultation from a traditional or indigenous faith healer to support my work with an Arab/Arab American. I would tend to focus on building a working relationship than solving a concrete problem (reverse coded).

Using this factor loading threshold of 0.3, 12 items were retained. This lower factor loading is justified due to a goal of inclusivity: previous analyses revealed that a multi-subscale structure was likely not valid. However, viewing cultural competence as a unidimensional concept appears to be most reflective of the data. See Table 22 for a summary of items remaining in the scale, the domain from which they originated, factor loadings, and communalities. All items are trending in the right direction, and no items are negatively loading on the factor.

Table 22
*Items remaining in final scale (factor loadings >.3)*

<table>
<thead>
<tr>
<th>Initial Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>I have had little to no personal or social interactions with Arabs/Arab Americans (reverse coded)</td>
<td>.37</td>
<td>.14</td>
</tr>
<tr>
<td>Awareness</td>
<td>I respect the religious beliefs and practices that clients may have, even if I feel that they are interfering with the therapeutic relationship.</td>
<td>.42</td>
<td>.18</td>
</tr>
<tr>
<td>Awareness</td>
<td>Many people may hold negative attitudes, stereotypes, preconceived notions, and biases toward Arabs/Arab Americans.</td>
<td>.41</td>
<td>.17</td>
</tr>
<tr>
<td>Knowledge</td>
<td>I am cognizant of the role physical distance may play with an Arab/Arab American client.</td>
<td>.45</td>
<td>.20</td>
</tr>
<tr>
<td>Skills</td>
<td>I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab/Arab American client.</td>
<td>.52</td>
<td>.27</td>
</tr>
<tr>
<td>Skills</td>
<td>Family should be integrated in many levels of treatment with Arabs/Arab Americans.</td>
<td>.41</td>
<td>.17</td>
</tr>
<tr>
<td>Skills</td>
<td>I would be comfortable engaging the services of a third party certified translator to communicate more effectively with an Arab/Arab American client.</td>
<td>.41</td>
<td>.17</td>
</tr>
</tbody>
</table>
After identifying the unidimensional structure underlying these 12 items, an item analysis was conducted to assess the reliability of items for this overall measure of cultural competence. Additionally, these factor analyses were re-run utilizing imputation of the mean for any missing values, and results did not differ from those reported here.

Reliability analyses. Alpha for the overall scale was revealed to be .63. Overall, given the weak statistical and conceptual evidence toward a multi-tiered conceptualization of cultural competence, this unidimensional structure appeared to be the most representative of these data. The statistical evidence is moderately strong, with 10 of the 12 items reflecting factor loadings above .4, and with adequate evidence of reliability. Conceptually, the evidence for this unidimensional structure is strong, given that these items are all specific to Arabs. It may be that the nuances within cultural competence were difficult to conceptualize when dealing with a population specific scale. This unidimensional scale consisting of 12 items was titled Cultural Competence – Arabs, or CC-A. Subsequent analyses utilized mean scores on this scale as the dependent variable.

Measure of readiness for change. Readiness for change toward cultural competence was hypothesized to consist of four stages: precontemplation, contemplation, preparation/action,
and maintenance. Results include a presentation of a progression of factor analyses, factor loadings, and factor names intended to capture the essence of the items loading on each factor. Following the presentation of factor analysis results, results of reliability analyses will be discussed. This will be followed by a final decision around scale inclusion.

**Factor analysis one.** Initially, a quasi-confirmatory principal axis factoring (PAF) factor analysis was performed using a direct Oblimin rotation, resulting in oblique (correlated) factors. It was determined that factors should be artificially limited due to the fact that this scale was created with four subscales in mind. Subscales were hypothesized to be correlated due to the fact that all four subscales are measuring some aspect of the readiness for change journey, within which one can cycle back and forth between stages. This is not a linear stage model of change.

Prior to conducting the factor analysis, correlations between each item were examined. There were two pairs of items with high correlations. The first pair consisted of the following items with a correlation of .67 (p<.01): *I attend trainings, seminars, and continuing education workshops to maintain my familiarity with minority groups* (maintenance), and *I will seek out continuing education seminars, workshops, and trainings to further refine awareness of the experiences of minority groups* (preparation/action). Given that the latter item can also be construed as a type of maintenance (through the use of the phrase *further refine*), it was determined that only this item would be used in subsequent analyses. Additionally, the following pair of items (both from pre-contemplation) was revealed to be highly correlated at .53 (p<.01): *I am aware of the role that privilege and oppression have played in the development of my own sense of self; and I am aware of the impact privilege and oppression can potentially have on one’s racial/ethnic identity.* It was determined that these two items were essentially
asking about the same concept, with the latter item representing a broader view of the construct. As a result, the former was removed.

**Number of factors.** Because this was not an exploratory factor analysis, three quasi-confirmatory factor analyses were run in order to determine which provided the most interpretable and parsimonious solution. These included factor analyses with factors limited to two, three, and four. All three solutions indicated that the factors were not correlated with one another, indicating that an orthogonal solution was warranted. Due the presence of low correlations between factors, the factor analysis was subsequently re-run using a Varimax (orthogonal) rotation. Additionally, factors were not limited a priori, as none of the previous factor analyses appeared to represent a better solution than another.

**Factor analysis two.** Using data obtained from a readiness for change measure, a principal components factor analysis (PCFA) with Varimax rotation was executed using SPSS. This rotation produces a solution containing orthogonal (uncorrelated) factors. The value of KMO measure, intended to represent the homogeneity of the variables, was 0.78. Results revealed a five factor solution, with Factor One, Two, Three, Four, and Five accounting for 27.1%, 10.7%, 10.1%, 8.6%, and 7.9% of the variance, respectively.

The following three criteria were considered for the retention of factors: 1) an Eigenvalue greater than one; 2) Scree plot (see Figure 5); and 3) total variance explained. The scree plot revealed that a unidimensional solution was most representative of the underlying structure of the data. According to these criteria, in combination with a conceptual interpretation of results, only one factor was retained, revealing a unidimensional measure. This is most likely due to the fluid and subjective nature of individual change. The stages of change are nuanced and specific to each individual, rendering them relatively difficult to conceptualize and measure objectively.
This factor explained 27.1% of the variance found in the correlation matrix. Additionally, six out of 14 items had communalities above .4.

![Scree Plot](image)

Figure 5: Scree Plot: Readiness for change

**Factor loadings.** Looking specifically at the five factor model revealed through the EFA, Factor One, Two, Three, Four, and Five revealed four, four, two, two, and two items with factor loadings above .4, respectively.

**Reliability analyses.** An item analysis was conducted to assess the reliability (i.e. consistency) of items for the measure. The alpha was .11. Due to a lack of statistical and conceptual evidence supporting the scale dimensionality of the readiness for change measure, it was determined that this measure, as is, could not be used in subsequent analyses, as it was unclear as to what concept, if any, this scale was measuring. This uncertainty would limit the interpretability of results.

However, upon re-assessing the wording of specific items, as well as specific item frequencies, it became apparent that the wording of certain items, particularly in the pre-contemplation and contemplation stages, (first two stages) were problematic and ambiguous. The majority of these items could be construed as belonging to a further stage of readiness. As a
result, it was determined that only those eight items from the latter two stages of readiness (preparation/action and maintenance) would be included in a subsequent factor analyses.

_Eight item readiness factor analysis._ Using data obtained from a readiness measure, a principal components factor analysis (PCFA) with Varimax rotation was executed using SPSS. Factors were artificially limited to two. All eight items were included in this factor analysis, including the two items querying participants about their participation in continuing education activities. Although these items were correlated, both were included because they may have tapped nuanced ideas regarding the difference between _attending_ trainings, and _seeking out_ trainings.

The two factors explained 51% of the variance. Five items loaded on factor one, and three on factor two. However, the items did not appear to conceptually represent different stages along a readiness continuum. While a scree plot cannot objectively be used to determine number of factors in a quasi-confirmatory factor analysis, observation of the scree plot appears to indicate that a unidimensional solution is applicable. See Figure 5 (p. 105).

This factor analysis was re-run with factors artificially limited to one, to represent a unidimensional structure. The factor explained 37% of the variance. Seven out of eight items loaded on the factor, at a factor loading threshold of .4. Four of the seven items had factor loadings of .6 or above. The following eliminated item had a factor loading of .04, and a communality of .001: _I know that I will never be able to know everything about a particular minority group._ This item contained problematic wording as well, particularly through the usage of words such as _never_ and _everything_. Table 23 provides information about the remaining seven items.
Table 23

<table>
<thead>
<tr>
<th>Initial Domain</th>
<th>Item</th>
<th>Highest Factor Loading</th>
<th>Communality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation/Action</td>
<td>I am ready to meet with members of minority groups in order to learn more about their culture.</td>
<td>.67</td>
<td>.45</td>
</tr>
<tr>
<td>Preparation/Action</td>
<td>I am ready to explore and clarify the origins of any biases and/or stereotypes I may hold about individuals from minority groups.</td>
<td>.40</td>
<td>.16</td>
</tr>
<tr>
<td>Preparation/Action</td>
<td>I will seek out continuing education seminars, workshops, and trainings to further refine awareness of the experiences of minority groups.</td>
<td>.83</td>
<td>.69</td>
</tr>
<tr>
<td>Preparation/Action</td>
<td>I will try to have conversations with peers about the importance of cultural competence.</td>
<td>.69</td>
<td>.47</td>
</tr>
<tr>
<td>Maintenance</td>
<td>I will endeavor to approach new situations with humility.</td>
<td>.53</td>
<td>.28</td>
</tr>
<tr>
<td>Maintenance</td>
<td>I interact with members of minority groups in community and neighborhood settings.</td>
<td>.56</td>
<td>.32</td>
</tr>
<tr>
<td>Maintenance</td>
<td>I attend trainings, seminars, and continuing education workshops in order to maintain my familiarity with minority groups.</td>
<td>.76</td>
<td>.58</td>
</tr>
</tbody>
</table>

Upon identifying the unidimensional structure underlying these seven items, an item analysis was conducted to assess the reliability of items for this overall measure of readiness for change. Additionally, these factor analyses were re-run utilizing imputation of the mean for any missing values, and results did not differ from those reported here.

Alpha for the overall scale was revealed to be .77. It appeared that these seven items measured one’s placement along a readiness for change continuum, specific to addressing cultural competence. A lower score on this measure was indicative of a greater readiness for change. The statistical evidence was moderately strong, with seven of the eight items reflecting factor loadings above .4, and with strong evidence of reliability. Conceptually, the evidence for this unidimensional structure was strong as well. This unidimensional scale consisting of seven
items was titled *readiness for change*. Subsequent analyses utilized mean scores on this scale as an independent variable, with lower scores indicative of greater readiness for change.

**Convergent Validity**

Convergent validity of the CC-A with the Multicultural Counseling Knowledge and Awareness Scale [MCKAS] (Ponterotto et al., 2002) was computed through the use of correlations between the two composite measures (utilizing mean scores). Overall scale convergent validity was found with a correlation of .60 (p<.01). While this correlation was high, it was also indicative of the fact that while these two measures were potentially tapping a similar construct, they also differed in one integral way: the CC-A is intended to measure population specific cultural competence, and the MCKAS is intended to measure cultural competence not specific to a unique group. The expectation that these two measures reflected similar yet different constructs is suggested in this correlation. However, this correlation also suggests that the two measures exhibit a high degree of shared variance.

The following sections will explore relevant results specifically by research question.

**Research Question One**

What is the overall level of cultural competence that mental health providers hold toward Arabs? It is important to note that this level of generalizability cannot be answered with a response rate of 14.3% to 15.6%. This limitation will be discussed to a greater extent in Chapter 5. However, what can be answered is the following question: What is the overall level of cultural competence a group of mental health providers working in Northern Virginia hold toward Arabs?

**Composite scores.** In order to reduce the impact of missing data, a mean value was utilized for the dependent variable (scores on the CC-A). This was due to the fact that one
missing value on a subscale resulted in a missing value on the entire scale (sum of responses). Additionally, utilizing a mean value would render comparisons more facile. Therefore, the final outcome variable in this study consisted of mean scores on the CC-A. Lower scores were indicative of higher levels of cultural competence. The frequency distribution of these scores is displayed in Figure 6. The potential scores ranged from one to five, with actual scores ranging from 1.33 to four, indicative of high variability. The composite measure had a mean of 2.22 and a standard deviation of .46. The distribution showed some minor skewness, with a very slight over-representation of lower scores.

![Figure 6: CC-A frequency distribution](image)

The presence of a slight over-representation of lower scores was potentially indicative of an element of social desirability, particularly around a topic such as professional cultural competence. This will be further explored in Chapter 5. Please see Table 24 for a summary of the distributions of this measure, as well as the MCKAS.
Table 24
CC-A and MCKAS summary of distributions

<table>
<thead>
<tr>
<th>Measure</th>
<th>Mean*</th>
<th>SD</th>
<th>N</th>
<th>Range</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cultural Competence</td>
<td>2.22</td>
<td>.46</td>
<td>143</td>
<td>1.3-4.0</td>
<td>.63</td>
</tr>
<tr>
<td>MCKAS</td>
<td>2.02</td>
<td>.55</td>
<td>142</td>
<td>1.0-4.0</td>
<td>.83</td>
</tr>
</tbody>
</table>

*lower scores are indicative of higher cultural competence

Mean scores of overall scale cultural competence should have correlated with responses to the item: In general, how would you rate your level of overall knowledge of Arab culture, values, and practices? It is important to note, however, that knowledge is only a part of cultural competence. As a result, direct comparisons between these two items could be made. As previously reported, descriptive results indicated that a majority of this sample (67.6%) self-reported at least moderate knowledge of Arabs. Correlations indicated that a significant, negative relationship existed between the two variables, r=-.38, p<.01. This means that lower scores on the CC-A (higher cultural competence) were related to higher self-reports of knowledge (better knowledge). Comparing the means provided further explanation. The mean of the CC-A was 2.22(.46), compared with the mean of the self-proclaimed overall level of knowledge item, which was 2.72(.86). These results may have been suggestive of participants having under-estimated their overall level of knowledge (not necessarily cultural competence).

The remaining research questions will initially be answered utilizing bivariate analyses. Following an explication of each research question in this manner, multivariate analyses will be presented, encompassing all research questions.

Research Question Two

What is the relationship between demographic variables (sex, age, race/ethnicity, religious affiliation) and levels of cultural competence toward Arabs among mental health providers? As this is a descriptive study, no causal relationships were explored. Looking at the
role of sex, any group differences needed to be interpreted with caution, due to low percentage of males in the sample (11.1%). An independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for males and females. There were no significant differences in levels of cultural competence.

With regards to age, no significant correlations between age and mean scores on the CC-A or the MCKAS were found. With regards to race/ethnicity, independent sample t-tests were conducted to compare mean scores along the CC-A and the MCKAS for Whites and non-Whites. Results should be interpreted with caution, given the high percentage of Whites (78%) compared with non-Whites. There was a significant difference in scores along the MCKAS for Whites (M=1.97, SD=.38) and non-Whites (M=1.83, SD=.29); t(131)=1.84, p=.04. Non-Whites appeared to exhibit better levels of cultural competence than Whites along the MCKAS. These findings tentatively support the stated hypothesis from Chapter 1, in that providers who are members of a racial/ethnic minority themselves should exhibit higher levels of cultural competence.

And finally, one-way ANOVAs were conducted to compare mean scores along the CC-A and the MCKAS for Christians, non-Christians, and non-religious individuals. There were no significant differences between these three groups along either measure. See Table 25 for a summary of results related to the impact of demographic variables on the CC-A and MCKAS.

Table 25

<table>
<thead>
<tr>
<th>Variable</th>
<th>CC-A</th>
<th>MCKAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>2.22</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>15</td>
<td>2.09</td>
</tr>
<tr>
<td>Female</td>
<td>120</td>
<td>2.19</td>
</tr>
<tr>
<td>Age</td>
<td>131</td>
<td>r=-.03, p=.72</td>
</tr>
</tbody>
</table>
Race/Ethnicity

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>105</td>
<td>2.18</td>
<td>.40</td>
<td>1.97*</td>
<td>.38</td>
</tr>
<tr>
<td>Non-White</td>
<td>29</td>
<td>2.20</td>
<td>.49</td>
<td>1.83*</td>
<td>.29</td>
</tr>
</tbody>
</table>

Religious Affiliation

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian</td>
<td>68</td>
<td>2.20</td>
<td>.44</td>
<td>1.94</td>
<td>.37</td>
</tr>
<tr>
<td>Non-Christian</td>
<td>14</td>
<td>2.20</td>
<td>.44</td>
<td>1.98</td>
<td>.42</td>
</tr>
<tr>
<td>None</td>
<td>40</td>
<td>2.17</td>
<td>.39</td>
<td>1.97</td>
<td>.37</td>
</tr>
</tbody>
</table>

*significant difference at p<.05

Research Question Three

What is the relationship between professional variables (number of Arab clients, field) and levels of cultural competence toward Arabs among mental health providers? Among professions, clinical psychologists exhibited the highest levels of cultural competence toward Arabs, followed by social workers, counseling psychologists, and mental health counselors. However, ANOVAs revealed no significant differences between professions along the CC-A or the MCKAS. See Table 26 for a summary of these results.

With regards to number of Arab clients, an independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for providers who had zero to five Arab clients during their careers, compared to those who had more than six Arab clients during their career. No significant differences were found between these two groups.

Table 26

<table>
<thead>
<tr>
<th>Variable</th>
<th>CC-A</th>
<th></th>
<th></th>
<th>MCKAS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>2.22</td>
<td>.46</td>
<td>2.02</td>
<td>.55</td>
</tr>
<tr>
<td>Field</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Work</td>
<td>43</td>
<td>2.22</td>
<td>.51</td>
<td>2.06</td>
<td>.54</td>
</tr>
<tr>
<td>Clin. Psych.</td>
<td>34</td>
<td>2.11</td>
<td>.39</td>
<td>2.02</td>
<td>.53</td>
</tr>
<tr>
<td>Couns. Psych.</td>
<td>21</td>
<td>2.30</td>
<td>.56</td>
<td>2.01</td>
<td>.67</td>
</tr>
<tr>
<td>MH Couns.</td>
<td>33</td>
<td>2.30</td>
<td>.43</td>
<td>1.97</td>
<td>.55</td>
</tr>
<tr>
<td>Number of Arab clients in career</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0-5</td>
<td>62</td>
<td>2.26</td>
<td>.44</td>
<td>2.01</td>
<td>.48</td>
</tr>
<tr>
<td>6+</td>
<td>79</td>
<td>2.20</td>
<td>.48</td>
<td>2.03</td>
<td>.61</td>
</tr>
</tbody>
</table>
Research Questions Four and Five

What is the relationship between prior experience and familiarity with Arabs and levels of cultural competence toward Arabs among mental health providers? Prior experience and familiarity with Arabs was conceptualized through the following variables: level of social closeness to Arabs, overall knowledge of Arabs, sources of previous knowledge of Arabs (television, internet, books), and whether one had previously traveled to the Middle East.

Social closeness. Associations between social closeness variables (to what extent are Arabs part of one’s familial, social, or professional group) and levels of cultural competence were explored through the use of t-tests (i.e. if one had low vs. substantial interactions with Arabs at a particular level).

Immediate family. An independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for providers reporting low interactions with Arabs among immediate family, compared with those reporting substantial interactions with Arabs among immediate family. Results should be interpreted with caution due to the large proportion of providers with low interaction (95%) compared with those reporting substantial interaction in their immediate family. There were no differences along the CC-A. There were significant differences along the MCKAS, t(140)=−2.9, p<.01, among providers with low levels of closeness among their immediate family (M=1.99, SD=.48) and providers with substantial immediate family interactions (M=2.59, SD=1.2). These results were in the opposite direction as hypothesized, in that providers with substantial immediate family interactions appeared to be scoring higher (i.e. lower cultural competence) than providers with low immediate family interactions. Given the small sample size of seven in the substantial interaction group, it was difficult to determine the reason for these findings.
**Extended family.** Next, an independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for providers reporting low interactions with Arabs among extended family, compared with those reporting substantial interactions with Arabs among extended family. Results were expected to be similar to those from the immediate family groups, due to the high correlation between the immediate family and extended family groups. Again, results should be interpreted with caution due to the large proportion of providers with low interaction (94%) compared with those reporting substantial interaction in the extended family. There were significant differences along the CC-A, t(141)=-.24, p=.03, among providers with low immediate family interactions (M=2.22, SD=.45) and substantial immediate family interactions (M=2.26, SD=.69). There were also significant differences along the MCKAS, t(140)=-2.8, p<.01, among providers with low immediate family interactions (M=1.99, SD=.47) and providers with substantial immediate family interactions (M=2.51, SD=1.19). Both findings were in the opposite direction as hypothesized, in that providers with substantial extended family interactions appeared to be scoring higher (i.e. lower cultural competence) than providers with low extended family interactions.

Upon further examination of these variables, it appeared that there were three individuals consistently responding in the opposite direction as hypothesized on at least six of the 12 items. For example, with regards to individuals reporting a high degree of familiarity with Arabs in their immediate family, for the item *I have had little to no personal or social interactions with Arabs/Arab Americans*, two individuals strongly agreed with this statement, and one indicated that he or she neither agreed nor disagreed. By virtue of being in the category of substantial interaction with Arabs among immediate family, one should feasibly interact/have interacted with Arabs. Another example involved the item *I am aware of the historical oppression*
Arabs/Arab Americans have experienced. Three individuals, who indicated substantial interaction with Arabs in their immediate family, strongly disagreed with this statement. With regards to individuals reporting a high degree of familiarity with Arabs in their extended family, the same patterns remain. Three individuals were scoring in a consistent, counter-intuitive manner across the same six items. Due to the high correlation between these two groups, it was hypothesized that the same individuals appeared in the two groups, and were likely selecting similar responses.

Professional colleagues. Next, an independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for providers reporting low interactions with Arabs among professional colleagues, compared to those reporting substantial interactions with Arabs among professional colleagues. There were significant differences along the MCKAS, t(140)=2.20, p=.01, among providers with low professional interactions (M=2.08, SD=.61) and providers with substantial professional interactions (M=1.86, SD=.30). These findings were in the hypothesized direction, in that providers with significant professional interactions with Arabs exhibited lower scores (i.e. higher cultural competence) along the MCKAS when compared with providers with low professional interactions with Arabs.

Community. Finally, an independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for providers reporting low interactions with Arabs among the community, compared with those reporting substantial interactions with Arabs among the community. There were significant differences along the MCKAS, t(140)=2.66, p=.05, among providers with low community interactions (M=2.15, SD=.66) and providers with substantial community interactions (M=1.91, SD=.40). Providers with significant community interactions with Arabs exhibited lower scores (i.e. higher cultural competence) on the MCKAS.
compared with providers with low community interactions with Arabs. It is important to note that this is the only group (regarding social closeness) with relatively equal cell sizes.

**Level of social closeness.** With regards to levels of social closeness (whether one had zero, one, or two or more levels of closeness to Arabs as evidenced through immediate family, extended family, profession, and community), one-way ANOVAs were executed to compare mean scores along the CC-A and the MCKAS for providers who had one, two or more, or no levels of social closeness to Arabs. Results revealed a significant difference (at p<.1) between the zero level social closeness group (M=2.31, SD=.49) and the two or more level social closeness group (M=2.08, SD=.48), along the CC-A, F(2,140) = 2.70, p=.07. As individuals increased levels of social closeness, they exhibited higher levels of cultural competence toward Arabs (lower scores). Overall, these results support the hypothesis presented in Chapter 1: that individuals with a greater degree of closeness to Arabs would exhibit higher levels of cultural competence toward Arabs. Please see Table 27 for a summary of findings related to social closeness.

<table>
<thead>
<tr>
<th>Table 27</th>
<th>CC-A and MCKAS social closeness variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
<td>Cultural Competence</td>
</tr>
<tr>
<td></td>
<td>N</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
</tr>
<tr>
<td>Social closeness</td>
<td></td>
</tr>
<tr>
<td>Immediate family</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>136</td>
</tr>
<tr>
<td>Substantial</td>
<td>7</td>
</tr>
<tr>
<td>Extended family</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>134</td>
</tr>
<tr>
<td>Substantial</td>
<td>9</td>
</tr>
<tr>
<td>Professional</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>104</td>
</tr>
<tr>
<td>Substantial</td>
<td>39</td>
</tr>
<tr>
<td>Community</td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>69</td>
</tr>
</tbody>
</table>
Overall knowledge of Arabs. With regards to self-reports of overall knowledge of Arabs, one-way ANOVAs were conducted to compare mean scores along the CC-A and the MCKAS for providers who rated themselves as having previous knowledge of Arabs at three levels: low, moderate, and high. Results revealed a significant difference between groups along the CC-A, \( F(2,135)=12.19, p<.01 \). Tukey post-hoc tests revealed a significant difference between those providers rating themselves as having low knowledge of Arabs (M=2.43, SD=.38) and those providers rating themselves as having moderate (M=2.10, SD=.41), and high (M=1.99, SD=.43) knowledge of Arabs. These results were in the hypothesized direction: as providers self-reported increasing levels of knowledge of Arabs, scores on the CC-A progressively decreased, indicating a higher level of cultural competence.

Table 28  
**CC-A and MCKAS previous knowledge variables**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>CC-A Mean</th>
<th>SD</th>
<th>MCKAS Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>143</td>
<td>2.22</td>
<td>.46</td>
<td>2.02</td>
<td>.55</td>
</tr>
<tr>
<td>Previous Knowledge*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>46</td>
<td>2.43</td>
<td>.38</td>
<td>2.14</td>
<td>.49</td>
</tr>
<tr>
<td>Moderate</td>
<td>77</td>
<td>2.10</td>
<td>.41</td>
<td>1.87</td>
<td>.35</td>
</tr>
<tr>
<td>High</td>
<td>15</td>
<td>1.99</td>
<td>.43</td>
<td>1.93</td>
<td>.37</td>
</tr>
</tbody>
</table>

* significant difference between low compared with moderate and high groups p<.05

Travel to Middle East. Independent samples t-tests revealed no significant differences between those who had previously traveled to the Middle East and those who had not. This does not support the hypothesis presented in Chapter 1, that individuals who had previously traveled to the Middle East would exhibit higher levels of cultural competence.
Table 29

*CC-A and MCKAS travel to Middle East*

<table>
<thead>
<tr>
<th>Variable</th>
<th>CC-A N</th>
<th>Mean</th>
<th>SD</th>
<th>MCKAS Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>143</td>
<td>2.22</td>
<td>.46</td>
<td>2.02</td>
<td>.55</td>
</tr>
<tr>
<td>Travel to ME</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>34</td>
<td>2.10</td>
<td>.43</td>
<td>1.92</td>
<td>.37</td>
</tr>
<tr>
<td>No</td>
<td>104</td>
<td>2.21</td>
<td>.39</td>
<td>1.95</td>
<td>.37</td>
</tr>
</tbody>
</table>

**Sources of previous knowledge.** These variables were dichotomized into low and substantial reliance on a particular source of knowledge, television, internet, or books.

**Television.** An independent samples t-test was conducted to compare mean scores along the CC-A and the MCKAS for providers reporting low reliance on television as a source of knowledge about Arabs (n=121), compared with those reporting a substantial reliance on television as a source of knowledge (n=22). Results revealed a significant difference between the two groups along the CC-A, t(141)=.35, p=.02, with those relying on television to a lesser degree exhibiting slightly higher levels of cultural competence (M=2.22, SD=.49) compared with those relying on television to a greater degree (M=2.25, SD=.29). Results should be interpreted with caution, given the uneven cell sizes. These results tentatively supported the hypothesis presented in Chapter 1, that individuals receiving their knowledge from television would exhibit lower levels of cultural competence. Shaheen (2003) analyzed portrayals of Arab in the popular media (i.e. movies) prior to 9-11, and found that only 5% of Arab film roles depicted Arabs as individuals with normal, desirable characteristics. However, there is also a great deal of misinformation on the internet, which may also be related to low levels of cultural competence.

**Internet.** An independent samples t-test was conducted to compare mean scores along the cultural competence measure and the MCKAS for providers reporting low reliance on the internet as a source of knowledge about Arabs, compared to those reporting a substantial reliance.
on the internet as a source of knowledge. There were no significant differences between groups along either measure. In addition, age was negatively correlated with the use of internet as a source of knowledge, $r(129)=-.18$, $p=.04$.

**Books.** An independent samples t-test was conducted to compare mean scores along the cultural competence measure and the MCKAS for providers reporting low reliance on books as a source of knowledge about Arabs, compared to those reporting a substantial reliance on books as a source of knowledge. There were significant differences along the MCKAS, $t(140)=3.31$, $p<.01$, among providers relying on books to a low degree ($M=2.14$, $SD=.64$) compared to providers relying on books to a substantial degree ($M=1.84$, $SD=.31$). Those providers relying on books to a larger degree as a source of knowledge about Arabs scored substantially lower (i.e. exhibited higher cultural competence) than those relying on books to a lesser degree. There appeared to be a relationship between the use of books compared to the use of television as a source of knowledge, in that they each appeared to contribute to opposing directions.

Table 30
**CC-A and MCKAS sources of knowledge**

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Cultural Competence</th>
<th>MCKAS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Mean    SD</td>
<td>Mean   SD</td>
</tr>
<tr>
<td>Total</td>
<td>143</td>
<td>2.22   .46</td>
<td>2.02   .55</td>
</tr>
<tr>
<td>Television</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>121</td>
<td>2.21*  .49</td>
<td>2.02   .58</td>
</tr>
<tr>
<td>Substantial</td>
<td>22</td>
<td>2.25*  .29</td>
<td>2.01   .36</td>
</tr>
<tr>
<td>Internet</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>122</td>
<td>2.22   .48</td>
<td>2.02   .54</td>
</tr>
<tr>
<td>Substantial</td>
<td>21</td>
<td>2.23   .36</td>
<td>2.01   .62</td>
</tr>
<tr>
<td>Books</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low</td>
<td>87</td>
<td>2.29   .48</td>
<td>2.14*  .64</td>
</tr>
<tr>
<td>Substantial</td>
<td>56</td>
<td>2.10   .42</td>
<td>1.84*  .31</td>
</tr>
</tbody>
</table>

* significant difference between groups $p<.05$
Research Question Six

What is the relationship between mental health provider readiness for change and levels of cultural competence toward Arabs? In what capacity does provider readiness for change exist? To answer the first part of the question, correlations between scores on the readiness scale and the CC-A were calculated. There was a significant relationship between the two constructs, $r = .38$, $p < .01$, in the hypothesized direction. As scores on the CC-A decreased (i.e., higher cultural competence), so did scores on the readiness for change variable (i.e., greater readiness for change). Those who exhibited a greater level of readiness for change appeared to show a higher level of cultural competence, consistent with hypotheses presented in Chapter 1.

Regarding the manner in which readiness for change was conceptualized, the factor analyses presented the unidimensional nature of readiness for change, specifically among seven of the eight items originally developed for the preparation/action and maintenance phases.

Multiple Regression Analysis

In order to more fully answer this study’s research questions, multivariate analyses were run to complement the analyses above. These are not divided by individual research questions, but are combined into several regression models described below.

In order to further examine the potential role that each predictor variable may have on the outcome variable (mean score on CC-A), while also controlling for the influence of other variables, multiple regression analysis was utilized. The amount of variance in levels of cultural competence, as measured by mean scores on the CC-A, explained by demographic, professional, familiarity, prior experience/knowledge, and readiness for change variables, was determined through the use of multiple regression modeling. The independent variables included in the hierarchical models were comprised of: 1) demographic variables (age, sex, race/ethnicity,
religious affiliation); 2) professional variables (field, number of Arab clients); 3) familiarity variables (social closeness); 4) previous knowledge (self-reports of overall knowledge of Arabs, sources of previous knowledge, and prior travel to the Middle East); and 5) readiness for change. The dependent variable consisted of mean scores on the CC-A.

**Assumptions of regression analysis.** The assumptions relevant to multiple regression include missing data, outliers, multicollinearity, linearity, and homoscedasticity.

As presented at the start of the chapter, missing data were minimal, and were not tested for patterns. Additionally, regression is sensitive to the existence of outliers, which can lead to an inflated $R^2$ value (the proportion of variance in the dependent variable that can be explained by all the predictor variables), and provide inaccurate values of the slope and the intercept. However, no outliers were identified in these data.

Multicollinearity, which is particularly important in regression-based strategies, refers to the correlation of predictors with one another. If all the predictors are perfectly correlated with one another, they cannot individually partially predict any value in the dependent variable. When correlated variables change with one another, this produces redundant and unnecessary results. Duplicate information in predictors might be an indicator that the model is too large or uninterpretable. There was an absence of multicollinearity among the predictor variables, except among those that were expected, such as age and year of graduation ($r=-.68$, $p<.01$). There also existed some multicollinearity among the social closeness variables, as presented earlier.

This data upheld the assumption of homoscedasticity (specifically, a lack of/mild heteroscedasticity), which is correlated with multivariate normality. Homoscedasticity assumes that the range, or variability, in scores for one variable is equal at all values on the dependent variable. If this assumption is violated, standard error may be difficult to estimate,
confidence intervals may be inaccurate. This can result in an increase in Type I or Type II error. Type I error refers to the rejection of the null hypothesis (that there is no difference) when it is true. This results in an observation of difference when one does not exist. Type II error refers to not rejecting the null hypothesis, when the alternative hypothesis is true. This results in a failure to observe a difference when there actually is one.

To test whether the observed variance is constant (i.e. to test for homoscedasticity), standardized residual values were plotted against standardized predicted values. The lack of a defined horizontal line revealed this assumption was upheld, and no transformation was needed.

**Figure 4.1 Standardized residual values vs. standardized predicted values**

To screen for linearity, the correlations between the outcome variable (cultural competence scale) and the predictor variables were examined. No Pearson’s r value was above .30, indicating a low level of linear association between the dependent variable and the independent variables.
**Examination of the correlation matrix.** An assessment of the bivariate relationships between the dependent variable (mean score on the CC-A) and the predictor variables was produced. Results indicated that the mean score on the CC-A was related to the following predictor variables: overall knowledge of Arabs, readiness for change, previous knowledge from books, and level of social closeness. Four of the five bivariate correlations (all except readiness for change) were negatively correlated. This suggested an inverse relationship, which is consistent with lower scores on the CC-A being indicative of higher levels of cultural competence. Specifically, higher levels of all four of these variables were associated with lower scores on the CC-A, reflecting higher levels of cultural competence. Regarding the readiness for change variable, which was positively correlated, a positive relationship was indicative of results in the hypothesized direction: higher readiness for change is related to higher levels of cultural competence, since lower scores on both measures reflect higher degrees of the respective construct.

Table 31
*Correlation Matrix of IVs to DV*

<table>
<thead>
<tr>
<th>CC-A</th>
<th>Readiness for change</th>
<th># AA clients</th>
<th>Field</th>
<th>Overall Knowledge of Arabs</th>
<th>Travel to Middle East</th>
<th>Previous Knowledge - Television</th>
<th>Previous Knowledge - Internet</th>
<th>Previous Knowledge - Books</th>
<th>Social Closeness - Immediate Family</th>
<th>Social Closeness - Extended Family</th>
<th>Social closeness - Professional</th>
<th>Level of Social closeness</th>
<th>Sex</th>
<th>Race/Ethnicity</th>
<th>Age</th>
<th>Religious Affiliation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>.38</td>
<td>-.08</td>
<td>.09</td>
<td>-.37</td>
<td>.04</td>
<td>.03</td>
<td>.21</td>
<td>.09</td>
<td>-.19</td>
<td>-.21</td>
<td>-.19</td>
<td>.08</td>
<td>.02</td>
<td>-.03</td>
<td>-.04</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05, **p<.01*
A hierarchical regression analysis was conducted to determine whether the previously described relationships continued to be significant, while controlling for the influence of other variables. Five models were explored in order to isolate the role and influence of each predictor while controlling for other variables. The first model was a baseline model, consisting of demographic variables. These included sex, age, religious affiliation, and race/ethnicity. The next model added professional variables, consisting of field and number of Arab clients. The next model added familiarity, represented by level of social closeness. The fourth model added the following previous knowledge variables: overall knowledge of Arabs, sources of knowledge (television, internet, books), and travel to the Middle East. And finally, the last model added the readiness for change variable.

**Dummy coding.** Four of these variables consisted of more than one category, necessitating dummy coding to produce interpretable results: religious affiliation (three groups), field (four groups), level of social closeness (three groups), and overall knowledge of Arabs (three groups). Dummy coding creates dichotomous variables from categorical variables (with more than two levels or groups) for use in regression models. The following section will enumerate the dummy coding process for each of these variables.

**Field.** Three dichotomous variables were created, with social work serving as the reference group. The three variables represented the following groups: clinical psychology, counseling psychology, and mental health counseling.

**Overall knowledge of Arabs.** Two dichotomous variables were created, with moderate serving as the reference group. The two variables represented the following groups: low overall knowledge, and high overall knowledge.
Social Closeness. Two dichotomous variables were created, with zero levels of social closeness serving as the reference group. The two variables represented the following groups: one level of social closeness, and two or more levels of social closeness. Those with two or more levels had answered yes to possessing closeness with Arabs on at least two dimensions. This variable encompassed the individual social closeness variables (immediate family, extended family, community, profession). Therefore, the individual variables were not included in the regression models.

Religious affiliation. Two dichotomous variables were created, with the Christian group serving as the reference group. The two variables represented the following groups: non-Christian, and no religion.

After these variables were dummy coded, they were entered into the appropriate regression models. According to G*Power, an N of 70 would be needed for sufficient power (.80) in a regression analysis. Given that the N in this study was 143, it was deemed appropriate to retain non-significant variables in subsequent models. Results of these five models are presented in Table 32.
Table 32
Regression results

<table>
<thead>
<tr>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>R² adj. = -.30</strong></td>
<td><strong>R² adj. = -.03</strong></td>
<td><strong>R² adj. = .06</strong></td>
<td><strong>R² adj. = .14</strong></td>
<td><strong>R² adj. = .19</strong></td>
</tr>
<tr>
<td><strong>F₁₅,₁₂₂ = .26</strong>&lt;sup&gt;a&lt;/sup&gt;, p=.93</td>
<td><strong>F₉,₁₁₃ = .62</strong>&lt;sup&gt;a&lt;/sup&gt;, p=.77</td>
<td><strong>F₁₁,₁₁₄ = 1.70</strong>, p=.08&lt;sup&gt;a&lt;/sup&gt;</td>
<td><strong>F₁₇,₁₀₈ = 2.20</strong>, p=.01**</td>
<td><strong>F₁₈,₁₀₇ = 2.63</strong></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>b&lt;sup&gt;a&lt;/sup&gt;(std. error)</th>
<th>p</th>
<th>b&lt;sup&gt;a&lt;/sup&gt;(std. error)</th>
<th>p</th>
<th>b&lt;sup&gt;a&lt;/sup&gt;(std. error)</th>
<th>p</th>
<th>b&lt;sup&gt;a&lt;/sup&gt;(std. error)</th>
<th>p</th>
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</thead>
<tbody>
<tr>
<td>Age</td>
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<td>.00 (.00)</td>
<td>.00 (.00)</td>
<td>.00 (.00)</td>
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<tr>
<td>.96</td>
<td>.50</td>
<td>.70</td>
<td>.74</td>
<td>.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex (female)</td>
<td>.11 (.12)</td>
<td>.08 (.12)</td>
<td>.05 (.12)</td>
<td>.04 (.12)</td>
<td>.07 (.11)</td>
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<td></td>
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<tr>
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<td>.96</td>
<td>.70</td>
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<td>.53</td>
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<td>.00 (.10)</td>
<td>.05 (.09)</td>
<td>.14 (.10)</td>
<td>.16 (.09)</td>
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<td>.86</td>
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<td>.14</td>
<td>.08</td>
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<tr>
<td>Non-Christian</td>
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<td>.02 (.13)</td>
<td>-.04 (.13)</td>
<td>-.08 (.12)</td>
<td>-.05 (.12)</td>
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<td></td>
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<td>.62</td>
<td>.63</td>
<td>.73</td>
<td>.49</td>
<td>.68</td>
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<td>.04 (.09)</td>
<td>.02 (.09)</td>
<td>.04 (.09)</td>
<td>-.01 (.08)</td>
<td></td>
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</tr>
<tr>
<td>.70</td>
<td>.98</td>
<td>.82</td>
<td>.66</td>
<td>.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of Arab clients (6+)</td>
<td>-.07 (.08)</td>
<td>-.03 (.08)</td>
<td>.07 (.08)</td>
<td>.08 (.08)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>.42</td>
<td>.69</td>
<td>.38</td>
<td>.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Psychology</td>
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<td>-.11 (.10)</td>
<td>-.03 (.10)</td>
<td>-.02 (.10)</td>
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</tr>
<tr>
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<td>.25</td>
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<td>High overall knowledge – Arabs</td>
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<td>Knowledge – Net (substantial)</td>
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<td>Knowledge – Bks (substantial)</td>
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**p<.01; **p<.05; *p<.1**
<sup>a</sup>value indicating the number of units the DV changes as the IV changes one unit.
<sup>b</sup>F-tests are used to compute the significance of a set of variables to information reflected in R²
Regression results. In the first model, mean score on the measure of cultural competence toward Arabs [CC-A] was regressed onto sex (two groups), race/ethnicity (two groups), age, and religious affiliation (dummy coded into two groups: non-Christian and no religion; Christian used as reference category). This model yielded an $R^2_{adj}$ of -.03, which was not statistically significant ($F_{5,122} = .26, p=.93$). This suggested that the linear combination of these demographic variables alone did not explain any of variance in the outcome variable. Additionally, a negative $R^2_{adj}$ indicated that this model fit was worse than a horizontal line (since in the null hypothesis, $R^2$ is intended to compare the fit of a particular model with a horizontal line). No variables in the first model were significantly related to levels of cultural competence.

In model two, mean score on the CC-A was regressed onto the demographic variables, as well as number of Arab clients (two groups) and field (dummy coded into three groups: clinical psychology, counseling psychology, mental health counseling). This model yielded an $R^2_{adj}$ of -.03, which was not statistically significant ($F_{9,113} = .62, p=.77$). This suggested that the linear combination of these demographic and professional variables did not explain any of variance in the outcome variable. None of the variables in this model were significantly related to levels of cultural competence.

In model three, mean score on the CC-A was regressed onto the demographic and professional variables, as well as level of social closeness (dummy coded into two groups: one level of social closeness, two or more levels of social closeness). This model yielded an $R^2_{adj}$ of .06, which was statistically significant at $p<.1 (F_{11,114} = 1.7, p=.08)$. This suggested that the linear combination of these demographic, professional, and familiarity variables did not explain much of the variance in the outcome variable. One variable, the dummy coded level of social closeness variable, was significant in this model, in the hypothesized direction. Compared with
participants reporting no levels of social closeness to Arabs, those reporting two or more levels of social closeness scored significantly lower on the measure of cultural competence (i.e. higher cultural competence).

In model four, mean score on the CC-A was regressed onto the demographic, professional, and familiarity variables, as well as previous experience variables, consisting of travel to the Middle East, overall knowledge of Arabs (dummy coded into two groups: low overall knowledge, high overall knowledge), and sources of previous knowledge (television, internet, books). This model yielded an $R^2_{adj}$ of .14, which was statistically significant ($F_{17,108} = 2.2$, $p=.01$). This suggested that the variables in this model accounted for 14% of the variance in the dependent variable. In this model, there were three predictors with statistically significant effects. This included the dummy coded level of social closeness variable, in that participants reporting two or more levels of social closeness scored significantly lower on the CC-A (i.e. higher cultural competence) than those reporting no levels of social closeness. The dummy coded low overall knowledge of Arabs variable was also significant, with results in the hypothesized direction. Those participants with low self-reported knowledge of Arabs scored significantly higher (i.e. lower cultural competence) on the CC-A. Additionally, utilizing books as a source of knowledge was a significant predictor of cultural competence, with those reporting substantial usage of books scoring significantly lower on the CC-A (i.e. higher cultural competence) than those reporting low usage of books.

In model five, the best-fitting model, mean score on the CC-A was regressed onto the demographic, professional, familiarity variables, previous experience variables, and readiness for change. This model yielded an $R^2_{adj}$ of .19, which was statistically significant ($F_{18,107} = 2.63$, $p<.01$). This suggested that the variables in this model accounted for 19% of the variance in the
dependent variable. In this model, there were four predictors with statistically significant effects. This included the dummy coded level of social closeness variable. Those reporting two or more levels of social closeness scored significantly lower on the CC-A (i.e. higher cultural competence) than those reporting no levels of social closeness. Additionally, the dummy coded low overall knowledge of Arabs variable was significant, indicating results in the hypothesized direction. Those reporting low levels of cultural competence scored significantly higher on the CC-A (i.e. lower cultural competence). Books as a source of prior knowledge of Arabs was a significant predictor, with those utilizing books to a greater degree scoring significantly lower on the CC-A (i.e. higher cultural competence). Finally, readiness for change was a significant predictor of cultural competence, with those reporting higher levels of readiness (i.e. lower scores on the readiness for change scale) exhibiting higher levels of cultural competence (i.e. lower scores on the CC-A).

According to this last regression model, the variables significantly (at the p<.05 level) associated with (predictive of) levels of cultural competence toward Arabs were: previous level of knowledge of Arab and readiness for change. Given that knowledge was hypothesized to only comprise a part of cultural competence, it may have been that knowledge was the most superficially identifiable aspect of cultural competence. At the p<.1 level, utilizing books as a source of previous knowledge of Arabs, and possessing two or more levels of closeness were significant predictors of levels of cultural competence. These and other bivariate results explicated earlier in the chapter suggested that self-reports of prior knowledge, usage of books as a source of knowledge, increased levels of closeness, and readiness for change all played a role in the development of cultural competence toward Arabs.
Summary

This chapter presented results of a survey administered to mental health providers working in Northern Virginia, intended to measure levels of cultural competence toward Arabs. This measure was validated through a focus group, pilot test, factor analyses, reliability analyses, and convergent validity with the MCKAS. Factor analyses reduced items to twelve, and adequate reliability was observed. This measure correlated as expected to the established measure of cultural competence (MCKAS). Bivariate and multivariate analyses indicated that the following variables were related to, and predictive of, cultural competence toward Arabs: self-reports of prior knowledge, usage of books as a source of knowledge, closeness to Arabs, and readiness for change, particularly related to addressing cultural competence. The upcoming chapter will discuss implications of these findings, study limitations, and directions for future research.
Chapter 5: Discussion

Introduction

The primary purpose of this study was to identify and examine factors related to cultural competence toward Arabs among a group of mental health providers (licensed clinical social workers, licensed clinical psychologists, and licensed professional counselors). A number of variables, including those measuring demographic, professional, familiarity, prior experience, and readiness for change, were selected and tested with regards to cultural competence toward Arabs among a random sample of mental health providers working in Northern Virginia.

In order to carry out this research, a new measure, intended to capture variability in levels of cultural competence toward Arabs, was developed. This measure was based upon a conceptual model incorporating a tripartite conceptualization of cultural competence, the notion of intersectionality, critical race theory, and readiness for change. Based upon results of a focus group and pilot testing, revisions were made, and this measure was subsequently used to collect data from a group of mental health providers in order to answer the following questions:

1. What is the level of knowledge, awareness, and skills (cultural competence) that mental health providers hold toward Arabs?
2. What is the relationship between demographic factors and levels of cultural competence toward Arabs?
3. Are there relationships between selected professional variables and levels of cultural competence toward Arabs?
4. What is the relationship between previous knowledge or exposure to Arabs (for example, via travel to the Middle East, overall knowledge, sources of knowledge) and cultural competence toward Arabs?
5. Is familiarity with Arabs, conceptualized as social closeness, related to cultural competence toward Arabs?

6. How does readiness/desire for change relate to cultural competence toward Arabs?

Summary of Study

In order to further explore the relationship certain variables have with levels of cultural competence toward Arabs among mental health providers, a scale, intended to measure cultural competence toward Arabs, was developed and tested. This measure, titled Cultural Competence – Arabs [CC-A] was initially developed using the tenets of critical race theory, intersectionality, readiness for change, and Sue’s (2006) multidimensional model of cultural competence. Additionally, a focus group of Arabs provided input on the measure, and a pilot study with a small group of mental health providers subsequently refined the measure. It was then sent to a randomly selected sample of mental health providers working in Northern Virginia. Based upon a series of factor analyses following data collection, this measure was further refined. Analyses suggested that cultural competence toward Arabs was a unidimensional construct, with the final measure intending to assess this unidimensional construct. Subsequent bivariate and multivariate analyses were conducted in order to best answer the focal research questions.

Item development. Items were developed to represent this combination of theories and models. The ensuing measure consisted of items encompassing demographics, professional characteristics, familiarity, previous knowledge and exposure, readiness, and cultural competence, the last via a measurement of knowledge, awareness, and skills.

Data collection. The measure was sent to a randomly selected sample of mental health providers (licensed clinical social workers, licensed clinical psychologists, and licensed
professional counselors) working in Northern Virginia (n=1001). The final sample size used in analyses was 143, representing a response rate of 14.3% to 15.6% (reflecting a range based predicated upon the existence of undeliverable letters).

**Data analysis.**

**Factor analysis: Cultural competence.** A series of factor analyses was run in order to assess possible multidimensional structures underlying the data, particularly since the measure of cultural competence was developed with a tripartite conceptualization of knowledge, awareness, and skills in mind. Following a number of factor analyses and subsequent reliability analyses representing weak statistical and conceptual findings, a unidimensional structure was explored. This primary factor accounted for 14.9% of the variance in cultural competence, with a Cronbach’s alpha of .63, reflecting adequate consistency across items. These results were potentially indicative of the interpretation that cultural competence toward Arabs (in this sample) consisted of one factor in which knowledge, awareness and skills were represented in a complex and overlapping manner. When the 12 item measure (CC-A) was compared with an existing measure of cultural competence, the MCKAS (Ponterotto et al., 2002), convergent validity was established (r=.60, p<.01).

**Factor analysis: Readiness for change.** Readiness for change, based upon the tenets of the transtheoretical model, consisted of a newly developed sixteen-item measure intended to capture one’s placement along the continuum of readiness for change. This continuum consisted of four stages: precontemplation, contemplation, preparation/action, and maintenance. A series of factor analyses was run in order to assess possible multidimensional structures underlying the data, particularly since the measure was developed with four subscales in mind. However, weak conceptual and statistical data, in addition to problematic item wording, led to the modification.
of this measure to simply reflect eight items. Following factor analyses results, a seven item measure of readiness for change emerged, accounting for 37% of the variance. Mean scores on this measure represented a predictor variable whose relationship to cultural competence would be subsequently assessed.

**Bivariate results.** Bivariate analyses were run to assess the nature of the relationship between a number of independent variables and levels of cultural competence. These independent variables were grouped into five categories: demographics, professional characteristics, previous knowledge and exposure, familiarity, and readiness for change. Along the CC-A, there were no differences between groups for any of the demographic or professional variables.

Regarding previous knowledge and exposure, ANOVAs revealed that those reporting higher levels of knowledge exhibited higher levels of cultural competence. Regarding familiarity, ANOVAs revealed that as individuals increased their level of familiarity/social closeness with Arabs, so increased their levels of cultural competence. With regards to sources of knowledge, t-tests revealed that receipt of knowledge from television was associated with lower cultural competence. Additionally, although the MCKAS was not the dependent variable of interest in this study, it was noteworthy to observe that, along the MCKAS, receipt of knowledge from books was associated with higher cultural competence. Taken together, these results suggested that, compared to internet and television, books resulted in higher cultural competence. Compared to books and internet, television resulted in lower cultural competence. And finally, correlations revealed that individuals exhibiting higher readiness for change revealed higher levels of cultural competence.
**Multivariate results.** An inter-correlational matrix revealed that a significant relationship existed between the following predictor variables and mean scores on the CC-A: level of social closeness, source of knowledge – books, overall level of knowledge, and readiness for change. Regression analyses were subsequently conducted in order to assess which factors were significantly related to the CC-A. The best fitting significant model accounted for 19% of the variance in the DV. Characteristics of variables that significantly predicted higher levels of cultural competence included: possessing two or more levels of social closeness to Arabs, possessing moderate or high previous knowledge of Arabs, using books as a source of knowledge of Arabs, and exhibiting higher levels of readiness to change.

**Discussion of Results**

**Key findings.** Several conclusions can be drawn from the study’s results. First, the CC-A was shown to possess good measurement validity and consistency, as evidenced through a factor analysis, Cronbach’s alpha estimate, and convergent validity with the MCKAS. Second, the CC-A reflected an underlying unidimensional structure, not the anticipated three domains (knowledge, awareness, and skills). Because the measure was developed based on a conceptual model with three domains, it was important to determine whether this measure was in fact representing cultural competence, or some other concept altogether. Examining the twelve items that loaded on the unidimensional model, while providing only subjective evidence, revealed that these items appeared to measure a complex, nuanced, and overlapping conceptualization of cultural competence, not necessarily one in which knowledge, awareness, and skills were mutually exclusive constructs.

Another conclusion that could be drawn from these findings was related to the manner in which mean scores on the CC-A appeared to vary systematically with certain characteristics. No
demographic or professional variables were significantly related to the CC-A, suggesting that these basic demographic variables were not systematically related to level of cultural competence regarding Arabs. However, variables encompassing familiarity (level of social closeness), previous knowledge and experience (overall knowledge, sources of knowledge), and readiness for change were related to self-reported levels of cultural competence toward Arabs.

The latter results were in the hypothesized direction: greater levels of prior knowledge toward Arabs were significantly related to higher cultural competence. Specifically, this could be indicative of the presence of an indicator variable, or one that can be used to conceptually represent the entire measure. In essence, this one item could potentially be administered to participants in lieu of the whole 12-item measure in order to determine levels of cultural competence toward Arabs. This is an area worthy of further exploration, and is discussed in an upcoming section.

And finally, average overall levels of cultural competence among this sample were determined to be 2.22 (.46), on a scale of 1-5. While there was no standard to compare this mean against (since this was a new measure), this did appear to reflect relatively high levels of cultural competence (lower scores on the measure reflected higher levels of cultural competence). This could potentially also be an indicator of self-selection bias, in that individuals who were already interested or motivated in this topic participated in the survey.

**Conceptual framework.** The conceptual framework presented in Chapter 2, titled *Cultural competence toward racial/ethnic minorities*, encompassed the tenets of critical race theory, intersectionality, readiness for change, and multidimensional cultural competence [MDCC] (Sue, 2006). The development of items in the CC-A was predicated upon these theoretical orientations and precepts, most explicitly from the MDCC. However, as described
elsewhere, results from a series of factor analyses did not uphold this tripartite conceptualization of cultural competence as knowledge, awareness, and skills. Instead, these data revealed an underlying unidimensional structure of cultural competence, wherein knowledge, awareness, and skills could be found, but not in a conceptually separate configuration.

Taking into account this unidimensional structure, in combination with other significant findings from the data specific to level of social closeness and readiness for change, it appeared that these data may have better fit an alternative model of cultural competence, from the field of nursing. These data appeared to fit Campinha-Bacote’s (2002) model. The main limitation of this model is that it was developed for use in a healthcare setting, and does not provide any mental health specific information. However, Campinha-Bacote (1999) argued this model could be utilized in specialty areas, including mental health services.

Assumptions within this model, titled *The Process of Cultural Competence in the Delivery of Healthcare Services* (Campinha-Bacote, 2002), were consistent with those found in the MDCC (Sue, 2006). For example, both models assume that cultural competence is an ongoing process. In addition, Campinha-Bacote’s model consists of five constructs, three of which were also found in the MDCC. The five constructs found in Campinha-Bacote’s model include: cultural awareness, cultural knowledge, cultural skill, cultural encounters, and cultural desire. It is the last two constructs that appeared to more wholly fit the data from this sample.

The first three precepts of Campinha-Bacote’s (2002) model were consistent with the MDCC (Sue, 2006). According to Campinha-Bacote, cultural awareness is defined as “the recognition of one’s biases, prejudices, and assumptions about individuals who are different” (p. 182). Campinha-Bacote referred to cultural knowledge as “the process of seeking and obtaining a sound educational foundation about diverse cultural and ethnic groups” (p. 182). Campinha-
Bacote defined cultural skills as “the ability to collect relevant cultural data regarding the client’s presenting problem as well as accurately performing a culturally based physical assessment” (p. 182). It is important to note that, particularly with the conceptualization of cultural skills, Campinha-Bacote’s (2002) model may have been predisposed toward a health care (as opposed to mental health care) encounter. This was an important consideration, given that health care encounters are likely to involve physical examination, which do not occur in the provision of mental health services. Cultures and religions (including Arab and Muslim, respectively) exhibit a range of perspectives around acceptance of physical touching or closeness in the healthcare encounter, and these are of a sensitive nature, particularly around differences in sex between the patient and the provider (Hammoud, White, & Fetters, 2005; Inhorn & Serour, 2011). Therefore, it is incumbent upon the healthcare provider to remain cognizant about beliefs and attitudes around physical examination and contact in a way that a mental health provider does not.

The fourth concept found in Campinha-Bacote’s (2002) model was titled cultural encounters, and was defined as “the process that encourages the health care provider to directly engage in cross-cultural interactions with clients from culturally diverse backgrounds” (p. 182). This notion of cultural encounters was one that resonated in these results. Campinha-Bacote argued that these interactions could influence one’s extant beliefs about a particular group, and may moderate the effect of bias or stereotyping. This notion was reflected in these data, particularly around the notion of level of social closeness to Arabs. Findings from this research indicated that those with two or more levels of social closeness to Arabs exhibited significantly higher levels of cultural competence toward Arabs, compared to those who had zero levels of social closeness to Arabs. This was also consistent with data that indicate individuals were more likely to feel positively predisposed to Muslims if they had known one previously (Saad, 2006).
The final precept in Campinha-Bacote’s (2002) model referred to cultural desire, which was defined as “the motivation of the health care provider to want to, rather than have to, engage in the process of being culturally aware, culturally knowledgeable, culturally skillful, and familiar with cultural encounters” (p. 182). This construct appeared to reflect the notion encompassed in the predictor variable measuring readiness for change.

Thus, taking into account the original conceptual framework that guided this study (see Figure 8), in conjunction with certain findings, it appeared that Campinha-Bacote’s (2002) model more comprehensively captured the process by which this group of mental health providers exhibited cultural competence toward Arabs. Specifically, in addition to knowledge, awareness, and skills, she included two dimensions not included in the MDCC: cultural encounters and cultural desire.

Figure 8: Cultural competence toward racial/ethnic minorities
Implications of Study

These findings are part of a larger picture encompassing research, training, and practice, first presented in Chapter 1 (see Figure 9). While these results were not generalizable to larger groups (this is discussed in the limitations section) they provided valuable information on the baseline status of a specific subset of mental health providers. Specifically, these findings can begin to fulfill gaps in information found under foundation, or the first step of the process. This is the part of the research to practice process in which baseline levels of knowledge, awareness, and skills are determined, as well as sources of knowledge and readiness for change.

Figure 9: Impact of addressing cultural competence toward racial/ethnic minority groups

Research. Contributing to this foundation level of information can also inform future intervention research. The measurement of usual care is integral to the future development of targeted improvements and interventions. These results identified baseline practices of a particular group of mental health providers, as well as those variables that related to and
impacted cultural competence. Identification of these variables can propel the field forward by further narrowing and specifying variables of interest related to cultural competence. Additionally, an assessment of readiness or desire for change could influence the use of differential interventions depending on where the provider stands in the transtheoretical stages of change model.

The development and validation of a culture-specific measure of cultural competence fills a gap in the research. Several generic, validated, measures of cultural competence exist, but none are intended to measure cultural competence toward a particular group. There has been a noted gap in the literature around the development of emic (culture specific) interventions (Sue, 2001). While arguments exist for the existence of both emic and etic measures, having measures that fulfill both perspectives is useful. Without a valid and reliable way to measure changes in levels of cultural competence, it may be difficult to evaluate the impact and outcomes of future interventions. Stakeholders may express interest in both types of interventions: those around cultural competence toward diverse groups in general, or those around cultural competence toward a particular group. It is useful to move the field forward by increasing research on culture-specific notions of cultural competence, which can then be adapted with additional groups.

Due to this lack of research on valid and reliable culture-specific measures, and on cultural competence toward Arabs in mental health services, results of this study could fill a gap in the literature that would contribute to the development and evaluation of cultural competence interventions and outcomes. The long-term goal consists of addressing provider cultural competence as a means of beginning to ameliorate racial/ethnic disparities in mental health care, particularly among under-studied groups that are not members of the four major racial/ethnic
groups in the U.S. These are African Americans, Asian Americans and Pacific Islanders, Native Americans and Alaska Natives, and Hispanics.

**Practice.** There continue to be concerns around self-report measures of cultural competence, particularly around a lack of connection to applied cultural competence (Constantine & Ladany, 2000; Sehgal et al., 2011). Constantine & Ladany (2000) argued that self-report multicultural counseling competence scales measured anticipated rather than actual behaviors. Additionally, counselor’s self-assessments of cultural competence have not been shown to relate to clients’ assessment of counselor cultural competence (Dillon et al., 2016).

Regarding the measurement of mental health provider intentions toward cultural competence vs. culturally competent behavior, studies have found no significant relationship between self-report measures of multicultural counseling competence and one’s ability to conceptualize cases (i.e. demonstrated cultural competence) (Constantine & Ladany, 2000; Ladany, Inman, Constantine, & Hofheinz, 1997). Psychologists tend to endorse multicultural counseling competence highly on self-report measures, but without a consistent follow through in behavior, particularly when working with clients of a different race/ethnicity (Hansen et al., 2006; Sehgal et al., 2011).

The limitations presented in these studies point to a potential gap between attitudes and behaviors. It is important to note that attitudes only comprise one portion of behavior. The theory of reasoned action, (Fishbein & Ajzen, 2010) posits that behavioral intentions influence actual behaviors, which are in turn predicted by one’s attitudes and subjective norms. This suggests that other factors (in addition to self-reported cultural competence) likely play a role in impacting culturally competent behavior. At this time, results of this study are not intended to change clinical behavior, but instead are intended to identify a set of variables that are related to cultural competence toward a specific group, and contribute to the potential identification of
variables that may play a more significant role, in order to explore them to a greater degree in future research.

**Training.** There are potential implications with regards to clinical graduate and training programs, particularly with regard to any curriculum around cultural competence in the clinical encounter. Specifically, adapting or modifying graduate school curriculum could entail a broader inclusion of diverse groups (to reflect an intersectional approach). It could also include additional methods of training and assessing cultural competence among students, trainees, and supervisees. Specifically, self-report measures could complement observer ratings of skills, for example. Additionally, results of this research could highlight those areas in which a large number of participants exhibited low cultural competence. This could be another valuable consequence of identifying and completing further analyses on a select number of discriminating items (discussed under directions for future research).

**Limitations of Study**

Limitations of this study included issues around distribution of the data, concerns around sampling and response rate, development of the dependent variable, and validation of the hypothesized conceptual framework.

**Item Distributions.** Looking back at the item distributions, it appeared that while the distribution of the CC-A was only very slightly skewed, individual item distributions indicated some moderate skewness and bimodal responses. Some of this may have been the result of social desirability bias (discussed below). However, these data were not transformed, in part due to the potential benefits of analyzing specific groups of individuals who consistently scored in the same manner across items (discussed below). Additionally, it was decided that these data
would not be transformed so as to allow results to be most interpretable, specifically when compared to the original metrics guiding the development of the measure.

**Sample limitations.** Limitations related to the sample included concerns around social desirability, self-selection, and low response rate, particularly as it impacted external validity.

**Social desirability.** Considering the sensitivity of this topic, particularly for individuals whose livelihood may be dependent on working with diverse populations, some participants may have attempted to respond as they believed they should. Social desirability has been associated with self-report measures of cultural competence (Pope-Davis & Dings, 1995; Sue, 1996). In fact, Constantine & Ladany (2000) argued that self-report multicultural counseling competence scales are likely to be conflated with social desirability. The aim of ensuring that this data be anonymous was to limit the impact of social desirability. The assumption would be that individuals would be more likely to respond honestly if they knew their responses could not be linked to their identity. There was no way to ascertain whether, or to what extent, social desirability ended up being a factor (hypothetically in the direction of rendering responses in the direction of higher levels of cultural competence). Social desirability may have also been a factor in the presence of bimodal distributions, with participants responding from one extreme to the other. Specifically, bimodal distributions may be representative of the presence of two groups: one that was attempting to respond in the most desirable manner, and another that was attempting to respond accurately, or that may not necessarily know what a desirable response may entail. Interestingly, the option *neither agree nor disagree* was not particularly over-selected by this group. The research is mixed as to whether the inclusion of a social desirability measure would have contributed to the validity (Constantine & Ladany, 2000; Sodowsky, Kuo-Jackson, Richardson, & Corey, 1998; Sodowsky, Taffe, Gutkin, & Wise, 1994). A measure of
social desirability was not included, primarily due to the fact that the increase in scale length might have become prohibitive for participants. However, Constantine & Ladany (2000) argued that, of all the self-report measures of cultural competence (in existence at that time), the MCKAS (utilized for convergent validity purposes) “may be the least influenced by high social desirability attitudes on the part of the respondents” (p. 161).

**Self-report.** There also exist limitations around the self-report nature of measures of cultural competence, in addition to those related to social desirability. For example, researchers (e.g. Ponterotto, 1998; Ponterotto & Alexander, 1996; Pope-Davis & Dings, 1995; Sue, 1996) have called for an increase in validity based information, particularly with regards to a lack of consistency among the underlying concepts measured by self-reports (Pope-Davis & Dings, 1995; Sue, 1996). Additional limitations of self-report cultural competence measures include the observation that these measures are assessing levels of cultural competence toward working with diverse groups of color, and may not inclusive of other, non-racial/ethnic minorities (Constantine & Ladany, 2000).

**Self-selection bias.** Although this survey was sent to a random sample of providers, recipients decided whether or not to complete the survey and mail it back. Self-selection bias was a limitation in that participants who elected to complete the survey may have significantly differed from those who did not. This would be indicative of non-response bias. The low response rate (discussed below) supported the presence of self-selection bias. Individuals who were already interested in issues related to working with diverse groups may have elected to take the survey. Individuals who may not have felt that cultural competence was an important concept, or who may have been negatively predisposed toward Arabs or other diverse groups, may have elected not to take the survey. Survey responses might not have been representative in
that they may not have captured the variety of diverse beliefs, attitudes, and opinions these providers may have held. Additionally, demographic data revealed that the sample was overwhelmingly female (the initial proportion of sex was not provided by the Virginia licensing board, and therefore cannot be used to calculate the response rate by sex). Additionally, the sample was overwhelmingly White (again, the Virginia licensing board did not provide this information, and as a result, it could not be used to calculate response rate by race/ethnicity). The existence of self-selection bias provided evidence of non-response bias, and limits the generalizability of results (discussed below).

**Response rate.** As previously discussed in Chapter 3, the response rate was approximately 15% (14.3% to 15.6%). This low response rate has a significant impact on the external validity of the study. Specifically, it limits the generalizability of results. Due to the low response rate, and potential impact of self-selection bias, it cannot be assumed that these results represent a broader population, specifically all mental health providers. Instead, these results can only be used to further explore the characteristics and relationships found within this specific sample of mental health providers working in Northern Virginia. This lack of ability to generalize limits the impact of this research. However, there are a number of ways the results of this research can have a positive impact, both on the field and in practice (see directions for future research).

**Sample size.** As previously indicated, the general rule of thumb when it comes to sample size for factor analysis is 300 (Tabachnik & Fidell, 2001). However, a factor analysis can be conducted with fewer participants. Another suggestion indicates that the requisite sample size could depend on the actual number of scale items. Specifically, the ratio of participants to items should exist between 5:1 and 10:1 (Dattalo, 2013). The scale that was administered to
participants consisted of 20 items (specific to the measurement of cultural competence).

Regarding the measurement of readiness for change, the scale included 16 items. According the latter guidance around sample size for factor analyses, with regards to cultural competence, sample size should range from 100 to 200. With regards to the readiness for change scale, sample size should range from 80 to 160. The final sample size in this study consisted of 143 participants, well within both of these ranges.

**Final measure.** The final composite measure consisted of a cultural competence scale with a unidimensional underlying structure, straying from the hypothesized structure. In order to determine the underlying dimensionality of this scale, several factor analyses were run, which indicated that there were potentially a number of different models that could fit these results. This may be indicative of a measure that is not stable or consistent. Additionally, in order to retain the maximum number of items, factor loadings of .3 were utilized, which is considered low. The lower the factor loading, the weaker the relationship between item and factor. Additionally, Cronbach’s alpha was calculated to be .63 for the cultural competence measure, which is moderate. The factor analysis was intended to elucidate the validity of the measure, and in this case, evidence for high factorial validity was not as strong as it could have been.

**Conceptual framework.** As previously discussed, it appears that these results do not validate the MDCC (Sue, 2006). However, these results do appear to be more consistent with another model of cultural competence, stemming from the field of nursing. This model, developed by Campinha-Bacote (2002), consists of five precepts: cultural awareness, cultural knowledge, cultural skills, cultural encounters, and cultural desire. The combination of these factors appear to not only encompass the three facets of the MDCC, but also take into account readiness for change, and previous experience/familiarity with a particular group. Analyses
indicated that readiness for change, previous knowledge, and familiarity toward were all predictive of cultural competence.

**Directions for Future Research**

Despite the limitations inherent in the design and sample, results provided information on the current status of a group of mental health providers working in a geographic area with a high Arab population. Results can contribute to an exploration of additional methodologies surrounding the ability to ascertain levels of knowledge, awareness, and skills among mental health providers.

In particular, this may involve exploring and utilizing multiple methodologies, particularly to address clinical skills and behavior. Despite the focus of research on self-report measures of cultural competence, they comprise only one of many ways to measure clinician behavior. Other forms of indirect measurement include review of medical records and patient report. Direct measurement of clinical practice includes observing clinicians while practicing, or by observing videotapes/audiotapes, or through the use of simulated patients (Hrisos et al., 2009). In their systematic review of these methodologies, Hrisos et al. (2009) concluded that among indirect measures, patient report was more accurate than medical record review or clinician self-report. Among direct measures, which are less feasible due to time and money constraints, participant observation and use of standardized patients were among the most valid.

In addition to the exploration of multiple methodologies assessing cultural competence (specifically related to clinical behavior), future research can involve replicating this study with a truly representative, more fully powered sample. That would entail exploring sampling methodologies to minimize non-response bias and achieve generalizable results. Results from a less biased sample could be used to contribute to the development of interventions.
Future research can also work toward further validation of the CC-A or the readiness for change measure, in order to more accurately identify latent constructs found within each measure. Additionally, future research can involve new measure development, particularly around utilizing Campinha-Bacote’s (2002) model of cultural competence, which appears to have been more fully validated by these results (when compared to the MDCC). Another option might be to replicate this study, using Campinha-Bacote’s (1999) scale (based upon her model) as a form of convergent validity.

Understanding what providers currently know, as well as what current practices toward Arab clients entail, is integral in the future development and evaluation of interventions (individual, professional, and organizational). Possible outcomes include greater participation in necessary mental health services; greater access to mental health services; receipt of higher quality mental health services, in addition to an observed improvement in client well-being.

Future research can continue to analyze these data by exploring item distributions to a greater degree. Specifically, across items, there appear to be small minority of participants whose responses are consistently indicative of very low cultural competence. On items where these scores are particularly distinctive (when compared with the majority of responses), it is feasible to utilize these items as discriminating items. For example, statistical analyses can be configured to analyze only this group of individuals, to further understand their profile, particularly regarding those factors that are relevant to addressing cultural competence. Specifically, compiling a profile of these types of participants could be useful when developing interventions designed to address a particular facet of cultural competence. These profiles and analyses could inform the particular content the interventions focus on. It could also assist in delineating the structure of interventions: for example, whether some types of interventions are
designed for individuals who are less culturally competent than others. In order to increase the efficacy of interventions, it is important to tailor them to the level of cultural competence the individual(s) appear to be in. These discriminating items could help design the content and structure of these specific interventions.

As previously discussed, future research can further explore the potential discriminating role that one item can play in predicting cultural competence. Specifically, this is with regard to the item questioning participants about their assessment of levels of cultural competence toward Arabs. This indicator item asks participants to rate their overall levels of knowledge of Arabs, by selecting one of five options ranging from extremely high to extremely low. Due to the correlation between scores on this item and scores on the entire measure, it is feasible that this item be administered in lieu of the entire scale, to assess levels of cultural competence.

And finally, future research can begin to focus on understanding the client perspective, particularly as it relates to accessing and remaining in mental health services. For example, what are client expectations of therapy? What are the reasons that clients enter into the therapeutic relationship, and what are the reasons they remain? This study queried providers about their own levels of cultural competence; this data can be triangulated with client ratings of provider cultural competence. Additionally, focus groups of potential clients (i.e. Arabs) can be utilized to further understand cultural and religious nuances that may impact one’s willingness to seek or remain in mental health services. Focus groups of current clients can also be useful in assessing a more holistic picture of the entry into, and the experience of, mental health treatment. The client perspective can also play a valuable role in the assessment of any cultural competence interventions. For example, instead of assessing the impact of an intervention through a self-report measure of cultural competence, the impact can be assessed via client ratings of the
counselor, or via the number of sessions the clients returned for (similar to Wade & Bernstein, 1991). While there are a number of avenues for future research, it is clear that both the provider and client perspectives are of great value, and should be triangulated in order to present a more holistic and accurate assessment of the situation.

Conclusion

This research explored the levels of cultural competence exhibited by a random sample of mental health providers (licensed clinical social workers, clinical psychologists, professional counselors) working in Northern Virginia, which has a relatively high concentration of Arabs in the community population. These findings can fill a number of gaps in the literature, particularly with regards to the provision of mental health services toward Arabs and other under-studied groups. Specifically, it identified variables that significantly related to cultural competence for a specific group of individuals. In addition, it provided information on the assessment and evaluation of cultural competence. These results can inform future directions for research, as well as the development and the refinement of additional measures. Additionally, this research further elucidated the potential mechanism by which cultural competence can be conceptualized. Furthermore, these results can complement future research around utilizing additional methodologies to study cultural competence in the provision of mental health services. And finally, this research can inform the development of specific interventions aimed at individuals who exist along the spectrum of being culturally competent. Despite certain limitations, these results can inform and contribute to the research trajectory around addressing racial/ethnic disparities in mental health services, particularly through the mechanism of provider cultural competence.
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Appendix A: Definitions of Terms

Arab

An Arab is an individual originating from one of the 22 Arab League countries: Algeria, Bahrain, Comoros Islands, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Mauritania, Morocco, Oman, Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syria, Tunisia, United Arab Emirates, and Yemen. Arabs are not a racial group, but rather an ethnic/linguistic one. This study is focused on individuals of Arab descent living in the U.S. However, regardless of years in the U.S., acculturation level, citizenship status, etc., some Arabs living in the U.S. may not define themselves as Arab American. This is the reason this researcher elected to use the term Arab.

Race, ethnicity, culture

Race. Race is a social construction; a contrived system of categorizing people according to observable physical attributes that have no correspondence to biological reality (Abrams & Moio, 2009). Smedley & Smedley (2005): Race is a means of creating and enforcing social order, a lens through which differential opportunity and inequality are structured (p. 24).

Ethnicity. Ethnicity is a social identity based on attributional dimensions such as culture, language, heritage, that individuals belonging to a particular group choose to identify with (Abdulrahim, Yarmout, & Baker, 2012). Smedley & Smedley (2005) define ethnicity as encompassed in those: “...who share a common language, geographic locale or place of origin, religion, sense of history, traditions, values, beliefs, food habits, and so forth, are perceived, and view themselves as constituting, an ethnic group” (p. 17).

Culture. Williams (2006) defines culture as:

... part of an identity that is common to members of a group and maintained in a
continuous form because of its foundation in their shared experiences. Individual differences within the group are acknowledged…but culture is made knowable by privileging the experiences that are common to everyone and asserting these experiences as the core of the cultural identity. This stable constellation of traits, behaviors, and expectations is something that can be defined, validated, and shared with others (p. 211).

Mental Health/Illness

There are a number of definitions of mental illness, encompassing origin, severity, and prognosis. This definition is the most recent one developed by World Health Organization [WHO]: the International Classification of Diseases and Related Health Problems (ICD-10). They define mental disorder as: “the existence of a clinically recognizable set of symptoms or behaviour associated in most cases with distress and with interference with personal functions. Social deviance or conflict alone, without personal dysfunction, should not be included in mental disorder” (WHO, 2010). This definition encompasses all severities of mental disorders, as long as they cause some dysfunction in the individual’s life. To build upon this definition, the Diagnostic and Statistical Manual 5 (American Psychiatric Association, 2013) specifies that a mental disorder is:

a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress in social, occupational, or other important activities (p. 20)
**Mental Health Practitioner/Provider**

For purposes of this dissertation, this encompassed a licensed individual possessing a graduate degree in psychology, counseling, or social work who provides clinical services to individuals with mental health problems. These individuals have received specialized training around the nature and treatment of mental illness.

**Mental Health Services**

The focus on mental health services is the provision of therapeutic interventions, counseling, establishing rapport and building an ongoing, potentially long term relationship with a client. They are voluntary services, outpatient services, and generally occur on a repeated, consistent basis.

**Mental Illness Stigma**

Abdullah & Brown (2011): “[mental illness] stigma…refers to the social judgment, degradation, or devaluation of individuals because they have mental illness symptoms or have been labeled as having a mental illness” (p. 936).

**Social Justice**

Morris (2002) defines social justice as: “…the right of each person to have the opportunity—the resources and power—to develop a threshold level of capabilities in order to live a fully human life and to have the social responsibility to respect the dignity of each and every person in her or his own pursuit of achieving the same end” (p. 371).

**Racial/Ethnic Health and Mental Health Disparities**

Smedley, Stith, & Nelson (2003) define racial/ethnic health disparities as: “…racial and ethnic differences in the quality of healthcare that are not due to access-related factors or clinical needs, preferences, and appropriateness of intervention” (p. 3-4). This definition does omit
access related factors. Carpenter-Song et al. (2011): “Definitions of disparities emphasize differences in health status and outcome that arise from inequalities in care and the impact of wider social inequalities (e.g., poverty) rather than base rates of illness” (p. 2).

**Cultural competence**

Sue (2001) defines cultural competence as:

…the counselor’s acquisition of awareness, knowledge and skills needed to function effectively in a pluralistic democratic society (ability to communicate, interact, negotiate, and intervene on behalf of clients from diverse backgrounds), and on an organizational/societal level, advocating effectively to develop new theories, practices, policies and organizational structures that are more responsive to all groups” (p. 802).

**Awareness (attitudes/beliefs).** Awareness: “an understanding of one’s own cultural conditioning that affects beliefs, values, and attitudes” (Sue, 2001, p. 798). This is looking at allowing the individual to uncover any stereotypes, biases, assumptions that they may hold about another individual based on group membership.

**Knowledge.** Knowledge: “An understanding, knowledge of worldviews of culturally different individuals and groups” (Sue, 2001, p. 798).

**Skills.** Skills: “The use of culturally appropriate intervention/communication skills” (Sue, 2001, p. 798).
Appendix B: Cover Letter

June 22, 2015

Dear

We are conducting a survey of licensed mental health professionals in the state of Virginia in order to increase knowledge that can be used to improve practice with Arab American clients. It is critical that we get high levels of participation, so that we can accurately understand current knowledge, practice, and beliefs about this under-studied population. We very much appreciate your willingness to consider participating by completing and returning this survey. We are very interested in gathering data from all types of providers, exhibiting a range of experiences, working in a variety of settings, and who are both newly-trained and experienced. Participation from a wide range of individuals will help us more fully understand the most relevant issues. We really appreciate you taking the time to read this and complete the survey!

Given the current political climate, it is of particular import to examine this issue, so that future training of students and practicing professionals can accurately reflect and build upon existing information. Findings of this study will help to provide a more nuanced and comprehensive understanding of the mental health community’s understanding of Arabs/Arab Americans, and allow us to tailor future professional development to help reduce mental health disparities among racial/ethnic minorities.

This survey is being conducted by Dalia Y.N. Khoury, doctoral candidate, at Virginia Commonwealth University for her dissertation. This study has been approved by the VCU Institutional Review Board (IRB) [HM20000170] as exempt.

There are 2 ways to participate: complete and mail the enclosed survey (in the stamped, self-addressed envelope) OR go to https://redcap.vcu.edu/rc/surveys/?s=X7MDJE7LEL to complete the survey online.

Your answers are completely confidential and will only be reported in aggregate form. No identifying information will be collected. Your participation in this study is completely voluntary, and you may skip any question you do not wish to answer. The survey will take about 25-30 minutes to complete. We greatly appreciate you completing the survey at your earliest convenience.

Aggregate findings will be available once the study is completed. If you would like to receive updates on the findings as they are finalized, please contact Dalia Khoury at delkhoury@vcu.edu so that she can follow up.

If you have any questions or concerns (now or after you complete the survey), please contact:
Dalia Khoury, M.Ed.  OR  Elizabeth M.Z. Farmer, Ph.D.
Email: delkhoury@vcu.edu  Email: efarmer4@vcu.edu

Thank you in very much! We greatly appreciate your time and participation and look forward to moving forward with this work.

Sincerely,

Dalia Khoury, M.Ed.
Appendix C: Email Follow up

Email subject line: Follow Up – Dissertation Survey

Hello!

I am following up on a recent mailing you should have received from me that contained a survey I am conducting for my dissertation. *If you have already completed and returned the survey – thank you! Please feel free to disregard this email.*

My sample contained a randomly selected list of clinicians, so to maintain generalizability of the results, it is important that I get as high a response rate as possible. As such, I would greatly appreciate your willingness to complete the survey. If you still have the paper copy and self-addressed envelope, you are welcome to use that. If you no longer have that, or you would prefer to complete the survey online, please click on the following link (or copy and paste it into your browser) in order to access the online version of the survey. In either case, your responses are completely anonymous, voluntary, and you can skip any question(s) you do not wish to answer.

Survey Link: [https://redcap.vcu.edu/rc/surveys/?s=X7MDJE7LEL](https://redcap.vcu.edu/rc/surveys/?s=X7MDJE7LEL)

Thank you so much for considering this request - I really appreciate your time and effort. If you have any questions or concerns, please feel free to contact me or my dissertation advisor:

Dalia Khoury, M.Ed.,
[delkhoury@vcu.edu](mailto:delkhoury@vcu.edu)

OR

Elizabeth M.Z. Farmer, Ph.D.
[efarmer4@vcu.edu](mailto:efarmer4@vcu.edu)

Thank you!

Dalia Khoury
Ph.D. Candidate
School of Social Work
Virginia Commonwealth University
Appendix D: Measure

To begin with, a few questions about your professional role.

1. In your current position, do you work with clients in a professional/clinical capacity?
   - □ Yes. If yes, please respond to questions a-e below.
   - □ No. If no, you can skip to Question #2.

   a. If so, approximately how many clients do you generally see in a given week?
      _______

   b. During your career, approximately how many Arab or Arab American clients have you worked with?
      - □ None
      - □ 1-5
      - □ 6-10
      - □ 10+

   c. In what kind of agency/organization do you currently practice (please check all that apply)?
      - □ Private, for profit agency
      - □ Non Profit agency
      - □ Public agency
      - □ Community based mental health center
      - □ Hospital
      - □ Private Practice
      - □ University Counseling Center
      - □ Forensic setting
      - □ Veterans Administration (VA)
      - □ Other (please specify) ___________________________

   d. Which of the following best describes your role?
      - □ Case Manager
      - □ Administrator
      - □ Therapist/Clinician
      - □ Other (please specify) ___________________________

   e. What types of clients do you usually work with (please check all that apply)?
      - □ Children/adolescents
      - □ Adults
      - □ Couples
      - □ Families
      - □ Other (please specify) ___________________________
2. What is the highest degree you have attained?
   - Bachelor’s
   - Master’s
   - Ph.D.
   - J.D.
   - M.D.
   - Other

3. In what field did you receive your highest degree?
   - Social Work
   - Clinical Psychology
   - Counseling Psychology
   - Mental Health Counseling
   - Marriage and Family Therapy
   - Nursing
   - Psychiatry
   - Other (please specify)

4. In what year did you graduate with your highest degree? ________

Next, I would like to ask you a few questions about your experiences in graduate school. Please indicate the degree to which you agree or disagree with the following three statements.

5. My graduate program provided adequate multicultural coursework integrating information on Arabs?

   1 Strongly Agree  2 Somewhat Agree  3 Neither agree nor disagree  4 Somewhat Disagree  5 Strongly Disagree

6. My graduate program provided informal professional development activities (for example, community service opportunities) in which I gained exposure to working with Arabs?

   1 Strongly Agree  2 Somewhat Agree  3 Neither agree nor disagree  4 Somewhat Disagree  5 Strongly Disagree

7. My graduate program provided formal professional development activities (for example, trainings, symposia, seminars) in which I gained exposure to working with Arabs?

   1 Strongly Agree  2 Somewhat Agree  3 Neither agree nor disagree  4 Somewhat Disagree  5 Strongly Disagree

We all base our knowledge of people on direct and indirect interactions and experiences. This section asks about ways in which you may have acquired knowledge or experiences with Arabs and/or Arab/Americans.
8. In general, how would you rate your level of overall knowledge of Arab culture, values, and practices?

1                      2                      3                      4                      5
Extremely High       Somewhat high        Moderate           Somewhat low         Extremely low

9. Have you ever traveled to or lived in the Middle East?
   □ Yes
   □ No

If yes, how long (total time) have you spent in the Middle East?
   □ Less than one month
   □ Between 1-6 months
   □ Between 6-12 months
   □ More than 12 months

10. To what extent does your knowledge of Arabs/Arab Americans come from television or movies?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent

11. To what extent does your knowledge and experience with Arabs/Arab Americans come from internet sources or social media?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent

12. To what extent does your knowledge and experience with Arabs/Arab Americans come from books?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent

13. To what extent are Arabs/Arab Americans a part of your:

Immediate family?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent

Extended family?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent

Community, Neighborhood, or Town/City?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent

Professional environment (i.e. co-workers)?
    1                          2                       3                                4
    Not at all               A little              Somewhat             A great extent
This section asks a variety of questions related to practice. There are no right or wrong answers. These items should simply reflect your own experiences and ideas. Please indicate the response you believe is most accurate for you.

14. I have had little to no personal or social interactions with Arabs
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree

15. If I had a new client who was Arab, I would feel more comfortable referring him or her elsewhere than working with him or her myself.
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree

16. My own racial/ethnic background may play a role in the therapeutic encounter with an Arab client.
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree

17. Many people may hold negative attitudes, stereotypes, preconceived notions, and biases toward Arabs.
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree

18. An Arab client may be more amenable to receiving mental health services from indigenous healers or religious figures.
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree

19. I respect the religious beliefs and practices that clients may have, even if I feel that they are interfering with the therapeutic relationship.
   - [ ] Strongly Agree
   - [ ] Somewhat Agree
   - [ ] Neither Agree nor Disagree
   - [ ] Somewhat Disagree
   - [ ] Strongly Disagree
20. I believe that Arabs can be simultaneously privileged and oppressed.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

21. It is most effective for an Arab client to receive treatment from an Arab provider.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

22. I am aware of the historical oppression Arabs have experienced.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

23. I would encourage my Arab clients to differentiate their individual identities from that of their families.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

24. I would be cognizant of the role physical distance may play with an Arab client.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

25. I do not think it is appropriate for an Arab client to offer me small gifts.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

26. I would be able to tell if an individual was Arab from his or her name.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree

27. I would be able to tell if an individual was Arab from his or her physical appearance.  
   - [ ] Strongly Agree  [ ] Somewhat Agree  [ ] Neither Agree nor Disagree  [ ] Somewhat Disagree  [ ] Strongly Disagree
28. All Arabs are Muslim.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

29. I am comfortable seeking consultation from a traditional or indigenous faith healer to support my work with an Arab client.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

30. Family should be integrated in many levels of treatment with Arabs.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

31. When working with Arabs, I would tend to focus on building a working relationship than solving a concrete problem.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

32. I would find it challenging to work with an Arab female dressed in clothing where I could not see her facial features or read her body language.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

33. I would be comfortable engaging the services of a third party certified translator to communicate more effectively with an Arab client.

☐ Not Applicable (I already speak Arabic)

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

The following consist of generic items not specifically related to Arabs. Once again, there is no right or wrong answer, but responses on these items are very important to help us fully understand these issues.

33. I am ready to meet with members of minority groups in order to learn more about their culture.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree
34. I am unsure of how to use any knowledge I have of the historical legacy of racism and oppression in the therapeutic encounter.

35. Once I have learned something about a racial/ethnic group, I use that knowledge when interacting with any member of that group.

36. I know that I will never be able to know everything about a particular minority group.

37. As a mental health provider, I try to engage in color blind behaviors.

8. I am aware of the role that privilege and oppression have played in the development of my own sense of self.

39. I am unsure of what to do to begin to address the effects of privilege and oppression.

40. I am aware of the impact privilege and oppression can potentially have on one’s racial/ethnic identity.

41. I attend trainings, seminars, and
continuing education workshops in order to maintain my familiarity with minority groups.

43. I am unsure how to address the role that my own racial/ethnic background may play with a client (regardless of whether it is the same background as the client, or different).

44. I am aware of any biases that I hold about minority groups.

45. I am ready to explore and clarify the origins of any biases and/or stereotypes I may hold about individuals from minority groups.

46. I interact with members of minority groups in community and neighborhood settings.

47. I will seek out continuing education seminars, workshops, and trainings to further refine awareness of the experiences of minority groups.

48. I will try to have conversations with peers about the importance of cultural competence.

49. I will endeavor to continue to
approach new experiences with humility. Agree Agree Agree nor Disagree Disagree

The following items comprise the Multicultural Counseling Knowledge and Awareness Scale (Ponterotto, Gretchen, Utsey, Rieger, & Austin, 2002). This scale is important for the current study to help understand broader issues around cultural competence.

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<tr>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>I believe all clients should maintain direct eye contact during counseling.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Somewhat Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>2.</td>
<td>I check up on my minority/cultural counseling skills by monitoring my functioning - via consultation, supervision, and continuing education.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Somewhat Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>3.</td>
<td>I am aware some research indicates that minority clients receive &quot;less preferred&quot; forms of counseling treatment than majority clients.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Somewhat Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>4.</td>
<td>I think that clients who do not discuss intimate aspects of their lives are being resistant and defensive.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Somewhat Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>5.</td>
<td>I am aware of certain counseling skills, techniques, or approaches that are more likely to transcend culture and be effective with clients.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
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<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Somewhat Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>6.</td>
<td>I am familiar with the &quot;culturally deficient&quot; and &quot;culturally deprived&quot; depictions of minority mental health and understand how these labels serve to foster and perpetuate discrimination.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Strongly Agree</td>
<td>Somewhat Agree</td>
<td>Neither Agree nor Disagree</td>
<td>Somewhat Disagree</td>
</tr>
<tr>
<td>7.</td>
<td>I feel all the recent attention directed</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
toward multicultural issues in counseling is overdone and not really warranted.

8. I am aware of individual differences that exist among members within a particular ethnic group based on values, beliefs, and level of acculturation.

9. I am aware some research indicates that minority clients are more likely to be diagnosed with mental illness than are majority clients.

10. I think that clients should perceive the nuclear family as the ideal social unit.

11. I think that being highly competitive and achievement oriented are traits that all clients should work toward.

12. I am aware of differential interpretations of nonverbal communication (e.g. personal space, eye contact, handshakes) within various racial/ethnic groups.

13. I understand the impact and operations of oppression and the racist concepts that have permeated the mental health professions.

14. I realize that counselor-client incongruities in problem conceptualization and counseling goals may reduce counselor credibility.
15. I am aware that some racial/ethnic minorities see the profession of psychology functioning to maintain and promote the status and power of the White Establishment.

16. I am knowledgeable of acculturation models for various ethnic minority groups.

17. I have an understanding of the role culture and racism play in the development of identity and worldviews among minority groups.

18. I believe that it is important to emphasize objective and rational thinking in minority clients.

19. I am aware of culture-specific, that is culturally indigenous, models of counseling for various racial/ethnic groups.

20. I believe that my clients should view the patriarchal structure as ideal.

21. I am aware of both the initial barriers and benefits related to the cross-cultural counseling relationship.
22. I am comfortable with differences that exist between me and my clients in terms of race and beliefs.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

23. I am aware of institutional barriers which may inhibit minorities from using mental health services.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

24. I think that my clients should exhibit some degree of psychological mindedness and sophistication.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

25. I believe that minority clients will benefit most from counseling with a majority counselor who endorses White middle class values and norms.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

26. I am aware that being born a White person in this society carries with it certain advantages.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

27. I am aware of the value assumptions inherent in major schools of counseling and understand how these assumptions may conflict with values of culturally diverse clients.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

28. I am aware that some minorities see the counseling process as contrary to their own life experiences and inappropriate or insufficient to their needs.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree

29. I am aware that being born a minority in this society brings with it certain challenges that White people do not have to face.

☐ Strongly Agree ☐ Somewhat Agree ☐ Neither Agree nor Disagree ☐ Somewhat Disagree ☐ Strongly Disagree
30. I believe that all clients must view themselves as their number one responsibility.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

31. I am sensitive to circumstances (personal biases, language dominance, stage of ethnic identity development) which may dictate referral of the minority client to a member of his/her own racial/ethnic group.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>

32. I am aware that some minorities believe counselors lead minority students into non-academic programs regardless of student potential, preferences, or ambition.

<table>
<thead>
<tr>
<th>Strongly Agree</th>
<th>Somewhat Agree</th>
<th>Neither Agree nor Disagree</th>
<th>Somewhat Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
</table>


Finally, a few questions about yourself.

1. What is your sex?
   - [ ] Male
   - [ ] Female
   - [ ] Other

2. What is your racial/ethnic background? (please check all that apply)
   - [ ] White/European American
   - [ ] Black/African American
   - [ ] Asian/Asian American
   - [ ] Native American/American Indian
   - [ ] Alaska Native
   - [ ] Pacific Islander
   - [ ] Hispanic/Latino
   - [ ] Arab/Arab American
   - [ ] Other (please specify) ________________

3. What is your age?
   ______

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4.  What is your religious affiliation (if any)?
   [□] Christian
   [□] Muslim
   [□] Jewish
   [□] Buddhist
   [□] Hindu
   [□] Atheist
   [□] Agnostic
   [□] Other (please specify) __________________
   [□] No religious affiliation

Thank you again for your time! Please return your survey in the enclosed envelope. We greatly appreciate your help!

*Because this is an under-explored area of research, it can be very helpful to follow up with an opportunity to discuss this important topic in a more in-depth manner. These interviews would be conducted via phone or in person at your own convenience, and would remain confidential as well. *This is completely optional*. If you would like to be considered, please leave a phone number you can be reached at:*

   Ph#: ___________________________