

Psychometric Properties of the Satisfaction with Life Scale Among Arab Americans

Afnan Musaitif
Marquette University

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PSYCHOMETRIC PROPERTIES OF THE SATISFACTION WITH LIFE SCALE
AMONG ARAB AMERICANS

By

Afnan Musaitif, M.S.

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ABSTRACT
PSYCHOMETRIC PROPERTIES OF THE SATISFACTION WITH LIFE SCALE
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The body of literature on the Arab American population is growing both in breadth and depth. A biopsychosocial perspective has been applied in a review of the research on this population revealing gaps in the area of well-being among Arab Americans. Particularly, few studies have investigated well-being as defined by positive constructs, positive psychology, subjective well-being, or psychological wellbeing. More specifically, measures of these conceptualizations of well-being beyond the deficit model have not been validated among Arab Americans. This study aims to investigate the psychometric properties of one of the most commonly used subjective well-being instruments, the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). Results of the study found strong evidence for the validity of the SWLS among Arab Americans. Implications of these findings, limitations, and future directions are discussed.

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Chapter 1

Introduction

As our nation grows in diversity, understanding the cultural frameworks in which all individuals within society operate and function becomes imperative. This is especially true in counseling psychology, where the well-being of others is underscored with a purpose of social justice for all. Initiatives by the World Health Organization and in recent years with the Affordable Care Act have reinforced the importance of a broad, integrative biopsychosocial approach to health care. A broader approach to understanding well-being is also evident in the behavioral science and health care literatures across cultures, including in the Arab world (Nassar-McMillan, Ajrouch, & Hakim-Larson, 2014). There is great value in applying a cultural lens to the biopsychosocial approach to health as cultural distinctiveness—defined as culture-specific behaviors, attitudes, beliefs, and values—contributes in complex and significant ways to health and well-being (Nassar-McMillan, Ajrouch, & Hakim-Larson, 2014). Acknowledgement of culture in health care both increases the effectiveness of services and aligns with the philosophical underpinning of the biopsychosocial approach to understand an individual's health holistically across all domains. The body of literature on Arab Americans in this regard has steadily grown in recent years, though there is also considerable ground yet to be explored.

Arab Americans are a relatively recent minority group in the US, with a significant influx of Arabs migrating to the United States in the later part of the 20th century and early 21st century (Dallo, Ajrouch, & Al-Snih, 2008). Arab Americans are a

heterogeneous and growing population for which there is limited psychological research and inquiry compared to other minority groups in the United States. More specifically, there is a gap in research on mental health issues and the mental health experiences of Arab Americans. Much of the research that exists on this population focuses on the discrimination experienced by Arab Americans after the 9/11 attacks (e.g., Malos, 2010; Moore, 2009; Padela & Heisler, 2010; Abdulrahim, James, Yamout, & Baker, 2012). However, within the last several years there has been an increase in research addressing psychological and mental health issues within this population (e.g., Nazzal, 2015; Fakhri, 2014; Hakim-Larson, Nassar-McMillan, & Ajrouch, 2014). Assessing and understanding well-being among Arab Americans is a budding area of focus within the literature (e.g., Malos, 2010; Moore, 2009; Padela & Heisler, 2010; Abdulrahim, James, Yamout, & Baker, 2012; Amer, 2014; Fakhri, 2014; Jadalla, Hattar, & Schubert, 2015). However, there is much more to investigate in terms of how Arab Americans experience well-being and the factors that mediate well-being in this community.

Introduction and Background

The literature that addresses mental health, physical health, and sociocultural well-being among Arab Americans has received more attention in the last decade and a half, highlighting the early stages of this area of research. Several themes emerge across these three broad areas of research within the Arab American population. Various measurement issues such as a dearth of instruments validated and normed for Arab Americans coupled with the focus and definition of well-being through the deficit model when investigating this population group pose as significant issues and gaps in the

literature yet to be addressed. Many measurement issues exist due to the literature being in its early stages. Both the dearth of literature and accompanying measurement issues are also in part due to the relatively recent immigration status of Arab Americans in our nation's history compared to other immigrant and ethnic groups. There are also limited studies that address the full spectrum of well-being to include strengths, resilience, thriving, and life satisfaction within this population. These limitations will become more apparent in the review of the literature on this population.

Although the literature is in many ways in the beginning stages for this group, significant efforts to merge the current literature and empirical findings on the Arab American population have been made. One of the most prominent efforts is a book edited by Hakim-Larson and Nassar-McMillan (2014) titled *The Biopsychosocial Perspectives on Arab Americans*. To date, this is the only text to compile and integrate the literature on Arab Americans across all domains of culture and well-being through the biopsychosocial perspective. Efforts like this provide an organized and thoughtful foundation for current and future researchers to build upon.

As mentioned, several themes emerge when reviewing the literature on Arab Americans. Within the context of physical health, findings suggest that Arab Americans have somewhat differing health patterns compared to the mainstream American population. While tobacco use is of concern due to it being more prevalent, especially among Arab American adolescents, the use and abuse of other substances appear to be similar to or lower than the general American population. After reviewing the literature, it appears that tobacco is a more serious concern because it is a more socially accepted form of substance use in the Arab world, whereas other substances, particularly alcohol

and illicit substances within Muslim countries, are socially unacceptable. Diabetes is an emerging health challenge not only for Arab Americans, but also for Arabs in the Arab world as these areas become more developed and industrialized. Acculturation factors, such as linguistic barriers and time spent in the US, appear to play a role in both the prevalence of diabetes and health seeking behaviors to treat and manage this illness. Arab Americans present with a cancer profile that is unique compared to the mainstream American population but in some ways similar to Arabs in Arab countries, and a prevalence that is higher than Arab men in their home countries. This unique presentation indicates that in addition to possible genetic components contributing to the types of cancers Arab ethnicities may be more susceptible to, factors associated with living in America compared to living in their home countries may also influence the increase in prevalence. Discrimination experienced by Arab American mothers post 9/11 had negative effects on birth weights in some studies. However, a study assessing the birth weight effects of discrimination post 9/11 in Arab American mothers in the Detroit, MI area found no difference, indicating that the ethnic enclave in Detroit may provide a protective effect. There is a lack of consensus regarding the prevalence and risks of cardiovascular disease among Arab Americans, though obesity has been identified as a risk factor in several studies (e.g., El-Sayed & Galea, 2009).

These findings highlight the overall trends identified in the literature of physical health and well-being on Arab Americans. Although trends emerge within this domain of research, there is also a lack of consistency in the findings regarding issues such as cardiovascular health among Arab Americans. These inconsistent findings may be a result of measurement issues and novel strategies of collecting data on Arab Americans

due to this group being categorized as 'White' or 'Other'. There is no 'Arab' or 'Middle Eastern' category, causing significant problems for properly identifying this group in databases and other data sources. This measurement issue is not unique to the literature on physical health and is a concern across all domains of health and well-being for Arab Americans.

The collectivistic orientation of Arabs and Arab Americans highly values education and occupational success due to the family benefits of the individual's successes. Education is equally valued for Arab American women and men, though occupational success is more valued for Arab American men. Arab Americans had a higher median household income than the mainstream American population, especially prior to the year 2000. However, due to a larger influx of refugee Arab Americans who tend to struggle economically in America, the median household income of Arab Americans dropped. Even with this drop, the average median household income remains slightly higher than the overall American population (American Community Survey, 2010). These trends are significant because they highlight the diversity among this population. First, Arab Americans tend to be on either end of the spectrum of annual income, with a larger percentage making above \$100,000, and about 18% at or below poverty level (U.S. Census Bureau, 2010). Second, Arab Americans who are refugees and immigrated under dire circumstances appear to experience different struggles economically and occupationally than those who immigrated for other reasons. Escaping war, conflict, and political unrest left many of these individuals with limited educations and with trauma experiences. Those with previous professional degrees and positions

were unable to transfer their credentials, leaving them to struggle economically in their new country.

The socio-economic and physiological health and well-being of Arab Americans is undoubtedly interconnected with psychological well-being and functioning. Sociodemographic variables such as immigration and level of education are present in many studies examining the emotional well-being of Arab Americans. Additionally, levels of acculturation and discrimination are often a relevant factor in the literature examining psychological adjustment in this population. While a handful of studies assessed psychological well-being in terms of happiness and life satisfaction (Padela & Heisler, 2010; Henry et al., 2008), most studies assessed psychological well-being as the presence or absence of symptoms, usually anxiety, depression, or trauma. Still, factors influencing resilience and coping strengths have been identified, painting a fuller picture of the Arab American culture regarding psychological functioning. Culturally embedded protective factors have been found to include the collectivistic cultural view where identifying with family and community are sources of resilience, including spousal support (Beitin & Allen, 2005). Additionally, religion and religious affiliation have been sources of resilience against psychological distress (Wrobel & Paterson, 2014).

Overall, while there is not full consensus across studies, gender differences, religious differences, discriminatory effects, and effects of acculturation on psychological wellness and functioning generally have been found within the Arab American population. The link between acculturation and psychological health is a very complex one mediated by factors such as ethnic identity, perceived discriminatory experiences, perceived support, personal control, socio-demographic factors, socioeconomic factors,

self-concept, religion, and previous trauma experiences (Wrobel & Paterson, 2014). Such findings regarding the complexity of acculturation are congruent with the general findings of other minority groups in the U.S.

It appears that the lack of consensus across studies regarding sex differences, religious differences, and the effects of acculturation may also be in part due to the heterogeneity of the Arab American population. Although different nationalities and religious groups are sometimes lumped together into the broad category of Arab American, these differences may play a significant role in the adjustment and well-being of these individuals. For example, a study by Fronk et al. (1999) found that Palestinian girls with mothers who worked outside the home grew up to have more egalitarian relationships. Therefore, it may be fruitful for future studies on Arab Americans to pay more attention to group differences to better understand this pan-ethnic category of people. More attention to group variations may also shed light on the reasons for the variations in findings across the literature. It is a difficult and risky feat to research a group so richly diverse in ethnic, religious, socioeconomic, and identity backgrounds, the risk being oversimplifying, overgeneralizing, or perpetuating misunderstandings of an already misunderstood and understudied population. However, despite these risks and difficulties, ethical and conscientious researchers have been pushing past methodological and measurement barriers in an effort to bridge the vast gaps in literature on this population.

A common finding across both physical and mental health domains is barriers to services among the Arab American communities that prevent positive health seeking behaviors. Poor English skills, myths and misconceptions about physical diseases and

mental health conditions, knowledge deficits about the American healthcare system, stigma, and a general mistrust regarding receiving services negatively impacts health-seeking behaviors. Additionally, although the collectivistic orientation provides protective factors against psychological distress, it is also the driving force behind the strong emphasis on avoiding public shame which feeds the mental health stigma causing a reluctance to seek services or treatment. These barriers lead to poor care and treatment of both physical and mental health issues, further perpetuating the current issues and ailments among Arab Americans.

Acculturation is at the center of much of the research on Arab Americans in both medical and psychological health domains. In reviewing the literature on Arab Americans, it becomes apparent that the mixed findings on how acculturation affects this group displays a different outcome pattern compared to other immigrant groups. More specifically, Arab Americans do not appear to fit the phenomenon of the immigrant paradox, where immigrants are generally healthier than others in the general U.S. population despite challenging socioeconomic conditions and tend to be at an increased risk for physical and mental health issues the longer their stay in the U.S. This phenomenon has been particularly apparent in literature on the Latino population in the U.S (Alegria et al., 2008). However, when reviewing the literature on Arab Americans, it appears that some studies show quite the opposite, that the longer Arab Americans stay in the U.S (or more acculturated/assimilated) the better their health outcomes (e.g. Henry et al., 2008, Amer & Hovey, 2007). Yet, other studies found longer stays in the U.S. are more associated with lower health outcomes (e.g. Dallo & Borrell, 2006) indicating that

Arab Americans as a collective group do not present one way or another with regards to this phenomenon.

The biopsychosocial perspective illustrates how intertwined these findings and facets of the Arab American experience are. The educational, economic, and occupational experiences and values of this group operate synergistically with psychological adjustment and experiences and physical health. The unique and rich experience of the Arab and American cultures interacting in the current American socio-political climate is also continually changing and evolving; it is an experience shaped and shaping the interconnected physiological, psychological, and socioeconomic functioning of these individuals. As these threads are woven together through continued empirical research and inquiry, the understanding of overall well-being through the Arab American cultural lens will be illuminated, bridging gaps at both the societal and individual levels.

The Present Study

The overall aim of the current study is to further understand the concept of well-being within the Arab American population. The biopsychosocial approach has been the focus and structure of the brief overview of the literature, but the question remains, what constitutes well-being? Even in the broad sense, well-being has been conceptualized through various perspectives that work at elucidating the good life, the life well-lived, or happiness. As mentioned earlier, investigating well-being through approaches that move away from the deficit model and towards positive functioning and thriving is a limited area of research among the Arab American population. In an effort to merge two bodies

of research, that of Arab Americans and that of well-being, well-being perspectives and measurement issues pertaining to these perspectives will be briefly reviewed.

Eudaimonic and hedonic well-being are two of the most widely used perspectives on well-being, and each stemming from different philosophical roots and distinctions in axiology. Simply put, hedonic well-being consists of happiness or pleasure and focuses on the balance between positive and negative affect, whereas eudaimonic well-being consists of actualizing human potential (Lent, 2004). Research conducted from the hedonic and eudaimonic schools of thought are often referred to as subjective and psychological well-being, respectively.

Subjective well-being developed from the hedonic perspective and consists of three related but distinct components: life satisfaction, positive affect, and the absence of negative affect (Diener et al., 2002). Instruments and measures of subjective well-being have become a favored approach among researchers and have even been dubbed the “gold standard of well-being” (McGregor & Little, 1998, p. 505). The Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) and the Positive and Negative Affect Schedule (PANAS; Watson, Clark, & Tellegen, 1988) are two of the most widely used instruments. These self-report measures tap into life satisfaction, a construct defined as the global cognitive evaluation of one’s life as a whole, and the affect components of subjective well-being respectively. The SWLS and PANAS have been assumed to respectively assess cognitive and affective dimensions of subjective well-being, though such a distinction has been challenged as it is likely that they each reflect both dimensions of subjective well-being (Lent, 2004). Researchers indicate there are variations in theoretical perspective on which dimensions constitute subjective well-

being, specifically, whether life satisfaction is truly distinct from the amount of positive or negative affect a person experiences. Lent (2004) states, “Conceptually, rather than representing categorical differences in cognition versus affect, life satisfaction and positive-negative affect may involve subtler, quantitative distinctions in the globality-specificity of feeling descriptors. Life satisfaction probes for relatively broad, abstract affective judgements (i.e., how happy or content one generally feels), whereas positive and negative affect tap the experience of more specific, intense, or defined states... summed over different life contexts” (p.485). Evidence supports that life satisfaction and positive and negative affect are separate constructs (Diener et al., 2002). To this end, researchers have tended to study the intercorrelations among these distinct components of well-being and have developed models to explain how they function together with other sources such as personality or situational factors (Andrews & Robinson, 1991).

Psychological well-being is an alternative approach to well-being that is more closely aligned with the eudaimonic perspective. Carol Ryff, a key well-being writer, has argued that the aforementioned subjective well-being measures lack theoretical grounding and neglect aspects of positive functioning (Ryff, 1989). Ryff (1995) defines psychological well-being as “the striving for perfection that represents the realization of one’s true potential” (p. 100). This perspective reflects six ideals: autonomy, personal growth, self-acceptance, purpose in life, environmental mastery, and positive relations with others (Ryff & Singer, 1998). The most widely used instrument associated with this perspective is Ryff’s multidimensional instrument that assesses these six ideals and relates them as indicators of emotional and physical health. Among the six components,

Ryff and Singer (1998) prioritized life purpose and quality social relationships as primary “goods in life central to positive human health” (p. 3).

Research has found that Ryff’s multidimensional scale correlates strongly with life satisfaction (Ryff, 1989). Even with such strong correlations, empirical findings support that hedonic and eudaimonic conceptualizations remain distinct approaches to understanding well-being. Given they remain distinct, but very much related, Ryan and Deci (2001) have concluded that well-being may best be thought of as a multidimensional phenomenon including aspects of both psychological/eudaimonic and subjective/hedonic views.

The distinctions and commonalities in the conceptualizations of well-being and instruments used to measure well-being, whether conceived as components or the broader multidimensional union of components, yield a validity dilemma. Lent (2004) states “there is no ultimate independent ‘external’ criterion against which subjective or psychological well-being can be compared” (p. 486). In fact, appraisals of well-being, regardless of orientation, are “subject to temporal, contextual, and a variety of methodological and measurement considerations” (Lent, 2004, p. 487). Additionally, researchers have investigated many variables that may predict or promote well-being. Most of the research in this area is related to hedonic-subjective well-being (Lent, 2004). Demographic variables such as marital status, religion, and age have been found to be related to well-being. However, Lent (2004) asserts that these life domains alone are less predictive of life satisfaction, whereas satisfaction within a particular domain such as marriage may be more predictive. Therefore, “knowing how someone feels about their marriage or job is far more predictive of their overall life satisfaction than is the mere fact

that they have a spouse or job” (p. 490). Particular personality factors have also been found to be highly predictive of subjective well-being. In fact, Diener et al. (1999) concluded that “personality is one of the strongest and most consistent predictors of subjective well-being” (p. 279).

Statement of the Problem

As highlighted throughout the literature review in Chapter 2, significant gaps exist in the psychology literature on Arab Americans. On an even broader level, there is a great deal yet to be explored in investigating construct equivalence across cultures when assessing well-being. This extends to research on the Arab American population. Constructs enveloping well-being through both hedonic and eudaimonic perspectives, extending the scope of inquiry to coping strategies and mechanisms, strengths, and positive functioning, are areas that are waiting to be investigated among the Arab American population.

Exploring and establishing construct equivalence of well-being instruments is essential to ensure ethical and valid investigation of well-being in this group. As highlighted in previous research on other collectivistic oriented cultures, such as the Chinese American culture, establishing construct equivalence provides a more meaningful and accurate assessment and interpretation of results. This is especially true considering most instruments are created on the mainstream individualistic orientation of the West. A particular area of interest regarding establishing construct equivalence and culturally appropriate measures is the creation or validation of a measure that capture how collectivistically oriented cultural identities conceptualize well-being.

In order to accomplish this while holding to the standard of construct equivalence across cultures, instruments assessing well-being must first be validated for the Arab American population. As highlighted above, there is a gap in the literature on how Arab Americans experience well-being. Prior to investigating how they experience well-being, it is prudent to ensure instruments used on this group of individuals are indeed measuring what they intend to measure. It is unknown whether Arab Americans experience well-being as other cultural groups in the United States, or whether the construct as defined by certain instruments also measures that same construct among Arab Americans. To date, no well-being measure through either eudaimonic or hedonic perspectives has been validated on Arab Americans. This may very well be the first step to enhancing the quality of empirical work and reducing measurement issues. A gap that emerges out of these intersections in the literature is the lack of investigation of the psychometric properties of wellbeing measures for Arab Americans.

Research Questions and Hypotheses

Given the gaps in literature presented, the purpose of this study was to extend measures of well-being to the Arab American population by establishing construct validity on a widely used well-being instrument with a sample of Arab American individuals. The goals of the present study are five-fold and specifically investigate the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985). There are several reasons this study aimed to focus on the SWLS as opposed to other measures. First, it is one of the most commonly used and favored approaches among researchers. Investigating the validity of this measure within a new cultural context will allow future

research derived from the use of this instrument on Arab Americans to be placed within the larger context of well-being literature, moving away from the deficit model of well-being. Many measurement issues exist within the literature on Arab Americans, in part due to this group being a relatively new immigrant group to the United States. Assessing a widely-used measure that researchers may be more likely to use will allow the quality of research on Arab Americans to be enhanced in addition to strengthening empirical work with this population. Considering much of the research base on variables related to well-being reflect subjective well-being (Lent, 2004), utilizing an instrument that is widely used within this conceptualization will allow the literature on Arab Americans and well-being to be easily compared to other literature within this context.

Although this study aimed to assess one instrument reflecting the hedonic perspective of well-being, investigating other instruments, particularly those associated with the eudaimonic perspective, is also of importance. Due to reasons related to practicality and time restraints, this study was limited to only one view. As illustrated in the discussion earlier, however, both perspectives of well-being may tap into different components of well-being. Therefore, assessing the validity of instruments related to both the hedonic and eudaimonic perspectives are equally important to investigate among other cultures. For purposes of practicality, this study focused on the SWLS, which will hopefully give rise to future studies to validate and assess instruments related to other conceptualizations of well-being among Arab Americans.

The first aim of this study was to examine the internal structure of the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) in a sample of Arab American adults. Cook and Beckman (2006) state, “The results of any psychometric

assessment have meaning (validity) only in the context of the construct they purport to assess... because validity is a property of inferences, not instruments, validity must be established for each intended interpretation” (p. 166). The second aim of the present study was to test the reliability of the SWLS in a sample of Arab American adults. The third aim was to examine the evidence for the validity of the SWLS by examining how it correlates to measures known to either correlate or not with the SWLS in the literature. Specifically, physical health, mental health, affectivity, and personality measures will be examined in an effort to incorporate the broader biopsychosocial approach of well-being. The fourth aim was to assess social support correlates with SWLS. The rationale for investigating whether social support is correlated with SWLS in this sample originates from the collectivistic nature of Arab American culture. The fifth aim was examining whether gender differences exist for this sample in the SWLS.

It was hypothesized that the internal structure of the SWLS may be similar in a sample of Arab Americans compared to what is found in other populations. A one-factor structure of the SWLS has been found on mainstream Western samples and in other cross-cultural samples (Pavot and Diener, 1993). In a review of literature on the SWLS, Pavot and Diener (1993) state, “Diener et al. (1985) conducted a principal-axis factor analysis on the SWLS, from which a single factor emerged, accounting for 66% of the variance of the scale. This single-factor solution has since been replicated (Arrindell et al., 1991; Blais et al., 1989; Pavot et al., 1991)” (p. 108). Based on these findings, the SWLS appears to measure a single dimension. Additionally, it was hypothesized that the SWLS will be reliable among this sample as there are no obvious indications to assume otherwise. It was also hypothesized that Arab Americans may also present with similar

correlations as the cultural framework also incorporates individualistic factors with the variables of physical health, mental health, and personality. It was hypothesized that social support will be positively correlated with satisfaction with life as prior research indicates the collectivistic orientation of Arab American culture is a protective factor. These hypothesized correlations are illustrated in Table 1. Lastly, it is unclear if gender differences in life satisfaction would emerge with this sample. Some studies found that men experience slightly higher levels of happiness than women, though the magnitude was small (Haring, Stock, Okun, 1984). Other studies have found that women experience higher levels of satisfaction, though after controlling for other variables, gender differences disappear (e.g. Inglehart, 1990; White, 1992).

Table 1

Hypothesized Correlations among Study Variables

	SWLS	University of Michigan Happiness Item	SF-12	CES-D	GAD-7	MSPSS	Neuroticism	Extraversion	Positive affect	Negative affect
SWLS										
University of Michigan Happiness Item	+									
SF-12	+	+								
CES-D	-	-	-							
GAD-7	-	-	-	+						

MSPSS	+	+	+	-	-					
Neuro- ticism	-	-	-	+	+	-				
Extra- version	+	+	+	-	-	+	-			
Positive affect	+	+	+	-	-	+	-	+		
Negative affect	-	-	-	+	+	-	+	-	-	

The study utilized an online survey composed of demographic information, Satisfaction With Life Scale, the Short Form Health Survey (SF-12), the Center of Epidemiological Studies – Depression Scale, the Generalized Anxiety Disorder Screener, the National Survey of University of Michigan Happiness Item, extroversion and neuroticism personality scales, Positive and Negative Affect Schedule – Short Form, and the Multidimensional Scale of Perceived Social Support. The survey was distributed to fluent English-speaking Arab American adults through various list-servs, social media sites, and organizations.

Once data were collected, descriptive statistics were computed. Reliability was assessed for the instruments used in the survey. An exploratory factor analysis investigated whether the internal structure of the SWLS holds within this sample of Arab Americans, and the physical and mental health variable correlations were examined to establish discriminant and convergent validity. Demographic and personality correlates were also examined and then compared to correlations reported in the literature for the mainstream population. Lastly, the correlation between perceived social support and satisfaction with life were also analyzed.

Chapter 2

Literature Review

The pursuit of the good life, how to define, measure, and promote it, has been an age-old quest for all of humanity. In our modern world, this quest takes several forms respective to the field, population, or purpose in question. Within the field of psychology and context of mental health, this pursuit has taken its shape as the study of well-being. Both subfields of counseling and clinical psychology identify themselves as partaking in the effort of improving and promoting well-being and positive functioning in addition to alleviating distress and maladjustment (Society of Counseling Psychology, 2016; Society of Clinical Psychology 2016).

If we take a few steps back and assess how the field of psychology has historically approached mental health research and inquiry, we will see it has mainly been through the lens of psychological dysfunction and deficits (Ryff & Singer, 1996). Even so, positive conceptualizations of mental health can be found throughout the development of the field, especially in counseling psychology. Counseling psychology has included a focus on individuals' strengths, historically distinguishing it from clinical psychology (Lent, 2004). Although the appeal to include the promotion of positive functioning may be a relatively new focus in the field, interest in individual well-being and human thriving has been present for centuries around the world, dating as far back as the 4th century BCE (Dahlsgaard, Peterson, & Seligman, 2005). An investment in optimizing and guiding well-being can be found in the contexts of Abrahamic, Greek, and Eastern philosophies throughout the ages.

Perspectives on Well-Being

A holistic approach to understanding well-being can be achieved by utilizing a biopsychosocial lens in which the physical, psychological, and social elements of an individual are systematically included in conceptualizing overall health and functioning (Kirana et al., 2009). The biopsychosocial approach is primarily used in the health care setting, but has undeniably been used as a framework, whether directly or indirectly, by mental health professionals and researchers. This approach considers the emotional, cognitive, interpersonal, socio-economic, socio-cultural, and physical elements of an individual. Although a person's overall functioning can be broken down into such elements, this does not suggest that they operate in a mutually exclusive manner. It goes without saying, these parts operate synergistically to promote and maintain an individual's functioning. The biopsychosocial approach is the primary lens with which to begin to discern the construct of well-being. In this way, the elements of an individual's functioning set the foundation to explore conceptualizations of well-being.

Considering that interest in well-being and positive functioning spans across various disciplines and time periods, it is useful to differentiate well-being from other similar constructs. A construct that is sometimes used interchangeably with well-being is "quality of life". Quality of life is distinct from well-being in its breadth and setting. This distinction, however, is not a clear one due to the lack of consensus on a definition of quality of life in the literature. What is agreed upon is that it is a broader concept that is more often used in the health care field and encompasses many other constructs and instruments including life satisfaction, social relationships, adverse effects of treatment, and measures of well-being (Gladis et al., 1999).

It is also useful to make a distinction between well-being and positive psychology. The latter is a movement characterized by an effort to draw the greater field of psychology to focus on positive functioning and adjustment (Lent, 2004). Well-being is a component of positive psychology, just as it is a factor of quality of life. It is an essential element to fulfill the mission of positive psychology and draw the focus from one end of the spectrum of psychological functioning to the other. It becomes clear in this brief overview that although there are distinctions between well-being and other similar constructs, significant overlap and dependencies exist, highlighting the complex nature of this topic.

There are varying theoretical and practical perspectives on well-being. It is far too great a feat to comprehensively cover these perspectives in a brief overview. Thus, the next section will review the fundamentals of the two main perspectives, hedonic and eudaimonic well-being.

Hedonic well-being. Simply put, the pursuit of happiness and pleasure characterize what is known as hedonic well-being. The concept of *subjective well-being* (SWB) has risen from research conducted from this perspective and highlights the emotional experience and state of an individual. More specifically, SWB is comprised of three components: life satisfaction, positive affect, and the absence of negative affect (Diener et al., 2002). These components essentially boil down to an “affect-and-cognition” approach in which affect is measured by subjective reports of an individual’s happiness, and life satisfaction is measured by an individual’s cognitive evaluation of their life as a whole (Lent, 2004). In fact, measures of happiness and satisfaction have

been quoted to be the “gold standard of well-being” (Lent, 2004, p. 484), making it the empirically based perspective when contrasted against eudaimonic well-being.

Eudaimonic well-being. The eudaimonic perspective is characterized by the pursuit to actualize the self beyond personal happiness; to discover and work at achieving one’s fullest potential. The emphasis therefore lies in action, what an individual does and thinks rather than how they feel (Lent, 2004). Thus, eudaimonia is achieving psychological growth and seeking out purpose in life. Research from this tradition developed *psychological well-being* (PWB), which sought to add a theoretical grounding in measuring and defining well-being, an element that is criticized as being absent in SWB (Ryff, 1989). To this end, PWB incorporates elements of positive functioning. Through this lens happiness is the “by-product of a life that is well-lived” as opposed to “the main message” (Ryff & Singer, 1998, p. 5). This life well-lived is comprised of six ideals: autonomy, personal growth, self-acceptance, purpose in life, environmental mastery, and positive relations with others (Ryff, 1989).

Two perspectives, one experience. Although these two perspectives have distinct features and roots that differentiate them, they both capture different aspects of well-being in a seemingly complimentary way. Therefore, the two perspectives can be merged in a joint framework (Lent, 2004). For example, while individuals encounter challenging activities they can simultaneously experience happiness. In addition, the pursuit of self-actualization in and of itself leads to the goal of hedonic satisfaction, highlighting that the two perspectives are intertwined and can be utilized together.

Cultural Context of Well-Being

Matsumoto (2001) illustrated the profound importance culture has on an individual's experiences when he stated, "culture is to human behavior as operating systems are to software, often invisible and unnoticed, yet playing an extremely key role in the development and operation" (Matsumoto, 2001, p. 3). Although advancements have been made in multicultural research in the field of psychology, it is still a budding area within well-being research.

At present, counseling and clinical psychology both make clear mentions to the importance of diversity and multiculturalism in alignment with achieving well-being and alleviating distress in their mission statements (Society of Counseling Psychology, 2016; Society of Clinical Psychology 2016). However, historically, the field neglected culture in its development of theory and assessment (Downey & Chang, 2014). This ethnocentric approach led to models of inferiority and deficits in explaining ethnic differences, which bore the consequence of individuals outside of the majority culture to be pathologized (Sue & Sue, 2013; Downey & Chang, 2014; Lopez et al., 2002). In this way, any departure from the dominant culture was viewed negatively. In general, these models viewed ethnic and cultural differences either as biologically or adaptively inferior, and ignored individual differences (Lopez et al., 2002).

Eventually the field transitioned from models of inferiority and deficits to models that recognized and valued cultural differences, explored the inherent strengths of multiculturalism, and began a discussion on cultural influences within a positive contextual framework (Lopez et al., 2002). Many models developed, each with a different conceptualization of cultural differences. For example, one model takes on a salad bowl

perspective, which recognizes the importance of cultural differences and encourages groups to maintain their distinct cultural identities inclusive of both their ethnic and American values. Other models recognize each individual person as having their own unique culture and incorporates other aspects of diversity that extends beyond lines of ethnicity and race (Lopez et al., 2002). Such models have created a shift away from viewing cultural differences as inferior and have integrated the importance, value, and strengths of cultural diversity.

As discussed earlier, the pursuit of the good life transcends philosophies, traditions, and time. While this pursuit is universal, the definitions and approaches to achieve happiness differ across cultures. Sheu (2014) illustrates this point by contrasting how North Americans and East Asians define happiness. She states that East Asians find happiness through interpersonal connectedness and “a balance between positive and negative affect” (p. 62), whereas the “North American cultural context tended to define happiness in terms of personal achievement and were motivated to maximize the experience of positive affect” (p. 62). This is just one example of how two cultures conceptualize the affective definition of well-being differently. While the pursuit of happiness is universal, the meaning and experience of happiness is shaped by culture (Sheu, 2014). This distinction is even more pronounced in the literature surrounding the impact of collectivistic and individualistic cultures have on psychological functioning.

The evaluation of psychological constructs across cultures is a vital component to multicultural and cross cultural research. Lopez et al. (2002) cautioned against the dangers of investigating group differences without considering the variations in how the psychological constructs in question manifest, and to what degree, across different

groups. The unfortunate consequence of not considering the variations of construct meanings across cultures could result in negative generalizations of these different groups, when in fact these constructs are not equivalent cross-culturally, leading to skewed and misinterpreted results. Taking this precaution when researching cross-culturally allows the researcher to place the construct in a culturally appropriate framework, moving away from ethnocentric assumptions of health and well-being.

The meaning and experience of affective well-being, or subjective happiness and satisfaction, varies across cultures. In an attempt to understand the cultural variations of well-being, researchers have investigated these differences both conceptually and empirically (Sheu, 2014). Empirical variations of well-being exist across cultures, but it is the conceptual underpinnings of the constructs being investigated that explain these differences, thus placing them in context. For example, in a study by Jang et al. (2010) less acculturated Korean Americans were less likely to endorse positive affect items than more acculturated Korean Americans after controlling for depressive symptoms. These results could be interpreted as Korean Americans having lower levels of happiness. However, when considering the culturally appropriate norms of affective expression to individually oriented, or 'I' phrased, items, the results are interpreted differently. Lower levels of positive affect in this population are more indicative of the culturally appropriate norms, and may not have even measured what it was intended to measure in the first place. The cultural context in this case shapes how the results are interpreted, providing culturally accurate meaning. Race and culture have also been shown to influence how an individual recalls their emotional states (Sheu, 2014). For example, Asian Americans tend to report more unpleasant emotions and less pleasant emotions

than European and Hispanic Americans (Scallan et al., 2009). Culture influences the expression and experience of emotion, and additionally culture and cultural membership have a significant effect on well-being (Sheu, 2014).

Culture also impacts the cognitive appraisal of a person's satisfaction with their life. In a review of literature on life satisfaction and multicultural research, Robitschek et al. (2014) found that culture is a major determinant of satisfaction of life only after basic needs such as food and shelter are met, highlighting the critical role culture plays in determining life satisfaction. Furthermore, experiences of discrimination can have both positive and negative effects on satisfaction with life. Although it is easy to understand the negative effects of discrimination, Robitschek et al. (2014) explains that systemic and societal discrimination can actually strengthen an individual's ethnic identity, leading to higher levels of satisfaction. A common theme emerges throughout the literature regarding how cultures experience well-being, that theme being the effects of discrimination. Especially when investigating the experiences of minority cultures within a majority cultural context, the effects of discrimination cannot be overlooked as they clearly have lasting effects on an individual's outcome.

Resilience and coping are two other prominent topics in the literature of well-being in the cultural context. Resilience is defined as "the ability to thrive, mature, and increase competence in the face of adverse circumstances or obstacles" (Gordon, 1996, p.63). Lopez et al. (2002) summarize that those who are able to cope and utilize positive behaviors have a greater chance of thriving under stress. Different ethnicities and cultures utilize different coping processes, or use the same ones but to different degrees, under stress or in the face of adversity. For example, Lopez et al. (2002) review how religion

and spirituality are used by different cultures and ethnicities to varying degrees as coping mechanisms. They cite a study by Rosen (1982) that found that although African Americans and Caucasians both utilize religion to cope with everyday life, African Americans utilize their faith more often.

There is considerable research on racism related stress and discrimination across ethnicities. It is compelling to address one prominent trend within the literature on racism and discrimination related to stress and the role ethnic identity plays as a moderator in psychological outcomes. In a review of the literature on coping with racism, Brondolo et al. (2009) note that research suggests that developing an ethnic identity has stress-buffering effects and acts as a coping mechanism in and of itself. A developed ethnic identity encompasses an individual to have historical and experiential knowledge about their own group and social position, helping them differentiate that experiences of racism or discrimination are not a personal attack but rather an attack on the group, safeguarding their self-esteem. In addition, the sense of belonging to a group is also protective in these instances. However, Brondolo et al. (2009) state some research findings have shown that ethnic identity and pride may not buffer against race-based ostracism even when they have other social connections.

Although seeking social support is identified as a coping mechanism in the face of racism and discriminatory stress, quantitative studies provide little support that it actually buffers the effects of racism on psychological health (Brondolo et al., 2009). However, these findings contradict anecdotal reports and qualitative studies that find it does buffer the effects of racism. Uchino (2006) explains that the disparities in these findings are due to variations in conceptualization and measurement of social support across studies. It

appears that quantitative studies may also be tapping into different constructs and phenomena than qualitative research.

Whether coping in the context of discriminatory stress or in the broader context of psychological distress, research shows that culture influences the adaptive use of various coping strategies and how an individual's well-being is affected (Lopez et al., 2002).

When assessing coping across cultures, special care must be made to avoid generalizing one coping model or behavior from one group to another, in the same way care must be taken with construct equivalence.

Measurement of Well-being in the Cultural Context

A significant measurement issue in the domain of assessing well-being in the cultural context is the examination of cultural and conceptual equivalence across cultures (Robitscheck et al., 2014). Cultures operationalize happiness, satisfaction, one's life, interpersonal relationships, and much more in diverse ways. Exploring these cultural nuances allows researchers to capture a broader, deeper, and more accurate assessment of potential predictors, moderators, and mediators of well-being. Instrument items may carry different meanings for different people, rendering results that may not be comparable to the group in which the instrument was normed.

For example, instruments or items that were developed for individualistically oriented cultures may target certain constructs ineffectively if used on collectivistically oriented persons. To illustrate this point, Ho et al. (2014) state that the Satisfaction with Life Scale and the Subjective Happiness Scale are the most widely used instruments measuring well-being among the Chinese. The authors state that several items in both

instruments focus exclusively on an individual's self-appraisal, asking about 'me', rather than 'we'. Additionally these measures did not include items about other-oriented well-being, missing the potential full concept of well-being in these cultures. Ho and Cheung (2007) developed an instrument to include culturally operationalized appraisals of well-being and found that Chinese individuals can report high levels of well-being while abiding by social norms by presenting with low positive emotion (Ho et al., 2014).

Strengths also need to be considered in a multicultural context (Capielo et al., 2014). However, some argue that strengths are universal and thus empirical assessment need not consider cultural nuances (e.g., Seligman & Csikszentimihalyi, 2000). There is no empirical evidence to support either view. However, measures of strengths are typically developed on mainstream White Americans, providing no comparison between groups to assist supporting either viewpoint (Capielo et al., 2014). Although there is no empirical evidence to exclusively support either viewpoint, Diener and Ryan (2009) highlight that the value of numerous psychological constructs varies across cultures and thus provide varying contributions to subjective well-being. If such differences exist for psychological constructs such as self-esteem, guilt, or pride, then would they not exist for strengths as well? In addition to this being a potential measurement concern, it is also a gap in the literature.

In general, cross-cultural equivalence of constructs in measuring well-being is a significant issue researchers are faced with when developing and using instruments. Most instruments were developed in the West and on the mainstream population (Ho et al., 2014). A continued awareness of these issues and efforts to adapt and create culturally sound measures of well-being will not only enhance the literature base cross-culturally,

but more importantly, address the ethical responsibility of researchers to investigate and produce valid and reliable results.

Satisfaction With Life Scale

The Satisfaction With Life Scale (SWLS) has been investigated in diverse populations that include college student samples both in the U.S. and abroad, adult samples, inmates, veterans, individuals with physical disabilities, psychotherapy clients, persons in inpatient treatment for alcohol use, elderly caregivers, and abused women (Pavot & Diener, 1993). Additionally, the SWLS has also been investigated cross-culturally in samples of Chinese students, Korean university students, Russian students, French-Canadian students, and various samples of Brazilians (Shao & Diener, 1992; Balatsky & Diener, 1993; Blais et al., 1989; Gouveia et al., 2008). The psychometric properties of the SWLS have also been investigated when translated to other languages including an Arabic version using a sample of undergraduate students at Bethlehem University in the West Bank (Abdallah, 1998). The investigation of the SWLS in diverse populations has received wide attention over the decades, though it has yet to be tested among Arab Americans.

SWLS Characteristics and Norming Data. The SWLS is designed to measure one component of subjective well-being, the global cognitive evaluation of life satisfaction. The other two components of subjective well-being include the presence of positive affect and the absence of negative affect (Diener et al., 1997). The affective components of subjective well-being are usually evaluated with other measures such as the Positive and Negative Affect Schedule (PANAS; Watson et al., 1997) or the Scale of

Positive and Negative Experience (SPANE; Diener, Wirtz, Tov, Kim-Prieto, Choi, Oishi, and Biswas-Diener, 2010). Originally the SWLS was a 48-item instrument with three factors: life satisfaction, positive affect, and negative affect (Diener et al., 1985). In this original version, 10 items loaded onto the life satisfaction factor. These 10 items were then reduced to 5 items in an effort to reduce wording redundancies with no effect on reliability. The current version of the SWLS is comprised of these 5 items. The items are five statements with which the respondent may agree or disagree on a 7-point Likert-type scale that ranges from 1 (strongly disagree) to 7 (strongly agree). The item statements are “In most ways my life is close to my ideal”, “The conditions of my life are excellent”, “I am satisfied with my life”, “So far I have gotten the important things I want in life”, and “If I could live my life over, I would change almost nothing”. To score and interpret the instrument, the items are summed with higher scores indicating higher levels of satisfaction with life.

A score of 20 represents the neutral point, where the individual is equally satisfied and dissatisfied with their life, when interpreting the scale. Scores between 21 to 25 represent being slightly satisfied, scores between 26 and 30 represent being satisfied, and 30-35 represent being highly satisfied. Scores between 15 and 19 represent being slightly dissatisfied, scores between 10 and 14 represent being dissatisfied, and scores between 5 and 9 represent being extremely dissatisfied with life. A review of research on the SWLS by Pavot and Diener (2009) found that most sample groups (including the various groups listed earlier) had average SWLSs scores within the slightly satisfied to satisfied range (23-28) and noted this “level of satisfaction is in good agreement with the frequent finding that in Western countries a preponderance of respondents report well-being above

the neutral point on a variety of measures” (p. 105). The average score of a sample of Arabic-speaking Palestinian undergraduate students in the West Bank was in the slightly dissatisfied range (17.56), which is lower than the average score found in Western countries (Abdallah, 2012). Abdallah (2012) found that the average score of Arabic-speaking Palestinian students are comparable to other non-Western cultural groups such as Soviet students (M=16.3) in a study by Balatsky and Diener (1993) and Chinese Students (M=16.1) in a study by Shoa and Diener (1992). It remains to be discovered whether Arab Americans, a cultural group that adheres to both individualistic and collectivistic values, experience similar levels of life satisfaction to the Western country in which they live and belong, or closer to their collectivistically oriented non-Western counterparts.

Researchers have also examined the reliability and sensitivity of the SWLS, an area that is important to investigate to ensure that the instrument is not merely measuring the individual’s current, or momentary, mood state and is in fact measuring overall life satisfaction. Across many studies, the SWLS has been found to have strong reliability (Pavot and Diener, 2009). In their review, Pavot and Diener (2009) found that the coefficient alphas ranged from .79 to .89 across several studies (Alfonso & Allison, 1992; Pavot et al., 1991; Blais et al., 1989; Diener et al., 1985; Yardley & Rice, 1991; Magnus et al., 1993). The test-retest coefficient ranged from .50 with a ten-week interval to .84 with a one-month interval indicating test-retest reliability decreases over a longer period of time. This decrease is explained by possible life events being predictive of life satisfaction. This was found to be true in a study by Magnus et al. (1993) where both good and bad life events affected life satisfaction scores on the SWLS. The SWLS has

been found to detect change in life satisfaction over time as evidenced in a study by Diener, Sandvik, et al. (1991) which found the SWLS can detect changes “such as the increase of life satisfaction after a period of psychotherapy or the decrease in life satisfaction as one’s spouse becomes more debilitated” (Pavot & Diener, 1993, p. 107).

A one-factor solution was found using a principal-axis factor analysis on the SWLS. This single-factor solution accounted for 66% of the variance in the original 5-item scale (Diener et al., 1985). Since the 5-item SWLS was created, a one-factor solution has been consistently replicated across studies including translated versions of the scale (Pavot & Diener, 1993). Of the five items, the last item has the weakest factor-loading compared to the other items. Pavot and Diener (1993) state this may be in part due to this item inquiring about past, whereas the first four items inquire about the present, though this hypothesis has yet to be tested. In the sample of Palestinian undergraduate students, a principal-components analysis revealed a single-factor solution, though it accounted for 44% variance, which is less than what was found in the Diener et al. (1985) study. In a sample of Brazilian participants, a single-factor solution was found that accounted for 57% of the variance (Gouveia et al., 2009). In a sample of non-psychiatric medical patients in Amsterdam, a single-factor solution was found and accounted for similar variance to the American sample of 66% (Arrindell et al., 1991).

The factor structure of the SWLS has been investigated across many sample populations. Although previous studies have all indicated a single-factor structure for the SWLS, McDonald (1999) and Vautier et al. (2004) proposed alternative factorial structures for the SWLS. One alternative model is a two-factor structure with the last two items loading on a second factor. Vautier et al. (2004) states, “This alternative

measurement model reflects a qualitative structural variability, because the covariance structure is described as the result of two additive interrelated *valuations* (in the sense of information integration theory, e.g., Anderson, 2001) instead of only one: a valuation based on *present* satisfaction... and another one based on *past* satisfaction.” (p. 236). In this alternative model, the first three items on the SWLS are modeled in ‘present’ valuation group and the last two items are modeled in the ‘past’ valuation group. A second alternative model was proposed as an autoregressive model that expresses order effects, which can occur when items are presented in successive order. This model investigates the temporal features of life satisfaction. Vautier et al. (2004) assessed whether there was structural variability dependent on the age of the participants and dependent on whether the items were presented in immediate succession vs. scattered ordering. This study found that alternative models were accepted. Although the possibility of alternate factorial structures exists, some studies have confirmed via confirmatory factor analysis that a unidimensional model is the best fit across some samples such as the five Brazilian sample groups (Gouveia et al, 2009).

Construct validity for the SWLS has been extensively examined. The SWLS has been found to have moderate convergence with other measures related to life satisfaction, even those using different methodological approaches such as interviewer ratings (Pavot & Diener, 1993). These modest correlations were found between the SWLS and other measures such as the Andrews/Withey Scale, the Fordyce Global Scale, interviewer ratings, and informant reports across many studies. In their review of the SWLS, Pavot and Diener (1993) note that although moderate correlations were found between the SWLS and other related measures, considerable variance still remains unaccounted for.

In terms of convergent and discriminant validity, the SWLS has been examined across various demographic factors, individual differences (e.g. personality traits), affectivity, and health. Some of the most extensively researched demographic characteristics include marital status, gender differences, age, and religion. The SWLS has been found to be largely unrelated to gender and age across studies (Pavot & Diener, 1993; Arrindell et al., 1991; George, 1991; Pavot et al., 1991). In a review of three decades of research on the SWLS, Diener, Suh, Lucas, and Smith (1999) found that some studies show that men are slightly happier than women, though meta-analysis demonstrated the magnitude of this difference is small. Other studies have shown there are no significant gender differences (Diener et al., 1999). On the other hand, many studies have demonstrated that women report higher levels of subjective well-being than men, though these differences disappear after other demographic variables are controlled for (e.g. Inglehart, 1990; Larson, 1978; Shmotkin, 1990; White, 1992). It appears there is no consensus regarding gender differences aside from the fact that if they are found, they are either small differences, or better explained by other demographic variables.

Being married has been positively correlated with subjective well-being. Large scale surveys have shown that married individuals report greater levels of happiness than individuals who were never married, divorced, separated, or widowed (Diener et al., 1999). However, it has also been demonstrated that the marital satisfaction, rather than simply being married, has an influence on global life satisfaction (Headey, Veenhoven, and Wearing, 1991). Additionally, cultural characteristics have been found to influence the relationship between subjective well-being and marital status. Diener et al. (1998) found that although married individuals were generally happier than non-married

individuals, “unmarried partners in individualistic cultures were happier and more satisfied with their lives than married or single people. By contrast, in collectivist countries, people living with a significant other reported lower life satisfaction and more negative emotions than married or single individuals” (Diner, Suh, Lucas, & Smith, 1999, p. 290). These findings demonstrate cultural variations attribute to differences in life satisfaction. It is possible that the higher value placed on interdependent relationships in collectivistic cultures cultivates different meaning for how marriage fulfills that individual’s needs and well-being in addition to social support being more readily available.

Affectivity is found to be related to satisfaction with life. The SWLS is reportedly positively correlated with positive affect and negatively correlated with negative affect (Pavot & Diener, 1993). Smead (1991) reports correlations of .44 between the positive affect scale of the PANAS (Watson et al., 1988) and the SWLS, and -.48 between the negative affect scale of the PANAS and the SWLS. Similar correlations between positive and negative affect and the SWLS are found in other measures of affectivity. George (1991) reports correlations of .47 between the positive affect scale of the Multidimensional Personality Questionnaire (MPQ; Tellegen, 1982) and -.26 for negative affect and the SWLS.

Individual differences have been found to be related to the SWLS. Extraversion and neuroticism are the most extensively researched individual differences in relation to the SWLS. Extraversion can be simply defined as having sociability, warmth, involvement with people, social participation, and activity while neuroticism can simply be defined as having poor ego strength, guilt proneness, anxiety, psychosomatic

concerns, and worry. Extraversion has been found to be positively correlated to the SWLS, whereas neuroticism has been found to be negatively correlated to the SWLS (Diener et al., 1985; Pavot & Diener, 1993). Lucas et al. (1998) suggests the positive relationship between extraversion and SWLS is a result of the connection between extraversion and positive affect. Diener et al. (1999) state, “extraverts are more sensitive to rewards and that this sensitivity manifests itself in the form of greater pleasant affect when exposed to rewarding stimuli. Higher positive affect then motivates individuals to approach rewarding stimuli” (p. 280). Additionally, neuroticism has been found to be the most important predictor of negative affect and life satisfaction in a meta-analysis by DeNeve and Cooper (1998). These findings were confirmed by other studies (e.g. Gutierrez et al., 2005).

The SWLS has been shown to be related to clinical measure of distress and health. The SWLS has been found to be negatively correlated with measures of depression (Pavot & Diener, 1993). For example, Blais et al. (1989) found the Beck Depression Inventory (BDI; Beck et al., 1961) to be strongly negatively correlated to the SWLS ($r = -.72$, $p = .001$). The SWLS has also been negatively correlated to all eight symptom dimensions of the Symptom Checklist-90 (SCL-90-R; Derogatis, 1977) including depression ($r = -.55$) and anxiety ($r = -.54$) (Arrindell et al., 1991). Studies have found health is strongly correlated to life satisfaction. Specifically, health perceptions as measured by self-reported health instruments are strongly correlated to life satisfaction (Diener et al., 1999). When objective measures of health are used, this correlation is weakened (Watten, Vassend, Myhrer, & Syversen, 1997). The relationship between health perceptions and satisfaction with life is found to be influenced by personality.

Diener et al. (1999) illustrate this by stating, “Self-related health measures reflect not only one’s actual physical condition but also one’s level of emotional adjustment (Hooker & Siegler, 1992); Watson & Pennebaker, 1989), and the relation between self-rated health and SWB is inflated by this emotional component” (p. 287). Traits such as neuroticism and experiencing negative affect have been found to influence subjective health (Diener et al., 1999).

These findings demonstrate personality traits are a significant influence on life satisfaction as they affect how the individual perceives their health, the self, and their overall life. The range of findings presented demonstrate that variables that affect life satisfaction overlap and are inter-connected and influence life satisfaction to varying degrees depending on the culture. In summary, the SWLS has been extensively researched in diverse populations, though its utility has not been investigated among Arab Americans. As will be discussed in the following sections, Arab Americans retain collectivistic cultural features as they live in an individualistic nation. Research has shown that culture influences subjective well-being. Specifically, individuals in individualistic cultures have been found to have higher levels of subjective well-being than those in collectivistic cultures (Diener & Suh, 1999; Veenhoven, 1993). Schimmack et al. (2002). These differences have been explained in the literature by several factors including the cultural importance of emotions, cultural variations in maximizing pleasure, and freedom of individual choice (Oishi et al., 1999; Schimmack & Diener, 1997; Reizenzein & Spielhofer, 1994, Rozin, 1999; Suh et al., 1998). It appears different cultures experience life satisfaction in varying ways and to varying degrees based on the Western definition of life satisfaction. Therefore, the varying degrees of life satisfaction

may reflect variations in the cultural values placed on particular variables that influence life satisfaction, rather than actually having higher or lower levels of satisfaction with life. Even so, elucidating these variations is an important function to understanding how others experience life satisfaction.

Overview of Arab Americans

The brief overview of well-being and well-being in the cultural sphere set the contextual groundwork to review the literature on the Arab American population. The following discussion will review the literature on Arab American well-being through the biopsychosocial perspective encompassing literature attending to the full spectrum of functioning.

Clarification of Terms

As the focus of the present review shifts to Arab Americans, several key distinctions between this group and other groups will be highlighted to clarify common misconceptions. The first distinction is between the terms Middle Eastern and Arab American. Middle Eastern was a term employed by the United States Census to include non-Arab countries and regions in the world (including Turkey, Iran, Afghanistan, Pakistan, Israel, etc.) for political and immigration reasons (Nassar-McMillan & Zagzebski-Tovar, 2012). The term Middle Eastern encompasses a wider net of people both geographically and ethnically that extends beyond that of Arab ancestry or heritage. The second distinction is between the terms Muslim and Arab. The two are often used synonymously, usually for political reasons such as determining representation by

population size (Nassar-McMillan & Zagzebski-Tovar, 2012; Nassar-McMillan et al., 2014). To be Muslim means to follow the religion of Islam. Like any other religion or philosophy, a Muslim individual can come from any ethnic or cultural background. It is a common misconception that all Arabs are Muslim or that all Muslims are Arab. In fact, the reality is that the majority of the Arab American population is affiliated with a Christian denomination, with 63% of Arab Americans identifying as Christian, 24% identifying as Muslim, and 13% identifying with no religious affiliation according to the Arab American Institute Foundation (2002).

Arab Americans are defined as a pan-ethnic group of people with origins from the 22 League of Arab States (Nassar-McMillan & Zagzebski-Tovar, 2012). Although Arab Americans have a shared heritage, they are a very heterogeneous group of individuals due to distinct immigration patterns and reasons for immigration, diverse religious backgrounds, orientations, geographic origins, and acculturation patterns. These factors, including the political dynamics both in foreign and domestic policies, influence this group's demographics and sociocultural identity. As a result, the Arab American identity is continuously constructed and reconstructed (Nassar-McMillan et al., 2014).

Brief History of Immigration

Historians have identified three distinct waves of Arab immigration to the United States. These immigration patterns are worthy to note due to the impact they have had on the Arab American culture and identity. Through identifying these waves of immigration, the diversity and heterogeneity of Arab Americans can be better illustrated and understood, creating a historical cultural context for readers.

The first wave of Arabs to migrate to America were Syrian-Lebanese Christians between 1880 and 1918. These Arab immigrants were poor and uneducated artisans and farmers. The primary reason for their immigration was to improve their economic conditions and to escape religious discrimination during the rule of the Ottoman Empire. Historians have noted that the religious origins of these immigrants are not a clear cut matter. Muslims were forbidden to emigrate, leading to some stating they were Christian to escape Ottoman rule and maintained a Christian identity once in America out of fear of deportation. Once in America, these immigrants sought the American dream and thus tended to embrace the American culture, traditions, and way of life with ease. It was Arab American leaders from this wave of immigrants that fought in court for the 'White' legal identity and won in a racially divided Jim Crow America. Since then, Arab Americans have been categorized as White on official forms and in US Census data.

Though immigration continued between 1918 and 1948 at a slower rate due to immigration restrictions, a second distinct wave of Arab immigrants emerged between 1948 and 1965 following World War II. By this time, the first wave of immigrants had assimilated almost fully and did not hold an Arab identity; a stark contrast to future generations of immigrants, especially those in the second wave. These new immigrants were comprised of Muslim Palestinian refugees expelled from their homeland after the establishment of Israel in 1948 Palestine. In addition to Palestinians, other Arab immigrants such as Egyptians, Iraqis, and Yemenis, also sought to escape warfare and a worsening political climate as Arab nations fought for independence from colonial powers. In contrast to the first wave of immigrants, these post-World War II immigrants were predominantly Muslim and were highly educated and politicized professionals

(Abdelhady, 2014). Though, like first wave immigrants, they also sought to enhance economic opportunities. These immigrants had an easier time adjusting to America due to their political socialization before and after immigration and education and skills, though they typically had intentions of one day returning to their home lands. Their interest in homeland politics and religious views set them apart from both the first wave of immigrants and other Americans. The creation of the State of Israel and emergence of Arab nationalism resisting European colonization is pinpointed to be one of the primary motivations that united Arab Americans, regardless of their home country, and triggered the development of the Arab American identity (Abdelhady, 2014).

The third distinct wave of immigrants is comprised of individuals seeking asylum from political and economic crises in Arab countries, civil wars, and regional conflicts from 1965 to 2001. This wave shares many of the same demographics as the second wave of immigrants. Though they were also seeking asylum from political and economic crises and warfare, this third group is distinct in that the conflict they escaped from was due to intra-Arab warfare and intensified US involvement. The worsening climate in these regions created a different dynamic from the second wave immigrants in that though they had intentions to eventually go back to their homelands, the reality of this option was less feasible. Due to this dynamic, individuals from this wave are more likely to participate and integrate into American policies and life, both to make a difference in their new home country, America, and also in the Arab world (Abdelhady, 2014). This dynamic leading to increased involvement in both US and foreign politics helped shape the Arab American identity. The dynamics at play for this wave of immigrants set the stage for a strengthened Arab American identity that merges both traditions all while upholding this

identity as distinct from ‘American’, ‘White’, or just ‘Arab’. In fact, in recent years an effort has been made to distinguish those of Middle Eastern roots (to include other ethnicities in addition to the Arab ethnicity) from the majority ‘White’ census category. This effort highlights the changes in the Arab American identity over time and illustrates the construction and reconstruction of this identity.

While much of the literature cites these three distinct waves of immigrants to highlight the diversity in Arab Americans, even these distinctions can oversimplify the diversity among Arab Americans across time and across the country. Even with this in mind, it is helpful to be broadly aware of the historical context of the Arab immigration experience as a foundation to understand the sociocultural, sociopolitical, economic, physical, and mental health of Arab Americans.

The Arab American Experience

The heterogeneity of Arab Americans and continued development of the Arab American identity makes defining and reviewing the cultural features a task that risks oversimplifying and overgeneralizing a very diverse group. It is vital for readers to be aware that within group differences and individual differences exist, as with any group. Thus far, cultural features have emerged throughout the review of the history of immigration and the discussion distinguishing Arab Americans from other groups such as political interest variations and the emphasis on education. In addition, an overarching cultural feature identified in the literature is the preservation of the collectivistic outlook (Beitin & Aprahamian 2014), a prominent feature of the Arab culture compared to the individualistic American outlook. The Arab American experience has merged the two

seemingly paradoxical outlooks by preserving the collectivistic value of family as the central organizing cultural feature, but living more individualistic lives. This manifests in individuals relying more heavily on spouses for support rather than extended families or communities (Beitin & Aprahamian 2014). Rather than living in multifamily homes as many Arabs do in their home countries, Arab Americans live in single-family homes, but rely on their family for support and connection and live physically close to other family. Thus, family relationships remain a central component to the Arab American experience.

The collectivistic orientation emphasizes cooperation and interdependence, thus individual identities are strongly related to group identities (Wrobel & Paterson, 2014). Relationships are viewed as one of the most important elements in life, thus they are prioritized regardless of time or context. Even more so, family relationships are privileged over friends (Beitin & Aprahamian, 2014). This distinction is more pronounced in Arab American families than it is in traditional Arab families due to the pressures felt living in an individualistic society. Patrilineality is an important structural value upheld by Arab families. Traditional gender roles are upheld in the Arab culture, whereas these roles may be changing for Arab American families. Although these roles may be changing, research shows that Arab American women work at negotiating between their American and Arabic cultures, all while maintaining their role responsibilities at home (Meleis, 1991). Some research shows that Palestinian girls who had mothers who worked outside the home were more likely to have stronger egalitarian gender role expectations than those whose mothers stayed at home (Fronk, Huntington, & Chadwick, 1999). Faragallah, Shumm, and Webb (1997) found that more egalitarian relationships were associated with lower marital satisfaction due to conflicts in gender

role expectations, religious values, and traditionalism. These findings highlight that although there may be transitions in gender roles, Arab Americans are continually paving the way to establish gender roles and family structure that merges the two cultures to some degree, and in effect, continuing to adjust and construct the Arab American identity.

Religion is highly valued and incorporated into daily life for Arab Americans, regardless of religious affiliation. Religion is a source of community, belonging, worship, and resilience. However, religious affiliation, particularly being Muslim, may be linked to risk factors such as discrimination or acculturative stress (Wrobel & Paterson, 2014). After 9/11, Christian Arab Americans were “eager to belong and in the process interpreted American culture as compatible with Arab concepts of virtue and honor” (Haddad, 2002, p. 116). Whereas Muslims’ process of Americanization has been “impeded by a profound feeling of an American double standard that dismisses Arab sentiments and rights” (Haddad, 2002, p. 116). This leads to Muslim Arab Americans feeling as if they have to survive a hostile environment (Samhan, 2014).

Overall, the Arab American culture encompasses intra-ethnic diversity, religious diversity, an embedded importance on social and family relationships, and a continuously developing identity. Additional cultural features and experiences will emerge in the following review of the literature on the biopsychosocial functioning of Arab Americans.

Biopsychosocial Perspectives on Arab Americans

Although the hedonic and eudaimonic perspectives are common frameworks when assessing well-being in other contexts, they are not natural frameworks in which

the literature on Arab Americans is built. The following review will cover the literature on Arab Americans primarily through the biopsychosocial perspective, and as the studies reviewed unfold, it becomes apparent that neither hedonic nor eudaimonic conceptualizations are integrated in most of the studies on this population.

Health and Disease with Arab Americans

Several areas regarding physical health and disease have been identified in the literature as being salient to the Arab American population. Substance abuse, cancer, diabetes, cardiovascular disease, and child and maternal health issues are some of the main focuses within the literature on this population. Some studies have shown differences between Arab Americans and other groups in the US across some of these domains. Explanations as to why health indicators differ for Arab Americans have been highlighted in some studies (El-Sayed & Galea, 2009; Nassar-McMillan, 2014). One such explanation is limited availability and accessibility to healthcare due to linguistic, cultural, and financial barriers of this relatively recent immigrant group (Jaber et al., 2003). Essentially, the lack of acculturation, or assimilation and acculturative adaptations, have been identified as likely risk factors for Arab Americans regarding health disparities (Jaber et al., 2003). In reviewing the literature on health differences among Arab Americans and other Americans, limited acculturation to Western practices has been explained to be a result of Arab Americans sharing a set of cultural norms influenced by Islamic behavioral traditions (El-Sayed & Galea, 2009). Such explanations must be taken with caution to avoid the risk of inaccurately generalizing a religious subgroup of Arab Americans (i.e. Muslims) to the greater Arab American population. There may indeed be

within group differences between Muslim Arab Americans and other Arab Americans across these domains, but such differences must be accurately stated to avoid misrepresentation and overgeneralization of a very heterogeneous group. Another proposed explanation for health differences is that increased marginalization of Arab Americans from the general American population in the last few decades has caused negative health outcomes in this group (El-Sayed & Galea, 2009).

Overall, across all health domains addressed in the literature, there is limited published research regarding health issues in the Arab American population. Part of this issue is that Arabs are not specifically identified in national or state databases, making it difficult for researchers to identify health issues and outcomes with this group and compare them to similar studies of other Americans. Additionally, there is little consensus in the literature about Arab Americans and health differences. These consensus issues will be illustrated in the following review of the literature regarding substance abuse, cancer, diabetes, cardiovascular disease, and child and maternal health issues with Arab Americans.

Substance Use. Substance abuse research on Arab Americans is limited, with only several studies assessing the prevalence of tobacco and alcohol use in Arab American adults, and several more studies assessing tobacco use in adolescents. To date, the only national survey assessing substance use in this group is from the National Survey of Drug Use and Health (NSDUH) (Hammad et al., 2014). This survey was able to access this group by asking for place of birth, which has been used to identify immigrant Arab Americans. Thus, Arab Americans born in the US are not identified in this survey. Arfken et al. (2011) found that nationally, Arab immigrants had lower rates of lifetime

alcohol use (50.8%), past month use (26.4%), and binge drinking (10%) than US born non-Hispanic White Americans who were found to have 87% lifetime alcohol use, 55.5% past month use, and 24% binge drinking. To date, the only statewide survey assessing substance use with this group is the Michigan Behavioral Risk Factor Surveillance System (MiBRFSS) and includes questions to identify both immigrant and later generation Arab Americans. Arfken et al. (2011) found that statewide, Arab Americans had lower rates of past month alcohol use but no difference with binge drinking than non-Hispanic White Americans. These two studies suggest that Arab Americans may consume less alcohol compared to the majority population. Hammad et al. (2014) highlights a concern about underreporting with this population regarding alcohol and other drug use due to stigma of consuming alcohol within the Muslim Arab American communities.

There is more known about adolescent tobacco use in Arab Americans than with adults. Tobacco use is a part of the Arab culture, both with cigarettes and the water-pipe. Smoking the water-pipe is a ceremonial activity and a means of expressing hospitality (Hammal, Mock, Ward, Eissenberg, & Maziak, 2008). The first study to assess tobacco use (specifically cigarette and water-pipe use) with Arab Americans found that 40.6% of Arab American men smoke either forms and 38.2% of Arab American women smoke either forms in a sample of Detroit area Arab Americans (Rice & Kilwicki, 1994). A second study a few years later in the same area found similarly high rates in which 35% of Arab American men and 31.5% of women smoked either forms of tobacco (Gold, 1994). The Centers for Disease Control and Prevention found that in 2014 an estimated

16.8% of U.S. adults are current cigarette smokers indicating that Arab Americans have a significantly higher rate of tobacco use compared to the general U.S. population.

These two studies motivated researchers to assess tobacco rates in adolescent Arab Americans. One particular study by Rice, Templin, and Kulwicki, (2003) collected data from thousands of high school students both Arab American and non-Arab American over 8 years to identify risk and protective factors for tobacco use. This study found that peer use is a significant risk factor. They also found that there is growing use of water-pipe smoking among adolescents and that water-pipe use was the strongest predictor for experimenting with cigarettes. Arab American adolescents had higher rates of water-pipe smoking than other non-Arab American adolescents. Another study found that Arab American males were more likely to smoke the water-pipe than other ethnicities or females (Templin et al., 2005). However, contrary to the previously noted study, this study found that age of first cigarette smoking was predictive of both regular water-pipe and cigarette smoking, but age of first water-pipe smoking was only predictive of regular water-pipe smoking. Overall, studies show that tobacco use is a significant issue with Arab American adults and adolescents.

Diabetes. Diabetes has been identified in the literature as an emerging health challenge for both Arabs in the Arab world and Arab Americans due to advancements in industrialization lifestyles (Jaber, Al-Kassab, & Dallo, 2014). In fact, Arab countries account for six of the ten developing countries with the highest rates of diabetes (Jaber, Al-Kassab, & Dallo, 2014). There is a lack of consensus in the literature regarding the prevalence of diabetes among Arab Americans with studies yielding estimates ranging from 4.8% to 33% (Jaber, Al-Kassab, & Dallo, 2014) whereas the National Diabetes

Statistics report in 2014 found that 9.3% of the U.S. population had diabetes. A review of the literature on diabetes among Arab Americans by Jaber, Al-Kassab & Dallo (2014) states that the lack of consensus may be due to methodological issues such as the use of convenience sampling, particularly of Arab Americans in the Detroit, MI area. A study by Jaber et al. (2003) found that lifestyle transformations regarding nutrition and physical activity patterns increased the risk of diabetes in Arab Americans.

Jaber, Al-Kassab and Dallo (2014) identified several risk factors for developing diabetes in Arab Americans across the literature. Age and sex differences were found in Arab Americans, with older men and women having higher rates of dysglycemia. Additionally, men had a higher prevalence of diabetes than women under 49, but the rate was approximately equal for both sexes after 49. Paternal history of diabetes was not associated with diabetes in an individual, whereas maternal history of diabetes was found in men only. Although no association between diabetes and physical activity was assessed in Arab Americans, it was found that 72% of Arab Americans in a study by Jaber et al. (2003) were inactive (less than 15 minutes of activity a day). Obesity was found to be a risk factor for diabetes, with a study finding 34% of Arab Americans categorized as obese (Jaber et al., 2003). Acculturation has also been associated with an increased risk of diabetes in Arab Americans with length of stay in the USA to be negatively associated with diabetes (Dallo & Borrell, 2006).

Certain barriers to diabetes care with Arab Americans include linguistic, cultural factors, myths and misconceptions, knowledge deficits, and deficits in the healthcare system (Jaber, Al-Kassab, & Dallo, 2014). Cultural factors such as the Arab traditions of eating later in the day and consuming heavy meals have adverse effects on an

individual's health. Myths and misconceptions within Arab American communities have also hindered individuals from receiving proper care. An example is the misconception that insulin is an addictive treatment or that it leads to weight gain. Deficits in knowledge about the chronic nature of diabetes and the importance of consistency in treatment are barriers to proper care. Access to healthcare is a challenge for less acculturated first generation Arab Americans. In addition to this, a lack of cultural competence among some practitioners impedes medical care.

Overall, a review of the literature shows that Arab Americans are disproportionately affected by diabetes (Jaber, Al-Kassab, & Dallo, 2014). Although there is more known about diabetes among Arab Americans than substance use, there is still a significant gap in the research on this issue. Certain strategies such as increasing awareness of the consequences of diabetes, correcting knowledge gaps, and providing culturally competent care have been identified in the literature to combat the barriers to diabetes care among Arab Americans (Jaber, Al-Kassab, & Dallo, 2014).

Cancer. There is more known about cancer in Arab countries than in Arab Americans (Schwartz et al., 2014). The patterns of cancer incidence and mortality differ between Arab countries and the US. There are significantly higher newly diagnosed cancer rates in US men than Arab men, and the incidence rate in the US is three times higher than Arab men in Arab countries (Schwartz et al., 2014). It is difficult for researchers to assess cancer incidence and mortality in Arab Americans due to Arab Americans not being identifiable in various US databases. As seen in many other studies on Arab Americans, researchers turn to novel strategies such as creating name list cases using health databases and analyzing cases in the geographic area with the highest

concentration of Arab Americans in the US, Detroit, MI. A study used this developed and validated name list strategy to identify cancer incidents in Arab Americans in the Detroit area (Schwartz et al., 2004). This study found that Arab American men had higher rates of kidney, leukemia, liver, multiple myeloma, stomach and urinary bladder cancers, and less melanoma of the skin and cancers of the lung, esophagus, and testis compared to non-Hispanic White men (Schwartz et al., 2014). Arab women had higher incidents of leukemia, liver, stomach, and thyroid cancers, and less skin melanoma and cancers of the lung and cervix compared to non-Hispanic White women.

Another study used a similar method and developed a surname database to identify Arab Americans and Middle-Eastern Americans in California (Nasseri, Mills, & Allan, 2007). This study found that after adjusting for age, Middle Eastern men had higher rates of breast, leukemia, liver, multiple myeloma, stomach, and thyroid cancers and lower rates of colon, rectum, esophagus, kidney, lung, bronchus, skin melanoma, Non-Hodgkin's lymphoma, oral cavity, prostate, and testis cancers compared to non-Hispanic white men. Middle Eastern women were found to have higher rates of leukemia, liver, stomach, and thyroid cancers, and lower rates of breast, cervix, corpus uteri, colon and rectum, lung and bronchus, skin melanoma, oral cavity, ovarian, and urinary bladder cancers compared to non-Hispanic white women. Schwartz et al. (2014) compared these two studies and found that there were similarities in the findings despite differences in methodologies and geographic location of the samples used. In both areas and studies, there were higher rates of leukemia, liver, and stomach cancers for both men and women. Lung and bronchus cancers and melanoma were lower in both men and women. The lower rates of lung and bronchus cancers in both men and women, and lower rates of oral

cavity cancers in men is an interesting finding since tobacco use with Arab American men and women have been found to be higher than the non-Hispanic white population. Schwartz et al. (2014) suggests that such findings present opportunities for future research.

In addition to comparing the two known studies on cancers in Arab Americans, Schwartz et al. (2014) compared the overlapping findings to what is known about cancer incidence in Arab countries and found that the higher incidence in gastrointestinal cancers of the stomach and liver in Arab Americans is similar to findings in Arabs in Arab countries. Schwartz et al. (2014) posits that there may be a genetic component and that this is also another research opportunity to explore.

Maternal and Child Health. Generally, there is little to no research or data on perinatal health or immunization with Arab Americans. There is one study that used data on parents' country of birth and ancestry from the Michigan Birth Defects Registry (MBDR) to compare birth defects of Arab American children to those of non-Hispanic White children (Yanni, Copeland, & Olney, 2010). This study found that Arab American children had similar or lower birth prevalence estimates compared to non-Hispanic White children, and had higher estimates for three types of metabolic disorders. No national or state data exist on Arab American children and immunizations.

Regarding perinatal health and discrimination, one study examined if the discrimination Arab American women experienced after 9/11 affected the birth weight of their babies by using a surname list to identify Arab American women's birth records in California (Lauderdale, 2006). This study found that prior to 9/11 Arab American women had a risk of low birth weight that was comparable to women non-Hispanic white

women, indicating no differences between the two groups. However, six months after 9/11, Arab American women become 34% more likely to have low birth weight, whereas this risk did not change for non-Hispanic white women. In contrast to this study, another study by El-Sayed and Galea (2009) did not find any difference in birth weight post 9/11 in Arab American women in the Detroit area. This is an area in the literature that needs to be explored further. Dallo et al. (2014) notes that these differences may be due to differences in the Detroit population of Arab Americans versus the California population.

Cardiovascular Disease. A systematic review of peer-reviewed literature about the health of Arab Americans by El-Sayed and Galea (2009) showed that there is little consensus about cardiovascular disease and its risk factors with this group. They identified that some studies found a prevalence of hypertension among Arab Americans to be between 13-20%, which is comparable to non-Hispanic whites (23-25%). In a study comparing Arab Americans to African Americans, this prevalence is higher, with African Americans found to have an 8% prevalence (Jamil, Fakhouri, Dallo, Templin, Khoury, & Fakhouri, 2008). However, when comparing the prevalence of hypertension of Arab Americans to African Americans based on data from the third National Health and Nutrition Examination Survey which reports that African Americans have a 32% prevalence, Arab Americans have a lower prevalence. This illustrates that inconsistencies across prevalence of cardiovascular disease is not unique to Arab Americans and extends to other groups as well. A risk factor that has been identified in the literature as being higher for Arab Americans when contrasted against the general US population is obesity.

Overall, across all health domains reviewed in the literature, there is a lack of peer-reviewed studies and publications. One of the main reasons identified in almost

every review of the literature or study is the lack of easy identification of Arab Americans in health statistics. In addition, many of the studies have sampled Arab Americans from the Detroit area. Thus convenience sampling is also a common measurement issue for this reason. Another issue is that many studies resorted to novel strategies such as name lists in known databases as an attempt to identify Arab Americans. Such strategies have inherent measurement issues such as underreporting or misidentification. The dearth of research conducted on this population in addition to measurement issues may be why there is a lack of consensus across certain health domains. There are many areas that have not been studied at all for Arab Americans such as HIV/AIDS and other infectious diseases or chronic pain conditions (El-Sayed & Galea, 2009).

Socioeconomic Characteristics of Arab Americans

Education and occupational success are both highly valued in the Arab culture (Haboush & Barakat, 2014). Education improves the chances of economic success, which in turn enhances both individual and family survival and success. With the emphasis and reliance on the family unit within the Arab American culture, education is viewed as a vehicle in which an individual can propel the family towards success, bringing pride and honor to that family (Kovach & Hillman, 2002; Haboush & Barakat, 2014). Education enhances the success of both sexes within the culture (Al-Khatab, 2000). Families who have financial success in America are also able to financially support extended family back in their home country, adding another motivation for striving for financial stability in America (Ajrouch, 2000; El-Araby Aly & Ragan, 2010).

Overall, Arab Americans are reported to have higher levels of education compared to the general US population (U.S. Census Bureau, 2010). According to the U.S. Census Bureau, about 89% have high school degrees or higher compared to 86% of the total US population. Approximately 27% have bachelor's degrees compared to 18% of the US population, and 18% have postgraduate degrees compared to about 10% of the US population. Although there is variability among Arab Americans, as a whole they tend to have higher incomes, tend to have more professional occupations, and are one of the wealthier ethnic groups (Brittingham & de la Cruz, 2005; U.S. Census Bureau, 2010).

Based on the 2010 American Community Survey (ACS), Arab Americans have a median household income of \$61,579 compared to other US households who have a median income of \$60,609. The median household income for Arab Americans was reportedly even higher compared to the general American population prior to the year 2000 with Arab American men making \$41,700 compared to men in the general population making \$37,100, mainly due to a greater number of Arab Americans making above \$100,000. However, although their median income is still slightly higher than the overall population, it has become more aligned with the overall population in the last decade due to an increase in Arab Americans living at or below the poverty level after 2000, especially with more refugees coming into America in the last decade and a half. Many immigrants and younger Arab Americans live in poverty, with about 18% of adults below the poverty level (U.S. Census Bureau, 2010).

Arab Americans have similar employment rates as the general US population (Haboush & Barakat, 2014). Arab Americans also share mainstream job industry preferences and choices of occupations with 22% of Arab Americans working in

education, health care, and social services compared to 23% of the total US population in those same occupations (Haboush & Barakat, 2014). Additionally, 11% of Arab Americans are in professional and management positions compared to 10.6% of the US population. Arab Americans have some differences in professional trends compared to the total US population. For example, more Arab Americans (45%) work in management, business, science, and the arts compared to 36% of all Americans in those areas. Only 13% of Arab Americans work in service occupations compared to 18% of the total US population. The largest difference is in retail trade, with 18% of Arab Americans working in this area compared to 11.7% of the overall US population.

In a review of Arab American education and employment by Haboush and Barakat (2014), economic and occupational trends of Arab Americans today are explained in the historical context of the waves of Arab immigrants and the distinct characteristics of the individuals of each wave. A commonality among all the waves of Arab immigrants is the displayed drive towards accumulation of wealth due to the cultural feature of enhancing the family status and cohesiveness. However, each wave accumulated their wealth and worked towards fulfilling this drive in ways unique to the characteristics of those immigrants at that time. For example, first wave immigrants, who were largely uneducated and poor, turned to business entrepreneurship, sales, and factory jobs. Second and third wave immigrants were more educated, leading Arab Americans, especially present day, to have more professional jobs.

There is another side to the commonly highlighted success story of second and third wave immigrants. Many recent immigrants have come to America as refugees with disrupted educational histories, trauma, and limited English proficiency, leading to a

decrease in education and employment success (Haboush & Barakat, 2014). In addition, the reported increase in discrimination and bias post 9/11 has also affected the educational experiences and income of Arab Americans. This will be discussed in more detail later in this review.

Special issues pertaining to Arab Americans regarding education and employment that have been addressed in the literature include women's roles in the workplace and employment for women who wear the hijab, or veil (Haboush & Barakat, 2014). A study by Read and Cohen (2007) found that although Arab American women have the highest levels of education after Filipina American women, they are less likely to be employed compared to other American women of the same education. Education does not predict employment for Arab American women as it does for other women in America. Read and Cohen (2007) found that instead, the cultural value of the role of motherhood affects whether or not an Arab American woman works. Another study found that the role of being a mother was most highly valued and emphasized among Arab American women (Read & Oselin, 2008). This study identified that raising children and instilling cultural and religious values was of significant importance to Arab American women and their roles. Because of this, although culturally they are encouraged to be highly educated, the purpose is less to become employed and earn an income and more so to maintain and support their gender role (Read & Oselin, 2008). More specifically, Haboush and Barakat (2014) state, "A mother's education is viewed as a communal asset that will better enable her to contribute to the well-being of the children and socioeconomic success of the whole family" (p. 248).

Finding employment can be a difficult task for Muslim Arab American women who wear the hijab. Haboush and Barakat (2014) review how wearing the veil affects women's employment experiences. In their review, they describe how the veil is both a powerful and politically charged symbol in the West that carries different meaning for different people. For some it represents the subjugation of women and for others it symbolizes empowerment and equality. Haboush and Barakat (2014) state that due to the highly visible and symbolic nature of the hijab, women are more likely to receive biased reactions, especially when seeking employment. The authors cite a study by Muhtaseb (2007), a college professor who wears hijab and uses Burgoon's expectancy violation theory (1986) to demonstrate her experiences teaching while wearing hijab. She demonstrates that because she wears hijab, her students respond on end of the semester reviews with a focus on personal issues such as her perceived foreignness rather than professional and classroom issues. She states that she feels she has to work harder at her job to demonstrate that she is qualified in opposition of stereotypes. Although wearing the hijab may complicate a woman's employment experience with discrimination and prejudice, Haboush & Barakat (2014) state that hijab is perceived by these women as a source of strength and a symbol of rejecting "the Western discourse that sexualizes women and commodifies beauty" (p. 249). It is this deviation from the dominant culture that may lead women who wear hijab to be discriminated against. Haboush & Barakat (2014) highlight an important internal experience that occurs for many hijab wearing women. They state that these women may experience a strong sense of dissonance from wearing hijab since their positive beliefs and symbolism for wearing hijab clashes with Western negative perceptions of hijab. Therefore, although it is a source of strength and

resilience, women may find it challenging to wear it due to the negative politico-cultural associations the West has attached to it.

Behavioral and Mental Health of Arab Americans

Much of the literature on behavioral and mental health of Arab Americans is in the realm of acculturation and discrimination, especially post 9/11. However, there are some studies that assess mental health stigma, satisfaction with life in America, and risk and protective factors regarding mental health and well-being with Arab Americans. Even so, many of these studies still incorporate acculturation or discrimination factors within their methods and findings. Although there is dearth of empirical research on this population, the body of literature is steadily growing. The following review will evaluate the literature on mental health and behavioral health of Arab Americans beginning with the relatively most researched area, psychological outcomes related to acculturation, identity development, and discriminatory stress. In an effort to parse out literature on psychological outcomes such as protective and risk factors for this population outside the realm of acculturation, a review of the handful of studies that do not incorporate discrimination or acculturation in their measures will be examined separately. While these studies cite the effects of discrimination and acculturation on Arab Americans in their introductions or literature reviews, their focus of psychological outcomes outside those realms broadens the literature base beyond acculturation or discrimination and enriches the perspectives and findings on this population. Additionally, a review of studies regarding refugees will then be assessed separately given they may present as a special population within the Arab American group. This will be followed by a review of

literature regarding mental health stigma and assessments of mental health needs within Arab Americans.

Acculturation and discrimination literature. Across the body of literature regarding Arab Americans, acculturation is generally defined as adaptation to various elements such as ethnic identity, traditions, and norms in the new society (Beitin & Aprahamian, 2014). Many of the studies on Arab Americans regarding acculturation focus on factors that influence acculturation, and a smaller number of studies assess the mental health outcomes of the acculturation process. Sociodemographic factors such as age, sex, religious affiliation, length of time in the USA, and environmental factors such as discrimination are some of the variables that have been examined in the literature as influencing acculturation.

The prominence of Berry's (1980) model of acculturation has guided and shaped much of the research in this area on this population. His model proposes that immigrants choose one of four paths of acculturation. The first, assimilation, is when an individual abandons their original culture and takes on the new host culture completely. Separation occurs when the individual does the opposite and maintains most of their traditional culture and rejects much of the host culture. Integration occurs when individuals are able to incorporate both host and traditional cultures. Last, marginalization occurs when an individual abandons both traditional and host cultures. Though there are criticisms of this model, it is a widely accepted and popular conceptualization of the acculturation process. Additionally, supporters of his model have proposed that integration is predictive of positive well-being and psychological adjustment, whereas marginalization is predictive of negative mental health. Acculturative stress, distress experienced by an individual

when the demands of acculturation process are overwhelming, has also been found to impact these outcomes (Amer & Hovey, 2007). Thus, the level of acculturation, factors that influence that process, and the mental health outcomes of acculturation have become of considerable focus within the literature on the Arab American population. Researchers have referred to and used Berry's model and the predictive findings of the different levels of acculturation to better understand the experience of Arab Americans.

Although researchers have referred to and used Berry's model and predictive findings in research on Arab Americans, many of the studies that will be covered in this review have used the term acculturation as a proxy for assimilation. This is demonstrated by researchers measuring 'acculturation' by the length of time in the US, religious affiliation, or level of discrimination experienced (e.g. Awad, 2010; Soliman & McAndrew, 1998; Ajrouch, 2007) as opposed to utilizing Berry's model. However some studies (e.g. Amer & Hovey, 2007) do utilize Berry's model of acculturation and thus when they use the term acculturation, it is within the framework discussed earlier. This review will continue to use the word 'acculturation' even when it is used as a proxy for assimilation in the studies reviewed to maintain congruence of language. However, it is important for readers to be aware of the variations of the meaning of acculturation across studies. Due to more studies using acculturation as a proxy for assimilation than in the framework of Berry's model, this review will highlight when acculturation is not used as a proxy to clarify these differences to readers. Additionally, when appropriate, acculturation will be defined via the study's conceptualization (i.e. religious affiliation, time spent in the US).

Ajrouch and Jamal (2007) review the role of ethnic identity in the acculturation process. They highlight that immigration to the United States has historically been underscored with being placed into a racial hierarchy, causing ethnic identity adaptation to be a salient and deep-rooted experience for immigrants. Arab Americans are often referred to as the “invisible minority” due to their legal categorization in the white ethnic group (Naber, 2000), though that identity may not be a personally or socially attributed identity. In their study, Ajrouch & Jamal (2007) found that Arab Americans have a particular pattern of acculturation, specifically with regards to the development of their ethnic identity in America. They found that there are significant within group differences in how different Arab Americans identify ethnically, specifically whether they identify as white or other, and varying strengths in the pan-ethnic “Arab American” identity for participants. Religious affiliation, specifically being Muslim, and a strong “Arab American” identity was associated with a higher “other” or non-white ethnic identity. In addition to religious and emerging Arab American identity strength differences, immigration status, national origin, age, and socioeconomic status are also factors that affect an immigrant’s identification with the majority American culture and race. This creates a very heterogeneous pattern of ethnic identity development and acculturation within Arab American immigrants. This study is one of the few studies found for this review that utilized Berry’s model of acculturation in its conceptualization.

With respect to sex differences, one study found that Arab American women were at risk for both physical and mental health issues due to an increase in role responsibilities (Meleis, 1991). Another study found that Jordanian American women experienced sadness, emotional distress, anxiety, and social isolation due to stressors

such as societal prejudice, financial instability, managing the household, and maintenance of their ethnic identity (Hattar-Pollara & Meleis, 1995). Due to increased role responsibilities, especially if an Arab American woman is employed, they are at greater risk for negative mental health outcomes compared to their male counterparts (Dion & Dion, 2001).

Faragallah, Schumm, and Webb (1997) assessed how religion, length of residence, age at immigration, years since last visit to homeland, education, and discrimination affected overall satisfaction with life in America. They found that greater acculturation, i.e. longer length of residence, immigrating at a younger age, having not recently visited one's homeland, and being Christian, was associated with greater satisfaction with life in America. However, greater acculturation was also associated with reduced family satisfaction. Additionally, the authors found that discrimination experiences were associated with decreased satisfaction with life in America. There was no association with discrimination and length of stay, which the authors found troubling since this indicates that discrimination has not declined over time. Similar findings are found in other studies regarding discrimination not being related to length of residence in the US (Hakim-Larson et al., 2007; Marsella et al., 1994).

Amer and Hovey (2007) conducted a study assessing sociodemographic differences in acculturation and mental health with Arab Americans. They found that although older age was associated with more participation in Arab ethnic traditions, age was not a significant factor in acculturation or mental health outcomes. Regarding sex differences, the authors did not find any differences on acculturative stress, family dysfunction, or depression as the previously mentioned studies did, though they did find

that Arab American women did maintain the role of preserving and transmitting Arab culture and religious traditions. This study found that religious affiliation was associated with mental health differences. Muslim participants had higher levels of ethnic identities and higher levels of religiosity, and were more separated from the American culture compared to their Christian counterparts. An interesting finding regarding these differences is that although Muslim participants ended up with a more separated acculturative style, their intention, like their Christian counterparts, was to have integration. The more separated acculturation style of the Muslim respondents was associated with greater acculturation stress such as discrimination and alienation. However, despite Muslim participant's greater experience of discrimination and societal alienation, these factors were not related to depression. Additionally, acculturative style was not related to acculturative stress or depression either. The higher levels of religiosity and Arab family values of Muslim respondents was associated with better family functioning and this was associated with lower levels of family dysfunction and depression. The authors propose that this may be an important protective factor for Muslims in the face of adversity.

Christian respondents had a very different mental health pattern in this study (Amer & Hovey, 2007). The only factor that was associated with family functioning was the level of integration. Higher levels of integration were associated with better family functioning and less depression for Christian respondents. Unlike their Muslim counterparts, religiosity was not significantly associated with family functioning or mental health. Additionally, unlike the findings with Muslim participants, greater ethnic practices was associated with higher levels of acculturative stress. Separated or

marginalized acculturative style was associated with higher levels of acculturative stress and depression, another finding that differed between the two religious affiliations. These religious differences exemplify that there are inherent differences between religious affiliation that affect acculturative style regardless of intention, mental health, or family functioning. The authors also propose that their results challenge the assumption that integration is the strategy most associated with higher levels of psychological adaptation and well-being. These findings suggest that there is a significant amount of heterogeneity among the Arab American population. It appears that religious differences influence the mental health presentation of Arab Americans, especially related to how connected an individual is to their Arab ethnicity. These findings indicate that when assessing Arab Americans, attention to demographic differences is an important component to properly interpret results since Arab Americans do not present in a uniform way.

Another study by Awad (2010) challenges the assumption that integration or acculturation can enhance psychological adjustment. In his study, he found that in highly acculturated individuals, there were differences between Christian and Muslim Arab Americans, specifically that Christian Arab Americans in this group had the least amount of reported discrimination, whereas the Muslim Arab Americans in this highly acculturated group reported the most discrimination. This finding indicates that higher levels of acculturation in this group do not protect against discrimination. However, this study only assessed perceived discrimination, and did not assess the psychological ramifications of this perceived discrimination. Thus far, the two studies addressed found that Arab Americans do not follow the presumed acculturation pattern as other minority groups do. In fact, they present with a varied mental health pattern in regards to level of

acculturation. This further illustrates the heterogeneity of this population and additionally indicates that there may be unique cultural features when compared to other minority groups who do follow the presumed acculturation pattern of better mental health being associated with higher levels of integration into the main stream American culture.

The impacts of discrimination, especially post 9/11, have also been addressed in the literature on Arab Americans. A commonly cited qualitative study by Beitin & Allen (2005) looked at resilience in Arab American couples post 9/11. There were several themes in this study's results. The first was how Arab American couples made sense of the attacks. The authors found that all couples in the study reported that the events on 9/11 brought back flashbacks of war and terrorism that they experienced overseas and felt shocked that terror followed them to America. The second theme, the social environment after 9/11, found that there was a negative social environment for Arabs post 9/11 and that all couples in the study acknowledged hearing about discrimination against Arabs. They also expressed anger that Arabs were perceived negatively and categorized as terrorists. Regarding the third theme, the struggle for identity was found to be the strongest of all the emerging themes. Christians expressed a need to distinguish themselves from Muslims, and Muslims felt the need to distinguish themselves from terrorists. The authors state that the struggle for identity was present before the attacks, but afterwards, the attacks reminded Arab Americans that they are viewed as outsiders and that the need for a clear identity became a more salient issue. Possibly the most cited finding of this study is what was found about the fourth theme, how couples cope. It was found that the most important protective factor and source of strength for couples as they coped with the discrimination and other stressors was the strength of the couple's

relationship and relying on one another for support. In addition to the couple's relationship being a source of coping strength, community support, religion, and determination were also found to be factors in enhancing resilience.

This study illustrates how interconnected ethnic identity is with an individual's experiences and coping behaviors. It appears as though Arab American individuals are acutely aware of how both their ethnic identity and how they are perceived directly impacts their well-being and thus react by struggling for a particular identity (either making it clear they aren't Muslim or making it clear they aren't terrorists if they are Muslim) to protect themselves socially. It appears that regardless of the religion, all Arab Americans in this study strove to clarify their identities as they dealt with societal discrimination. However, the means in which this was achieved did indeed differ by religious affiliation indicating that religious differences among Arab Americans impact behavioral health.

A study by Abu-Ras and Abu-Bader (2009) assessed risk factors for depression and Posttraumatic Stress Disorder (PTSD) in Arab and Muslims Americans after 9/11. The authors assessed both the prevalence of depression and PTSD and assessed risk factors for these two disorders. Regarding the prevalence of these disorders, the authors found that participants had higher levels of depression and PTSD and that this was related to the backlash against Arabs and Muslims post 9/11. They also found that age, education, marital status, access to support, and having children were important factors in predicting depression and PTSD. They did not find sex differences with depression or PTSD in this population, which contradicts earlier findings both in this population and generally. Older age, being married, having children and having low levels of financial

support were associated with a higher risk of depression. This study also supports previous research that family and community support are protective factors against depression and PTSD, but unlike previous research, they found that governmental and spiritual support did not protect against these disorders. Previous exposure to traumatic events was not associated with either depression or PTSD. This study supports some previous findings about risk and protective mental health factors of discrimination in this population, but also introduced new and contradicting findings that religion or religious coping may not be associated with mental health status and acculturation. The conflicting findings of religious differences further illustrates that there may be other factors influencing the heterogeneity of Arab Americans.

Higher levels of anxiety and depression in Arab Americans post 9/11 compared to normative samples was found in a study by Amer and Hovey (2012). The authors found these findings surprising because the participants in this sample were highly educated with high incomes and more than half were born and raised in America indicated low to no immigration stressors, which are factors that have been shown in previous literature to protect against anxiety and depression. Additionally, they were surprised that participants readily admitted psychological mal-adjustment due to the stigma associated with mental illness among Arabs and Arab Americans. The authors of this study address how Arab Americans, like many Americans, have the challenge of daily stressors, but unlike other groups, the ongoing anti-Arab and anti-Muslim sentiment may compound these everyday stressors and create a particularly challenging situation for Arab Americans.

Many of these studies, including one conducted by Aprahamian et al. (2011) demonstrate that many factors and variables affect acculturation and the relationship

between acculturation and mental health. In a study conducted by Aprahamian et al. (2011), acculturation was not found to be significantly correlated to mental health, and that in fact mental health was affected by other variables. Gender, income, education, and more predictively, age at migration, length of time in the US, religion, and discrimination experiences were found to be related to mental health, but only accounted for 6% of the variance suggesting that other factors affect mental health. This also demonstrates that predictors of mental health are more complex than what current findings suggest. This also suggests that acculturation patterns, or more accurately assimilation patterns, may in fact be over stated in the literature on Arab Americans and further supports that Arab Americans do not cleanly fit into a general pattern when it comes to mental health. Thus far, there are mixed findings across studies when it comes to the connection acculturation has on mental health and behavioral health. A more obvious reason may be the heterogeneity of Arab Americans across many domains such as religion, country of origin, or gender. However, there may be other more complex reasons such as anti-Arab sentiment intersecting with ethnic identity. What is clear however, is that the mental health patterns of Arab Americans are complex, varied, and require more investigation.

Few studies have looked at subjective or psychological well-being, and fewer have done so in a population based, representative sample of Arab Americans. Thus far, the studies discussed have assessed mental health from a deficit model by assessing whether mental illness is present in the given samples. Neither hedonic nor eudaimonic conceptualizations or assessments of well-being were applied to the studies discussed above. One of the few studies that did assess hedonic well-being was a study by Padela and Heisler (2010) which investigated the effects of perceived abuse and discrimination

on psychological distress, self-reported levels of happiness, and self-reported health status. They found that having negative experiences related to one's ethnicity and the perception that Arab Americans are not well regarded in American society were associated with more psychological distress. This study found no differences between Christians or Muslims. Negative experiences based on ethnicity after 9/11, personal or familial experiences of abuse, and the perception of the lack of respect for Arab Americans in American society were associated with lower levels of happiness. Protective factors that increased levels of happiness included higher levels of education, higher levels of income, health insurance coverage, and living in America for more than 10 years. This study indicates that for Arab Americans, higher levels of hedonic well-being are associated with adherence to culturally important values such as high education and income and intact supportive families. This indirectly suggests that Arab Americans who are able to preserve and practice their Arab American values are happier. This study differs from most others in that it draws the investigation of well-being from one end of the spectrum (the presence or lack of mental illness) to the other end of the spectrum, positive functioning and thriving. Even so, much more is yet to be investigated and discovered on the latter end of the spectrum of well-being among the Arab American population.

A study by Henry et al. (2008) assessed subjective well-being in Arab American college students based on perceived acculturation behaviors and control. The authors found that children of parents who participate more in American life and culture and are more open to American life and culture have lower levels of psychological distress. Parental openness and parental preservation of the Arab culture were associated with

higher levels of subjective well-being only when the parenting style was autonomy-granting. Said differently, there was a negative association between parental control and subjective well-being. These findings suggest that parental style, specifically entrusting the child to use their Arab culture as a resource when engaging in the American culture, may foster higher levels of well-being. Although the authors did not discuss this, these findings suggest that there may be a connection with fostering openness and trust with the greater American mainstream society, possibly leading to a decrease in incidence of dissonance as the Arab American child enculturates, which may in turn enhance their subjective well-being. These findings compliment the previous study discussed by Padela and Heisler (2010) in that they found that involvement and openness with the mainstream American culture impacts the well-being of Arab Americans. These findings show that not only is fulfilling Arab cultural values an important part of the well-being equation, but fulfilling the integration and openness to American cultural values also contributes to this equation. This highlights the importance of both parts of the identity ‘Arab American’ in an individual’s well-being.

A particularly unique addition to the body of literature about acculturation and discrimination on mental health is a study assessing the mediating role of personal control in discrimination, mental health, and self-esteem (Moradi & Hasan, 2004). Many of the cited studies thus far in the literature have assessed culturally relevant phenomena and variables. Like other studies on Arab Americans and other Americans, it was found that perceived discrimination was associated with psychological distress. This particular finding is also consistent with Arabs in Finland (Moradi & Hasan, 2004), indicating that this may be an experience that extends beyond national lines.

Very few studies evaluated the impact that other factors have on Arab Americans. One study examined the effects of intimate partner violence, depression, length of stay in the United States, and barriers to services in Arab American women (Kulwicksi et al., 2015). The authors found that similar to literature on other populations, intimate partner violence was significantly associated with depression among Arab American women. Acculturation, defined as longer time spent in the US in this study, was associated with decreased barriers to receiving services in the event of intimate partner violence. Essentially, although barriers to disclose intimate partner violence and receive services may decrease the longer an individual lives in America, cultural barriers exist and appear to be a strong factor influencing receiving help regarding mental health issues such as depression. These findings suggest that the complex integration of the two cultures impacts accessibility to mental health services.

Several studies have assessed various factors that impact Arab American adolescents. Peer and classmate support was found to be associated with higher self-concept in Arab American adolescents (Tabbah et al., 2012). Tabbah et al., (2012) also found that perceived discrimination was associated with lower Scholastic Competence and lower perceptions of classmate support, but was not associated with overall social acceptance or self-worth. However, peer and classmate support trumped perceived discrimination, indicating that peer support is a significant protective factor.

Research also shows that the level of parental acculturation has an effect on adolescent mental health. One study found that adolescents raised in a bicultural environment, a densely populated community of Arab Americans, had higher levels of self-concept than those raised in a monocultural environment, Arabs living in Egypt

(Soliman & McAndrew, 1998). Another study compared Arab American children living in areas less densely populated with Arab Americans to children living in Lebanon and found that the Arab American children had higher levels of self-concept in areas including physical appearance and ability and peer relationships (Alkhateeb, 2010). This study illustrates that the formation of ethnic identity in a possibly more conscious manner, such as in a bicultural environment, may foster elements of resilience.

The psychological impacts of acculturative stress, acculturation, and parent-child conflict have also been addressed in the literature. Several studies indicate that perceived discrimination and acculturative stress are related in samples of Arab American youth (Ahmed et al., 2011; Goforth et al., 2014), and that ethnic identity, specifically a strong Arab ethnic identity, serves as a protective factor and is associated with positive psychological adjustment (Goforth et al., 2014). These findings suggest that although discrimination may enhance acculturative stress, enhancing ethnic identity and social peer supports in the child's environment may foster resilience and positive psychological adjustment for Arab American children. Additionally, these findings are congruent with previously cited research by Brondolo et al. (2009) regarding the protective effects of ethnic identity in other minority populations who experience discrimination.

Religiosity and religious support have been identified as protective factors for Arab American adolescents (Ahmed et al., 2011; Goforth et al., 2014). Ahmed and colleagues (2011) found that higher levels of religious coping and support along with strong ethnic identity were associated with less psychological distress in Arab American adolescents. Goforth et al. (2014) found that higher religiosity in Muslim Arab American adolescents is associated with less acculturative stress. Specific religious protective

factors against the stress of acculturation included perceived support from God, practicing religion, and being a part of a religious community.

Research on elderly Arab Americans is even more limited than other groups of Arab Americans. In a study assessing well-being in Arab American elders, Ajrouch (2007) found that those not born in America had higher levels of negative mood and lower levels of life satisfaction. Although familial relationships were not significantly associated with better well-being, Arab American elders in this sample sought out support from their adult children when they experienced negative mood. Additionally, other research shows that acculturative stress negatively affects the well-being of Arab American elders. Having poor English skills was found to be linked to depression (Wrobel et al., 2009). This link is more complex in that the perception of poor English skills as a stressor and poor English competency together were more predictive of depression.

It appears that certain factors such as perceived discrimination against Arab Americans has been associated with psychological distress (Abu-Ras & Abu-bader, 2008; Abu-Ras & Abu-Bader, 2009; Moradi, 2004; Padela & Heisler, 2010). However, protective factors such as spousal support, community and family connection due to collectivistic traditions, strong ethnic identity, age, and in some studies, higher levels of acculturation can foster positive psychological adjustment. Thus far, several variations among Arab Americans have already been identified, highlighting the heterogeneous nature of this group. Considering the pan-ethnic nature of Arab Americans, it is important to be aware of the ethnic differences between Arab American groups of individuals.

Other mental health literature. Few studies have examined psychological health and well-being in Arab Americans outside the realm of acculturation. In general, studies have shown that Arab Americans present with similar mental health patterns as others from developing or developed countries (Abi Hashem, 2008). The patterns for individuals from such countries exhibit a higher rate of mood disorders, anxiety, trauma, and dissociative disorders than those in underdeveloped countries. Although Arab Americans may also present with these mental health patterns, the presentation of these disorders may be different. For example, in several studies it was found that Arab Americans' presentation of depression is associated with anxiety and somatic complaints and lower levels of guilt, a presentation that differs from that of other Americans (Erickson & Al-Timimi, 2001; Sayed, 2003, Wrobel & Paterson, 2014). Additionally, Al-Krenawi & Graham (2000) found that emotional expression is usually avoided, except for the presentation of anger in men. These findings demonstrate that although Arab Americans may present similarly to those in developed countries, there are variations in mental health presentation. This indicates that there may be cultural features of this population that cause these variations.

Literature reviewing the conceptualization of mental illness within the Arab culture reveals that within the culture, seeking mental health services is viewed as a sign of weakness and may bring shame towards the family of that individual (Sayed, 2003). However, non-psychological ailments of a medical nature are widely accepted within the culture. In addition, many studies in Arab countries show a high prevalence of somatization in contrast to expressing psychological symptoms of distress (El-Rufaie, Al-Sabosy, Bener & Abuzied, 1999). Similar findings can be found across other eastern

cultures as well (Draguns, 1994). Sayed (2003) explains that somatization of symptoms relieves the individual from societal stigma. The stigma associated with mental illness and the difference in how Arab Americans conceptualize mental illness compared to the majority culture appears to be one possible explanation for variations in the presentation of mental illness.

Suicide prevalence and risks within the Arab American population is severely understudied. Only one study to date has investigated suicide among Arab Americans. Sayed, Tracy, Scarborough, and Galea (2011) assessed the prevalence of suicide in Michigan area Arab Americans using data on all deaths across the span of 17 years (1999 to 2007) and compared the results within a densely populated Arab American area to a less ethnically populated area to explore the role of the Arab ethnicity and ethnic density with suicide risk. They found that like other minority ethnic groups in America, Arab Americans had a lower suicide rate compared to non-ethnic whites. Additionally, lower rates of suicide were found in the more densely populated Arab American county in Michigan whereas higher rates of suicide were found for non-ethnic whites in this area compared to the rest of the state for both groups. The authors suggested several factors might explain the lower rates of suicide including stronger religious beliefs and spiritual coping, collectivistic orientation and stronger family bonds, higher affective expressiveness among Arab Americans, and a positive ethnic group identity. These factors have not been researched or shown to lower suicide risk, but rather have been proposed as possible explanations based on other ethnic minority groups (Leong & Leach, 2008). Thus, there appear to be cultural features that are protective against suicide, but such proposed explanations are yet to be researched.

It is important to note that it appears there may be conflicting reports of the level of and preference of affective expression among Arab Americans. Leong & Leach (2008) refer to a high level of affective expressiveness among Arab Americans, whereas Al-Krenawi & Graham (2000) found that emotional expression is avoided. It is unclear if these two authors and these two findings are referring to the same construct considering they use different language to describe their observations of what seemingly is the same thing. If they are referring to the same construct, then there is a lack of consensus within the literature on how Arab Americans express themselves affectively or emotionally. If they are not referring to the same construct, then this is an example of the importance of clarifying terminology that may sometimes be used interchangeably across works of literature to establish consistency with interpretation and generalizability. This is especially true when the purpose of the paper or of the research is to discover some aspect of a group of individuals.

Very few other studies have been published regarding mental health issues and behavioral health on Arab Americans that don't include a component of acculturation or discrimination. Much of the research regarding mental health and psychological well-being with Arab Americans is concerned with acculturation or discrimination. However, there is growing research in the sub-population of Arab American refugees and the special considerations and findings with this group.

Psychological outcomes among Arab American refugees. Ibrahim Kira and various colleagues have published a significant amount of the literature on Arab American refugees in the last decade. The Arab American refugee population has received some attention in the literature, especially regarding psychological issues

pertaining to trauma and resilience. With Arab American refugees fleeing oppression, war, and conflict in their home countries, the effects of these conflicts and coping mechanisms and the development of resilience has been examined in the literature. Arab American refugees include, but are not limited to, Iraqi refugees, Syrian refugees, Lebanese refugees, Somali refugees, Sudanese refugees, and Palestinian refugees (Kira, Amer, & Wrobel, 2014). While many refugees envision permanent residence in their new host country, some refugees, especially Palestinians, feel they are in exile and may not envision permanent residence in America, which may affect their attitudes and behaviors (Stockton, 1985). These distinctions between the various experiences of Arab ethnicities demonstrate the heterogeneity of this population. Therefore, paying attention to the ethnicity, country of origin, and specific experiences associated with these variables is important in order to interpret results within the appropriate context. For example, a Somali refugee's psychological experience may differ greatly from a Palestinian refugee's experience therefore creating different mental health patterns and concerns.

The types and levels of traumas Arab refugees experience are varied. Arab refugees experienced more intergroup identity trauma of oppression compared to other immigrant groups. Additionally, refugees face multiple traumas that compound on one another such as the unique sufferings they experience in their home countries and during their resettlement in America (Kira et al., 2014). Research has shown that day-to-day struggles and resettlement issues and discrimination may mediate the psychological distress associated with the original trauma they experienced before their arrival to America (Kira et al., 2010; Rasmussen et al., 2010).

Gender issues with Arab American refugees have been identified in the literature, with females experiencing higher levels of gender discrimination. Some of these issues and traumas have been found to include domestic violence, early or forced marriage, genital mutilation, rape, sexual trafficking, and education disparities (Kira et al, 2014). Kira, Smith, et al. (2010) found that after controlling for all other traumas, gender discrimination can have significant effects on the mental health of Arab American refugee women. This includes increases in Posttraumatic Stress Disorder symptoms, suicide ideation, deficits in executive functioning, and dissociation.

Economic and acculturative stress can also have negative impacts on Arab American refugees. While many refugees had professional jobs and strong personal and professional identities in their home countries, they struggle to find employment in jobs and professions similar to their previous positions or status (Kira et al., 2014). Research has shown that the loss or decrease in employment status is associated with an increased risk for depression with Arab American refugees (Kira et al., 2007). Arab American refugee women also experience higher levels of acculturative stress compared to their male counterparts due to social isolation, usually experienced as a result of poor English fluency and having less education (Kira et al., 2014).

Post 9/11 discrimination effects are a major acculturative stressor that has been labeled a traumatogenic factor that negatively affects the resettlement and psychological adjustment of Arab American refugees (Kira et al., 2014). Some studies have shown that after 9/11, Arab American refugees experienced several types of backlash traumas that negatively impacted their mental health. These factors are identified as receiving hostile interpersonal exchanges from mainstream Americans, anti-Arab sentiment and negative

stereotypes in the media, institutionalized discrimination and racism such as racial profiling or parts of the Patriot Act (Kira et al., 2014, Kira, Lewandowski, et al., 2010). Discrimination explains much of the variance in mental health symptoms after controlling for previous traumas, indicating that the discriminatory stress that refugees experience significantly negatively impacts their mental health (Kira, Lewandowski, et al., 2010, Kira et al., 2008).

The mental health outcomes of refugee children have also been assessed in the literature. A longitudinal study on Sudanese refugee children who have lost their parents and were placed in a program that places them in foster care found that receiving mental health counseling did not have an impact on their mental health (Geltman, Grant-Knight, Ellis, & Landgraf, 2008). A quantitative study of Somali refugee children by Ellis et al. (2008) found that less acculturation and more discrimination was linked to worse mental health and symptoms of PTSD. Gender differences were also found in this study with better mental health being associated with retaining Somali culture for girls, while more American socialization was associated with better mental health for boys. Ahmed et al. (2011) found that depression, anxiety, and other internalizing and externalizing symptoms were associated with discrimination and acculturative stress for Arab American refugee children. Cognitive abilities and IQ were found to be negatively affected by cumulative trauma in refugee children (Kira, Lewandowski et al., 2012; Kira, et al, 2012). More specifically, cumulative trauma was found to suppress cognitive ability and children had lower perceptual reasoning.

Having a strong collectivistic culture, the struggle for a just cause, intact families, and religion have all been identified as protective factors and sources of strength from

which resilience is born among Arab American refugees. Kira, Templin, et al. (2006) found that in a population of Iraqi refugees who were the victims of torture trauma, described as a higher dose trauma by Kira et al. (2014), their views of being more tolerant of religious and cultural differences and perceiving support from their community fostered better adjustment, more resilience, and more post traumatic growth than survivors of other types of trauma. The strength of the family bond and the importance of maintaining intact families is an important value for Arab American refugees. Studies by Kira and colleagues (Kira, Lewandowski, Somers, et al., 2012; Kira, Lewandowski, Yoon, et al., 2012) have shown that while Iraqi refugee children may experience various war traumas and acculturation stressors, family was a source of strength and stability for them compared to African American children who experienced more family oriented traumas, social traumas, and attachment disruptions. This research demonstrates that although Arab American refugee children may experience war traumas and oppression, the stability of their inner world within the family context provides them with the essential support to cope with these hardships.

Like the general Arab American population, Arab American refugees value religion and are likely to use religion and religious practices to cope with trauma and other ongoing stressors (Kira, Templin, et al., 2006). Muslim refugees attend mosques to enhance community connection and build interpersonal bonding, and Christian refugees use churches to connect with the larger American society in addition to bonding (Allen, 2010).

Kira et al. (2014) review the implications for clinical and community research and practice among Arab American refugees. They state that there is limited empirical

research examining interventions with Arab Americans and have highlighted the need to incorporate new and more effective interventions that integrate various models of recovery both at the individual level and at a systemic level. Kira et al. (2008) and Kira, Templin, et al. (2006) found that political and religious beliefs were identified as Iraqi refugees' reasons for surviving their torture. Discussing these strengths and integrating them in treatment can be a powerful tool to help practitioners working with this population (Kira et al., 2014). Additionally, it was also found that regaining self-control significantly helped reduce depression and anxiety and promote post-trauma growth (Basoglu et al., 2005, Kira, Lewandowski, et al., 2006; Kira et al., 2009). Teaching and enhancing forgiveness has also been linked with decreased PTSD symptoms and better health overall (Kira et al., 2009).

The added stressor of trauma, the loss of family, and the loss of economic and social status have been shown to be added unique stressors that can negatively impact the mental health and psychological adjustment of Arab American refugees. These factors along with acculturation and discriminatory stress may compound on one another creating a particularly difficult hardship for refugees. The cultural and individual strengths and sources of resilience are important factors to recognize and research as they provide clinicians and others with keys to enhance and support healing with this population. The investigation of well-being in the literature on Arab American refugees is limited. As discussed above, sources of coping and resilience are targeted in the literature in addition to traditional assessments of trauma and the presence of mental illness. However, an investigation of well-being via the hedonic or eudaimonic perspectives remains a gap in literature on this subpopulation.

Mental health stigma and assessment of needs. Mental health issues are strongly stigmatized in the Arab culture. Honor and upholding the family reputation and integrity are important values and mental illness is viewed as violating that honor. Due to the collectivistic orientation of Arabs, an individual with mental health issues is viewed as bringing shame to the family (Soheilian & Iman, 2009). This is particularly true for women, where the stigma of mental illness may harm her prospects to marry and increase the likelihood of divorce (Al-Krenawi & Graham, 2000). The potential heritability of mental illness is also a concern among Arabs and contributes to stigma (El-Sendiony, 1981). It is proposed that Arab Americans with a high sense of Arab ethnic identity will be more likely to hold these beliefs and stigmas about mental illness (Al-Krenawi & Graham, 2000).

Tigani el-Mahi was named the “Father of Psychiatry” in the Arab World in the early 20th century. In his writings he defined mental illness, providing one of the earlier conceptualizations of mental illness in the modern Arab world. He wrote, “mental illness is not entirely a medical concept; not a social doctrine; not a religious idea; not an economic concept; not even the work of fate or destiny, but is a harmoniously integrated complex of all these in varying proportions subject to the influence of time and space” (Sayed, 2003, p. 29). El-Mahi proposed a holistic perspective on mental illness that considers various factors that influence a person’s psyche. However, despite his conceptualization, mental health is often viewed in the medical model or via a religious and supernatural lens. Those of the Arab culture view illness with an external locus of control (Al-Krenawi & Graham, 2000), explaining mental illness as the result of envy from the ‘evil eye’ (Hakim-Larson et al., 2007).

As mentioned earlier, somatization of affective symptoms is common among Arabs and Arab Americans (Gorkin et al., 1985; Ahmed & Reddy, 2007; Al-Krenawai, 2005). There are numerous proposed reasons explaining why emotional or affective pain is displayed in physical terms and complaints. Meleis (1982) proposed that the lack of terminology in the Arabic language to describe mental states as distinct from physical ones could explain this. Additionally, Arabs may view emotional or affective issues as having somatic or physical origins (Al-Krenawi & Graham, 2000). Thus, the expected treatment is typically pharmacological or medical in nature. Al-Krenawi & Graham (2000) state that depression and somatization are so strongly connected in the Arab culture that two nearly always coexist. The authors validate this as a normal presentation of depression for non-European populations by citing the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 1994). The DSM-IV states that somatic expressions of depression are common in non-European populations and “feelings of guilt, self-deprecation, suicidal ideas, and feelings of despair are often rare or absent...” (p. 306) in those populations. The latter rings true for the Arab culture in that expressing negative feelings or conflict, regardless if it is internal or external, is discouraged. Symptoms of anxiety and depression are viewed as a narcissistic and self-absorbed preoccupation and “thinking too much” (Al-Krenawi & Graham, 2000). However, physical symptoms are morally accepted ailments. Therefore, studies have shown that mood symptoms, such as loss of pleasure, are not typically endorsed by Arab patients suffering from depression (Al-Issa, 1995). Cognitive symptoms, such as guilt and self-esteem, are also typically not endorsed for the same reasons (Al-Krenawi & Graham, 2000).

Although there is a dearth of research on mental health stigma among Arab Americans, some studies indicate that being conscious of the stigma is associated with greater severity of symptoms in Arab American mental health patients (Kira & Hammad, & Simman, 2005). Jaber et al. (2014) attempted to decrease the stigma towards mental health in Arab American adolescents through mental health awareness and education. Adolescents were randomized into two groups prior to taking the Self-Stigma of Depression Scale, a scale useful in identifying self-stigma. One group watched a mental health awareness video, while the control group watched a childhood obesity video. The authors found that one in seven Arab American adolescents exhibited moderate or moderately severe depression based on the Patient Health Questionnaire-9 form. However, the brief mental health awareness video was not associated with decreasing stigma, possibly due to it being a single and brief exposure (Jaber et al., 2014).

The extreme stigma associated with mental illness, varying presentations of mood disorders, and supernatural and external locus of control regarding mental health issues are some factors contributing to Arab Americans' reluctance to seek mental health treatment. In addition, the unfamiliarity with Western counseling approaches, specifically talk therapy, poses yet another barrier (Erickson & Al-Timimi, 2001). Traditionally, individuals with psychological issues tend to turn to an elder of the same sex for guidance, usually within the family (Erickson & Al-Timimi, 2001). This is to protect and preserve the family's honor and dignity. Thus, seeking help from individuals from outside the family is not a common practice, as talking about personal matters with others outside of the family unit is unacceptable. However, in religious Arab American families, the use of a priest or imam to guide the family is an acceptable form of help. One study

found that the use of an imam in Muslim families as the role of a counselor and mental health resource beyond spiritual concerns is common for Arab Americans.

A unique issue addressed in the literature is how the Arab culture influences the conceptualization and treatment of childhood sexual abuse. Although the strong family bond and sense of protectiveness of family members extends to children, childhood sexual abuse may not be appropriately addressed, or even disclosed at all, due to concerns about the shame it would bring the family (Haboush & Alyan, 2011). Therefore, children rely on self-blame to rationalize the abuse and cope. One study found that Palestinian children who suffered from sexual abuse by a family member had higher levels of hostility, anxiety, somatization, phobic anxiety, paranoid ideation, depression, and OCD than those abused by a stranger (Haboush & Alyan, 2011; Haj-Yahi & Tamish, 2001). More research needs to be done regarding childhood sexual abuse by a family member as it appears to hold more severe repercussions for Arab Americans considering the added emphasis of family and family cohesion within the culture (Haboush & Alyan, 2011).

The literature is very limited regarding research on how Arab Americans view mental health issues and whether they have the same barriers to service as Arabs in their home countries. Assessment of the Arab culture and beliefs is usually explained and then generalized to Arab Americans, typically to those with strong ethnic origins and identities (i.e. Al-Krenawi & Graham, 2000; Abudabbeh, 1996). The degree of acculturation has been cited to mediate whether an Arab American seeks out services (Hakim-Larson et al., 2007).

Measurement issues and ethical implications. There are several significant measurement issues in the literature reviewed about the behavioral and mental health of

Arab Americans. One of the main issues is the use of convenience sampling. The use of nonrandom convenience sampling limits the generalizability of results (Tabbah et al., 2012). Many of the studies cited have used convenience sampling to some degree due to the difficulty of identifying Arab Americans in databases or accessing Arab Americans nationally. Very few studies have used traditional methods of data collection (i.e. Alreshoud & Koeske, 1997; Faragallah et al., 1997). A significant portion of the studies cited and reviewed were based on samples of Arab Americans in the Detroit, MI area. This poses an issue due to the density of Arab Americans living in that area compared to most other Arab American communities across the United States. It is estimated that over 400,000 Arab Americans live in the Detroit area alone, making it the most densely populated Arab American city. Although California houses over 700,000 Arab Americans, making it the state with the highest Arab American residency, they are dispersed throughout the state. The Detroit area Arab Americans have a unique situation compared to other Arab Americans. In Detroit, Arab Americans are the majority, creating a different dynamic compared to other cities and towns in America. The sense of community, collectivism, and the Arab culture is very public and pronounced with Arabic signs, billboards, advertisements, and translations throughout the city. This is not the norm in the rest of America, and the strong ethnic enclave in Detroit may foster unique presentations and needs compared to Arab Americans living elsewhere. In particular, there may be stronger social and community resources and networks and less pressure to assimilate or acculturate (Ajrouch, 2000). Additionally, studies have shown that this type of increased ethnic density has positive health effects (Pickett & Wilkinson, 2008).

Data collection is also problematic due to the shame and stigma associated with endorsing symptoms of mental health issues or psychological maladjustment (Wrobel & Paterson, 2014). Individuals may be less likely to endorse such symptoms when they exist either through inability to identify their experience as psychological rather than physiological or out of denial to avoid stigmatization. It is proposed that Arab Americans who are more acculturated may be less likely to be influenced by shame or stigma or those with severe mental illness may be more willing to receive services (Wrobel & Paterson, 2014). These variations also pose an issue because it is more difficult to get a true representative sample of Arab Americans who currently receive mental health services, if only a certain demographic of Arab Americans is motivated to receive these services. Additionally, many of the measures utilized in the studies cited do not control for response bias or social desirability bias, posing another measurement limitation. Quantitative measures across most of the studies cited used were self-report measures, further limiting the validity and reliability of results.

There are measurement issues in the research addressing acculturation among Arab Americans regarding the assessment of ethnic versus American cultural identity using Berry's acculturation model. Since much of the research on acculturation is based on his model, acculturation is typically defined and categorized in those four categories, limiting the definition and complexity of acculturation and the experience of a developing identity. Additionally, there are insufficient psychometrically intact culturally sensitive instruments for this population. These acculturation classifications run the risk of oversimplifying the multilayered identities of Arab Americans and have particular assumptions attached to them. Generally, acculturation and acculturative stress is

understood and applied to Arab Americans based on existing research on other minority groups such as Asians (Wrobel & Paterson, 2014). This poses an issue because extrapolating information from existing research on other groups may not be applicable or generalizable. Scholars have argued that acculturation should be measured on instruments that have been designed for that particular ethnic group (e.g., Cuellar, Harris, & Jasso, 1980), which has not been done on any studies assessing the role of acculturation among Arab Americans.

Only one study was found that used Arabic versions of measures that have been tested for construct equivalence (i.e., Awad, 2010). This limits survey respondents to fluent English speakers and does not allow research to capture the breadth of and variability of Arab Americans. Several studies also analyzed data from pre-existing data sets, which restricted the variables and constructs they were able to analyze.

There is a paucity of literature focusing on resilience and strength among Arab Americans regarding both mental health issues and acculturation and trauma. Though some studies addressed resilience and strengths (i.e. Beitin & Allen, 2005), the majority perceived Arab Americans through a problem-focused lens and as a group largely in suffering or in need (Amer, 2014).

Most studies also have small sample sizes, which potentially limit the ability to detect within group differences (Amer, 2014). Within the Arab American population there is a variation in response to acculturation and within group cultural differences and identity formations based on religious affiliation, country of origin, family environment, and individual personality to name a few. In addition, small sample size also limits generalizability of results (Tabbah et al., 2012). Due to the convenience sampling utilized

in many samples, demographic variables such as gender or religion may be unbalanced, further hindering some results (i.e., Britto & Amer, 2007). Certain samples may represent pockets of demographic presentations of Arab Americans and may not be generalizable to all Arab Americans. For example, the sample utilized by Amer & Hovey (2007) mainly consisted of younger, more affluent, and better-educated Arab Americans compared to the overall American population. A good number of studies also used cross-sectional surveys, therefore their findings do not allow for causal inferences (i.e. Padela & Heisler, 2010; Tabbah et al., 2012).

Although the body of literature on Arab Americans is growing and covers a broad range, in many ways it is still in its infancy in terms of depth. Given the measurement issues discussed and the dearth of literature on behavioral and mental health among Arab Americans, current findings must be taken with caution. Many of the measurement issues and limitations discussed are due to the exploratory nature of some studies, and the infancy stage of the literature base on Arab Americans. Thus, researchers often resorted to the use of convenience sampling or novel methods of data collection.

The presented methodological and measurement issues discussed also have ethical implications. Per the APA (2002) Code of Ethics, researchers and practitioners have a responsibility to follow the ethical principles of beneficence, fidelity, integrity, justice, and respect for people's rights and dignity. Ensuring best practices in the methodology and measurement helps safeguard the results and interpretation of the data, preserving all five ethical principles. Examining cross cultural equivalence of constructs and using instruments that apply these cross-examined constructs ensures nonmaleficence. An example of this is suicide risk assessment among Arab Americans.

Many typical measures of suicide risk assessment determine suicidal ideation or plan by directly asking about suicidal thoughts or plans. However, several authors found that directly asking about suicidal thoughts are considered disrespectful and shameful by Arab Americans and may very well be denied (Ali, Liu, & Humedian, 2004; Al-Krenami & Graham, 2000). In fact, a study by Bazzoui (1970) found that Iraqis with depression rarely indicated that they had thoughts of suicide or attempted suicide, but 25% of those who had depression “indicated a desire to escape into the wilderness and run away from home” (Wrobel & Paterson, 2014, p. 215). This indicates that suicide ideation may manifest in different ways in this population. If not addressed or assessed via the cultural framework of the individual, it may not be assessed properly leading to lapse in the ethical duty of nonmaleficence.

If such steps and precautions are not taken to check construct equivalence, a study may inadvertently produce false assumptions and interpretations perpetuating misinformation, misunderstanding, or risk pathologizing what is culturally appropriate. Considering well-being research and other psychological empirical works are based on Western cultures, it is imperative that other cultures are researched fairly, ensuring justice for all groups while maintaining integrity by promoting accuracy and truthfulness.

Chapter 3

Methods

To test the study hypotheses outlined in Chapter One, data were collected through use of an online survey. Descriptive statistics, reliability, an exploratory factor analysis, and the physical and mental health variable correlations were examined to establish discriminant and convergent validity. Demographic and personality correlations were also examined and then compared to correlations reported in the literature for the mainstream population. The correlation between perceived social support and satisfaction with life were also analyzed. Lastly, a hierarchical linear regression was conducted to further explore differences.

Participants

Four hundred and eight individuals completed part or all of the study survey. Several of these participants did not meet the inclusionary criteria for the study (i.e., at least 18 years of age, Arab American, and proficient in reading and speaking English). Of the 408 total number of participants, 365 met the criteria for the survey (250 female, 115 males, $M_{\text{age}} = 31.2$ years, $SD = 11.3$, age range: 18-74). This study defines Arab American as an American citizen who ethnically self-identifies as Arab or having ethnic origins to an Arab nation from either one or both parents. The term 'Arab' in this study refers to individuals whose ethnic heritage is from the 22 North African and Middle Eastern member states of the Arab League. See Table 3.1 for data on the demographic characteristics of the study sample.

Table 3.1

<i>Demographic Characteristics of the Study Sample (N = 365)</i>	
Variable	Percent
Age	M = 31.2 (SD = 11.2)
Gender	
Female	68.5
Male	31.5
Ethnicity	
MENA	77.0
White & MENA	13.7
White	4.1
Other	1.9
Hispanic & MENA	.8
Asian & MENA	.8
White & Other	.5
Asian	.3
White & MENA & Asian	.3
White & MENA & Native	
American & Black	.3
White & MENA & Other	.3
Arabic Country of Origin	
Palestine	54.0
Lebanese	13.7
Iraq	10.3
Mixed Country of origin with non-Arabic countries	8.0
Syria	6.0
Egypt	4.2
Jordan	2.0
Libya	1.0
Yemeni	1.0
Saudi Arabia	0.8
Immigration Generation	
First Generation	55.1
Arab Immigrant	30.1
Second Generation	9.0
Third Generation or more	4.7
Marital Status	

Married	50.1
Single/Never Married	43.8
Divorced	5.8
Separated	.30
US Region of Residence	
Midwest	67.0
East Coast	16.0
South	12.0
West Coast	5.0
Education, %	
4-year College	29.3
Masters	22.5
Some College	19.2
Doctorate	12.6
High School/GED	8.5
2-year College	6.8
Less than High School	.8
Income	
0-25,000	35.6
50,000 – 100,000	23.3
25,000 – 50,000	22.5
100,000 – 200,000	13.2
More than 200,000	3.3
Religious Affiliation	
Muslim	87.0
Christian	6.0
Atheist	3.5
Spiritual	1.0
Agnostic	.5

Note: Some percentages in categories do not add up to 100% due to missing values.

The majority of participants endorsed a single ethnicity with the majority being Middle Eastern/North African (MENA) (77%), while the remainder indicated either a combination of Arab and another ethnicity (16.7%) or they indicated “White (4%), Asian (.30%), or other (1.90). The majority of participants indicated their country of origin was Palestine (54%), another 39% indicated another Arab country, and 8% of participants indicated their country of origin included an Arab and a non-Arabic country (e.g.,

Germany, Poland, Mexico, Norway, Switzerland, Colombia, Ireland, Italy). Over half (55%) of the participants indicated that they were first generation Arab American (i.e., the first generation to be born in the United States to parents who immigrated). The sample was overrepresented by women (68.5%), half of participants were married, and about two-thirds of participants endorsed living in a Midwestern state (67%) such as Wisconsin, Minnesota, Missouri, Michigan, Ohio, and Illinois.

Most of the study participants were educated beyond high school (91%). The sample was also overwhelmingly Muslim (87%) in terms of religious orientation.

Instruments

The study survey included eight brief questionnaires in addition to a brief demographics questionnaire.

Demographic survey. The demographics questionnaire included a series of questions assessing sociodemographic indicators such as race or ethnic origin, immigration generation, gender, age, marital status, education, income, location of residence (state), years spent in the United States, and religious affiliation

Satisfaction With Life Scale (SWLS). The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) is a 5-item scale designed to measure global cognitive judgements of an individual's satisfaction with their life. The items are on a 7-point Likert-type scale that ranges from 1 (strongly disagree) to 7 (strongly agree). Responses to the items are summed and higher scores indicate higher levels of satisfaction with life. There are extensive findings supporting the reliability and evidence for the validity of the SWLS across a broad range of age groups and applications (Shao &

Diener, 1992; Balatsky & Diener, 1993; Blais et al., 1989; Gouveia et al., 2008). Test-retest reliability across two months was found to be .82, and the Cronbach's alpha coefficient was found to be .87 (Diener et al., 1985). In the current study sample, Cronbach's alpha coefficient was .82.

National Survey, University of Michigan – Happiness Item. The University of Michigan – Happiness Item (Gurin, Veroff, & Feld, 1960) is a single-item measure of subjective well-being. It is a global cognitive assessment of how happy an individual is with their life. The item reads, “Taking all things together, how would you say things are these days, would you say you are very happy, pretty happy, or not too happy?” (Gurin, Veroff, & Feld, 1960). Although this one item instrument is widely used, limited validity data are available. This item was used to assess convergent validity for the construct of life satisfaction. Higher scores indicate higher levels of happiness.

Short Form Health Survey – 12. To assess physical health and convergent validity, a 12-item version of the Short Form Health Survey - 36 was used (Ware, Kosinski, & Keller, 1996). The 36-item questionnaire is self-administered and measures health on eight multi-item dimensions including functional status, well-being, and overall evaluation of health. The SF-36 detects both positive and negative states of health. The SF-12 was constructed as a shorter version of the SF-36 while still showing similar levels of reliability and evidence for validity. The SF-12 was able to reproduce more than 90% of the variance of the SF-36 in the general US population. Only the scales that best predicted physical health (Physical Functioning, Role Physical) and the two scales that best predicted mental health (Role Emotional, Mental Health) were reproduced in the SF-12, each scale using two of the original items. The remaining scales (Bodily pain,

General Health, Vitality, and Social Functioning) are one item each. Ware, Kosinski, and Keller (1996) state “The 12 items provide a representative sampling of the content of the 8 health concepts and the various operational definitions of those concepts, including what respondents are able to do, how they feel, and how they evaluate their health status” (p. 231).

Ware, Kosinski, and Keller (1996) state that the SF-12 contains categorical questions (e.g., yes/no) that assess limitations in role functioning as a result of physical and emotional health. It also contains three-point Likert-type scale responses (e.g., limited a lot, limited a little, or not limited at all) that assess limitations in physical activity and physical role functioning. A five-point Likert type scale is also used to assess pain (e.g., not at all, a little bit, moderately, quite a bit, and extremely) and overall health (e.g., excellent, very good, good, fair, and poor). Mental health, vitality, and social functioning are assessed on a six-point Likert type scale (e.g., all of the time, most of the time, a good bit of the time, some of the time, a little bit of the time, and none of the time).

Strong internal consistency and convergent validity were found with this scale (Ware, Kosinski, & Keller, 1996). Validity estimates between the SF-12 and SF-36 range from .43 to .93 (median = 0.67) across 14 validity studies. Test-retest (2 week) correlations of .89 for the 12-item Physical Component Summary (PCS-12), and .76 for the 12-item Mental Component Summary (MCS-12) were obtained in a sample of 232 general United States participants. Ware, Kosinski, and Keller (1996) state, “The PCS-12 and MCS-12 scored using general population weights were very highly correlated with PCS-36 and MCS-36 ... ($r = .951$ and 0.969 , respectively)” (p. 225). Similar to the

findings of Ware, Kosinski, and Keller (1996) in the general US population, the current study sample had a Cronbach's alpha coefficient of .80 (Ware, Kosinski, & Keller, 1996). Higher scores indicate better health.

Center for Epidemiological Studies Depression Scale (CES-D). The CES-D is a self-report instrument designed to screen for depressive symptoms in the general population (Radloff, 1977). The instrument contains 20 items regarding experiences the individual may have had during the preceding week. Sample items include: "I thought my life had been a failure," "I felt lonely," and "I have trouble keeping my mind on what I was doing." For all items of the CES-D, respondents are asked to check one of four responses, with higher scores indicating greater severity of depression symptoms. Strong discriminant validity has been reported for the CES-D, with strong sensitivity for discriminating between levels of severity of depressive symptoms (Radloff, 1977). This scale has also been validated on a sample of second generation Arab Americans and was found to have strong reliability, with a Cronbach's Alpha of .90 and similar factor structure consistent with other studies (Amer, Awad, Hovey, 2012). The current study sample was also found to have strong reliability, with a Cronbach's alpha of .92.

Generalized Anxiety Disorder Screener (GAD-7). The GAD-7 is a 7-item anxiety self-report instrument originally validated for use in primary care, though it has since been standardized for use in the general population with good reliability, with a Cronbach's alpha of 0.89, as well as evidence of criterion, construct, and factorial validity (Lowe, Decker, Muller, Brahler, Schellberg, & Herzog, Herzberg, 2008). The GAD-7 was found to have strong evidence for validity in measuring anxiety in the general population (Lowe, Decker, Muller, Brahler, Schellberg, & Herzog, Herzberg,

2008). The instrument has shown to be a useful screening tool for panic disorder, social anxiety disorder, post-traumatic stress disorder and generalized anxiety disorder (Spitzer et al., 2006). The GAD-7 items ask how often the individual has been bothered by 7 symptoms of generalized anxiety disorder on a scale ranging from “not at all”, “several days”, “more than half the days”, and “nearly every day”, scored from 0 to 3 respectively. The items are totaled, and a higher score indicates the presence of anxiety with scores less than 5 representing no anxiety symptoms, 5 to 9 representing mild anxiety symptoms, 10 to 14 representing moderate anxiety symptoms, and ≥ 15 representing severe anxiety symptoms. In the current study sample, reliability was found to be strong with a Cronbach’s alpha of .94.

Multidimensional Scale of Perceived Social Support (MSPSS). The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet et al., 1988) is a relatively brief 12-item scale that measures perceived support across three domains: family, friends, and significant others. This instrument assesses perceived availability and adequacy of emotional and instrumental social support and captures the variability in the three domains. The MPSS has strong evidence for validity and has been used in culturally diverse populations. Respondents answer on a 7-point Likert scale ranging from 1 (very strongly disagree) to 7 (very strongly agree). The score is calculated by summing the total of all three subscales, with higher scores indicating higher levels of perceived social support. Cronbach’s alpha for the total scale was .88. The scale was found to have strong construct and discriminant validity (Zimet et al., 1988). In the current study sample, reliability was found to be very strong with a Cronbach’s alpha of .95.

Eysenck's Personality Questionnaire Brief Version (EPQ-BV), Neuroticism Scale and Extroversion Scale. The Eysenck Personality Questionnaire Brief Version (Sato, 2005) is a 24-item brief version of the Eysenck Personality Questionnaire Revised Short Form (EPQR-S; Eysenck & Eysenck, 1992). Good reliability and evidence for validity were found for the EPQ-BV, with a Cronbach's alpha of .92 and .90 for the Extraversion and Neuroticism scales respectively (Sato, 2005). Reliability for the EPQ-BV in the current study sample was strong with a Cronbach's alpha of .89 for the Extraversion Scale and .90 for the Neuroticism scale. Higher scores indicate higher levels of extraversion and neuroticism.

The Positive and Negative Affect Schedule – Short Form (PANAS-SF). The Positive and Negative Affect Schedule Short Form (PANAS-SF; Watson et al., 1988) is a briefer measure of positive and negative affect. The scale is comprised of two 10-item scales measuring positive and negative affect. Participants are asked to rate the extent they experienced an emotion on a 5-point Likert-scale ranging from 1 'very slightly or not at all' to 5 'very much'. The internal consistency of this scale was found to be high with a Cronbach's alpha of .89. Adequate construct and factor validity was also found for this measure (Crawford & Henry, 2004). Reliability in the current study sample was moderate with a Cronbach's alpha of .79. Higher scores indicate greater levels of positive and negative affect.

Procedure

The survey comprised of the aforementioned instruments was accessible on a secure online survey website (i.e., Qualtrics). Participants were solicited via social media

sites such as Facebook and Reddit, various college campus list servs, and through various community and national agencies and national Arab American list servs, such as the Middle East North African (MENA) listserv. An informed consent form along with inclusion criteria were attached to the beginning of the survey. The intention was for the survey to extend beyond the geographic location of the researcher and reach Arab Americans across the country through the use of social media. The researcher obtained IRB approval prior to implementation of the survey through Marquette University.

The survey was accessible online for 10 weeks. The survey was closed when the desired number of participants was reached, and responses decreased significantly. Once the data were collected, they were transferred and downloaded into SPSS, a statistical software program.

Chapter 4

Results

Preliminary data analysis included frequency counts and distributions of responses to the demographic questions as well as all the other study variables. A total of 408 individuals participated in this study. Cases with more than 10% missing values were excluded from the analysis. The amount of missing data excluded from the sample is below the suggested cutoffs of 10% as suggested by Bennett (2001) or 20% by Peng et al. (2006), indicating little risk in biasing results. Thirty participants had missing values that met this cutoff while 13 participants did not meet the criteria of the study (i.e., identify as Arab American over the age of 18). The remaining total participants for the study is 365.

The means and standard deviations of the study variables are reported in Table 4.3. Most of the means and standard deviations are similar to other populations except for the satisfaction with life scale mean score. The average SWLS score for this sample of Arab Americans was 25.47 (SD = 5.73). This finding is consistent with other western populations with scores ranging from 23 to 28 (Pavot & Diener, 2009). This sample's average SWLS score is different from non-Western groups, which studies have found to have average scores in the slightly dissatisfied range (15-19) (Abdallah, 2012; Balatsky and Diener, 1993; Shoa and Diener, 1992). This sample of Arab Americans appeared to have similar average scores on all other measures compared to the general American population.

Factor Analysis

A principal-axis factor analysis with Varimax rotation was conducted on the SWLS to address the first aim of this study. Principal-axis analysis was used for several reasons. First, a goal of this study was to identify latent constructs in the SWLS in this sample. Principal-axis analysis is an exploratory factor analysis procedure (EFA) that functions to understand the structure of correlations of related variables. In contrast, an analysis such as principal components analysis aims to reduce the data into smaller sets of composite variables, and does not identify the structure correlations of the original variables. Additionally, Fabrigar, Wegener, MacCallum, and Strahan (1999) state, “whereas the goal of common factor analysis is to explain correlations among measured variables, the goal of PCA is to account for variance in the measured variables” (p. 275). The intention of this study is not to determine the amount of variance in the measured variables, but rather to explain the correlations among the variables. Therefore, a principal axis analysis, an EFA, was the best analysis to address this study’s research goals. An oblique rotation was applied in the event that there would be more than one factor due to hypothesizing that if there were more than one factor, they would be correlated.

This sample was adequate to detect underlying factors as the KMO and Bartlett’s tests of adequacy were within appropriate range, with a KMO value of .83 and a statistically significant Bartlett’s test of sphericity. A single factor emerged from the principal-axis factor analysis accounting for 49.19% of the variance after extraction and 59.18 before extraction. Oblique rotation was not applied as there was only one factor found in this sample. There was only one eigenvalue above one ($\lambda = 2.46$ after

extraction). Additionally, the scree plot (see Figure 4.1) indicates that a one-factor solution is the best approach for this data set. Table 4.1 indicates the factor loadings. These findings suggest that the last two items were the weakest in terms of convergence with the other items. However, these two items loaded on the first factor at a level of .61 and .68, indicating the one-factor solution is indeed the best solution. These results indicate that the first hypothesis is supported in that this sample of Arab Americans produced the same factor structure as other samples in previous studies.

Figure 4.1. Scree Plot

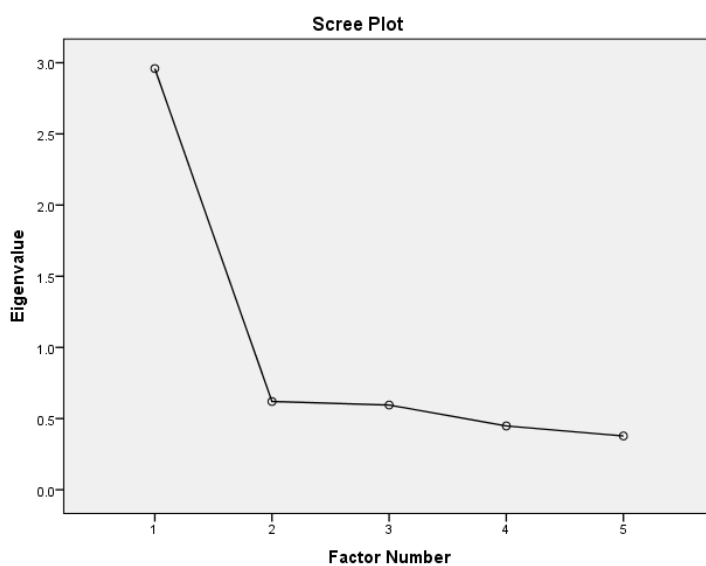


Table 4.1. Satisfaction With Life Scale Item Factor Loadings

Item	Factor 1
1. In most ways my life is close to ideal	.71
2. The conditions of my life are excellent	.76

3. I am satisfied with my life	.75
4. So far I have gotten the important things I want in life	.68
5. If I could live my life over, I would change almost nothing	.61

Extraction Method: Principal Axis Factor

Reliability of the SWLS

The second aim the study was to test the reliability of the SWLS, and thus the internal consistency coefficient was computed. The Cronbach's alpha for this sample was .82, indicating adequate internal consistency in this sample of Arab Americans. This sample's reliability is comparable to the SWLS reliabilities of .87 in other studies reported by Diener et al. (1985). Item-total correlations are found in Table 4.2. As seen in Table 4.2, all "Cronbach's alpha if item deleted" were less than the overall alpha of .82, indicating that deleting items would not improve the overall reliability of the instrument, highlighting good reliability in this sample.

Table 4.2

Item-Total Correlations and Alpha if Deleted for the SWLS

Item	Corrected Item-Total Correlation	Cronbach's Alpha if item Deleted
1. In most ways my life is close to ideal	.62	.78
2. The conditions of my life are excellent	.66	.77
3. I am satisfied with my life	.66	.77
4. So far I have gotten the important things I want in life	.60	.78
5. If I could live my life over, I would	.55	.81

change almost
nothing

Construct Validity

The third aim of this study was to test evidence for concurrent validity of the SWLS by examining the correlations between SWLS and measures known to correlate with the SWLS scale. Intercorrelations of the variables in this study were explored. Table 4.3 presents the means, standard deviations and intercorrelations among the variables satisfaction with life (SWLS), Michigan happiness item, physical well-being, mental health, depression, anxiety, perceived social support, neuroticism, extraversion, positive affect, and negative affect. As hypothesized, most of the correlations among these variables for this sample were similar to correlations found in previous studies. The only correlation that was significantly different than hypothesized was the correlation between subjective physical health and satisfaction with life ($r = .08$, $n = 362$, $p = 0.118$). There was no significant correlation between subjective physical health and SWLS as was found in previous studies. Figures 4.2 and 4.3 show the distribution of scores for the SWLS and physical well-being scores, respectively. The limited variability in physical well-being scores may contribute to the lack of correlation with SWLS scores.

Table 4.3

Means, Standard Deviations and Intercorrelations of Measures

Variable	1	2	3	4	5	6	7	8	9	10	11
1. SWLS	1										
2. Happiness	.54**	1									
3. Phys. WB	.08	.08	1								
4. <u>Ment. Health</u>	.37**	.39**	-.14**	1							
5. Depression	-.50**	-.52**	-.12*	-.75**	1						
6. Anxiety	-.45**	-.47**	-.03	-.66**	.77**	1					
7. <u>Soc.Support</u>	.45**	.39**	-.00	.45**	-.46**	-.37**	1				
8. Neuroticism	-.34**	-.41**	-.13*	-.55**	.68**	.69**	-.36**	1			
9. Extraversion	.26**	.30**	.11*	.23**	-.22**	-.17**	.25**	-.12*	1		
10. Pos. Affect	.37**	.38**	.05	.41**	-.42**	-.31**	.32**	-.26**	.53**	1	
11. Neg. Affect	-.30**	-.39**	-.00	-.60**	.71**	.71**	-.31**	.75**	-.13*	-.26**	1
Possible range	1-7	1-3	n/a	n/a	0-3	0-3	1-7	1-5	1-5	1-5	1-5
<i>M</i>	25.01	2.00	52.70	46.88	15.60	5.92	5.42	28.78	39.13	32.97	20.60
<i>SD</i>	5.69	.59	7.46	11.41	11.44	5.41	1.30	9.53	8.63	8.50	8.51

Higher scores on point scales reflect more of the construct.

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

Figure 4.2

Distribution of Satisfaction with Life Scores

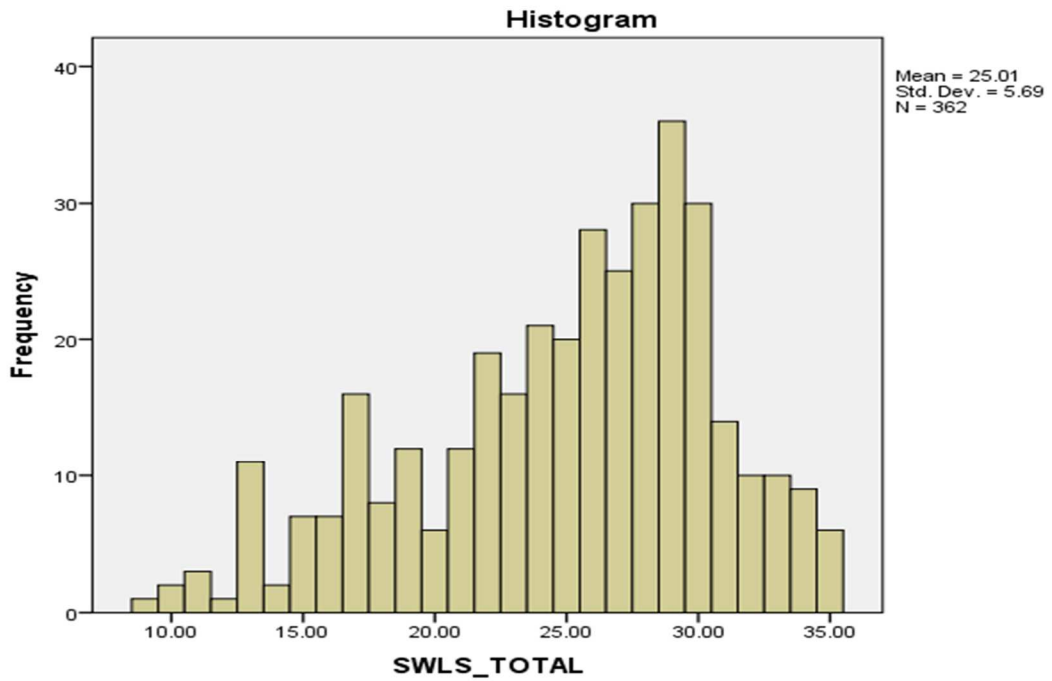
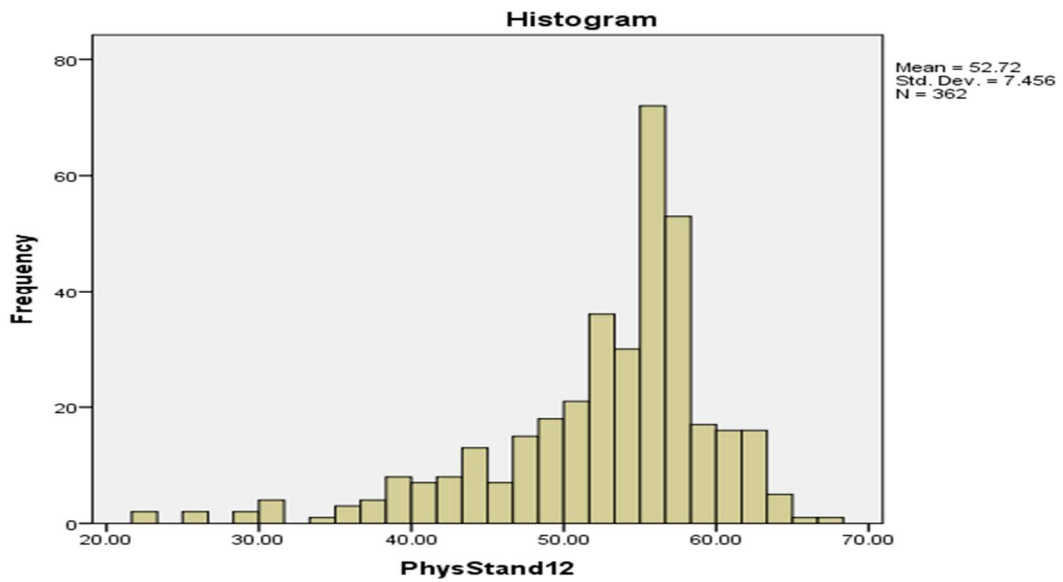


Figure 4.3

Distribution of Physical Well-Being Scores



Social Support and SWLS

The fourth aim of this study was to explore the relationship between perceived social support and satisfaction with life. As hypothesized, a moderate positive correlation was found between the two variables ($r = .459$, $n = 318$, $p = .000$). To further investigate these findings, a one-way analysis of variance was conducted to explore differences in life satisfaction between three relationship status groups (i.e., single, married, separated/divorced/widowed). Results indicate there is a significant difference between groups at the $p < .05$ level in life satisfaction for the three relationship status groups: $F(2, 359) = 7.86$, $p = .000$. Despite reaching statistical significance, the actual difference in mean scores between the groups was quite small. The effect size, calculated using eta squared, was .04, indicating only 4% of the variance in satisfaction with life is accounted for by marital status. Post-hoc comparisons using Tukey HSD test indicated that the mean score for the single group ($M = 24.40$, $SD = 5.86$) differed significantly from the married group ($M = 25.97$, $SD = 5.18$). The third group encompassing separated, divorced, and widowed participants ($M = 21.55$, $SD = 6.71$) differed significantly from the married group.

Gender Differences and the SWLS

To address the fifth aim of the study, an independent-samples t-test was conducted to investigate gender differences in satisfaction with life. Women ($M = 25.47$, $SD = 5.73$, $N = 248$) experienced higher levels of satisfaction than men ($M = 24.00$, $SD = 5.47$, $N = 114$), $t(360) = 2.29$, $p = .02$. Although women in this sample had statistically significantly higher scores of satisfaction with life, the absolute amount of that difference

was relatively small (i.e., 1.5). The effect size, calculated using Cohen's d , was .26, a small effect size.

Additional Analyses

This study was originally conceptualized to test for social support and gender differences in life satisfaction. However, to further examine whether those differences would hold in the presence of other demographic variables, the analysis was extended. A hierarchical linear regression was used to assess whether age, relationship status, income, education, immigration generation, and gender predict a significant amount of variance in satisfaction with life. Each of these independent variables were entered into their own blocks. Preliminary analyses were conducted to ensure no violation of the assumptions of normality, linearity, multicollinearity and homoscedasticity. Intercorrelations between the hierarchical regression variables were reported in Table 4.3 and the regression statistics are in Table 4.4.

Age was entered into stage 1, and did not contribute significantly to the model, $F(1, 350) = 1.18, p > .05$, and explained .30% of the variance in satisfaction with life. Relationship status was entered next and significantly contributed to the model, $F(2, 348) = 4.81, p < .05$ accounting for an additional 3.60% of the variance of satisfaction with life. Income was then entered next and did not contribute significantly to the model, $F(3, 345) = 3.28, p > .05$, accounting for an additional 1.40% of the variance in satisfaction with life. Education was entered next, contributing significantly to life satisfaction, $F(3, 342) = 3.12, p < .05$, accounting for an additional 2.20% of the variance in satisfaction with life. Immigration generation was then entered, significantly contributing to the

model, $F(3, 339) = 3.78, p < .05$, accounting for an addition 4.20% of the variance in satisfaction with life. Finally, gender was entered, significantly contributing to the model, $F(1, 338) = 4.12, p < .05$, accounting for an additional 1.90% of the variance in satisfaction with life. When all six independent variables were included in the last stage of the model, neither age nor income were significant predictors of satisfaction with life. The most significant predictors of life satisfaction in this model were relationship status, which uniquely accounted for 3.6% of the variance in satisfaction with life, and immigration generation, which uniquely accounted for 4.2% of the variance in satisfaction with life. Together, all the independent variables accounted for 13.7% of the variance in satisfaction with life $F(1, 338) = 4.12, p < .05, R^2 = .13, R^2_{Adjusted} = .10$.

Participants who were separated/divorced/widowed were found to significantly differ in satisfaction with life scores as compared to those who were married in that they experienced lower levels of satisfaction with life by 4.4 points (Beta = $-.19, t(338) = -3.54, p < .05$). Participants who earned a post-graduate degree (i.e., masters/doctorate) were found to significantly differ in satisfaction with life scores as compared to those who received a bachelor's degree, in that they experienced higher levels of satisfaction with life by 2.2 points (Beta = $.18, t(338) = 2.83, p < .05$). Participants who identified as an Arab immigrant were found to significantly differ in satisfaction with life scores as compared to those who identified as first generation Arab Americans in that they experienced lower levels of satisfaction with life by 2.32 points (Beta = $-.18, t(338) = -3.22, p < .05$). Additionally, male participants significantly differed in satisfaction with life scores compared to females in that they reported experiencing lower levels of satisfaction with life by 1.76 points (Beta = $-.145, t(338) = -2.73, p < .05$). Although not

statistically significant, participants who identified as third generation Arab immigrants reported experiencing 1.55 points more in life satisfaction compared to first generation Arab immigrants (Beta = .059, $t(338) = 1.13, p > .05$). The overall model accounted for 13.70% of the variance in satisfaction with life.

Table 4.4

Hierarchical Regression Analysis Predicting Satisfaction With Life Scale

Variable	b	SE (b)	β	t	R ²	Adj R ²	ΔR^2	ΔF	df
Step 1					.00	.00	.00	1.17	(1, 350)
Age	.02	.02	.05	1.08					
Step 2					.04	.03	.03**	6.61	(2, 348)
Age	.01	.03	.02	.36					
Single	-1.3	.72	-.11	-1.82					
Divorced/ Separated/ Widowed	-4.3***	1.26	-.18	-3.42					
Step 3					.05	.03	.01	1.72	(3, 345)
Age	-.00	.03	-.01	-.28					
Single	-1.31	.74	-.11	-1.75					
Divorced/ Separated/ Widowed	-3.86**	1.27	-.11	-3.04					
Income0-25k	-.48	.85	-.04	-.57					
Income25-50K	-1.20	.88	-.08	-1.35					
Income \geq 100K	1.01	.94	.067	1.07					
Step 4					.07	.05	.02*	2.71	(3, 342)
Age	-.02	.03	-.03	-.64					
Single	-1.32	.74	-.17	-1.78					
Divorced/ Separated/ Widowed	-3.66**	1.26	-.15	-2.89					
Income0-25k	.45	.92	.03	.49					
Income25-50K	-.43	.92	.03	.49					
Income \geq 100K	.77	.94	.05	.82					
Educ \leq HS/GED	-.96	1.14	-.05	-.84					
Educ: Some College/2yr Degree	-.29	.82	-.02	-.359					
Educ: Masters/ Doctorate	1.78	.79	.15	2.25					
Step 5					.11	.08	.042***	5.35	(3, 339)
Age	.01	.03	.03	.463					

Single	-1.40*	.72	-.12	-1.93					
Divorced/ Separated/ Widowed	-4.04***	1.25	-.17	-3.22					
Income0-25k	.75	.91	.06	.82					
Income25-50K	-.38	.90	-.02	.42					
Income≥100K	.73	.92	.04	.79					
Educ≤HS/GED	-.77	1.13	-.04	-.68					
Educ: Some College/2yr Degree	-.37	.81	-.02	-.46					
Educ: Masters/ Doctorate	2.18**	.78	.18	2.77					
Immigrant	-2.54***	.72	-.20	-3.50					
2 nd GenImmig	-1.44	1.03	-.07	-1.40					
≥3rdGenImmig	1.51	1.38	.05	1.09					
Step 6					.13	.10	.01**	7.43	(1, 338)
Age	.02	.03	.05	.72					
Single	-1.19	.72	-.10	-1.64					
Divorced/ Separated/ Widowed	-4.43***	1.25	-.19	-3.54					
Income0-25k	.41	.91	.03	.45					
Income25-50K	-.58	.90	-.04	-.64					
Income≥100K	.70	.91	.04	.76					
Educ≤HS/GED	-.53	1.12	-.02	-.47					
Educ: Some College/2yr Degree	-.27	.80	-.02	-.34					
Educ: Masters/ Doctorate	2.20**	.77	.18	2.83					
Immigrant	-2.32***	.72	-.18	-3.22					
2 nd GenImmig	-1.66	1.02	-.08	-1.62					
≥3rdGenImmig	1.54	1.36	.05	1.13					
Gender=Male	-1.75**	.64	-.14	-2.72					

Note: Comparison groups for each variable are: Marital Status = Married; Income = \$50-100k; Education = Bachelor's Degree; Immigration Generation = 1st Generation; Gender = Female

* p < .05 ** p < .01 *** p < .001

Chapter 5

Discussion

The present study examined the internal structure and reliability of the Satisfaction With Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) in a sample of Arab Americans. Additionally, this study examined how the SWLS correlated with overall physical health, overall mental health, depression, anxiety, positive and negative affect, neuroticism, extroversion, and social support. Furthermore, gender differences in SWLS scores in this sample of Arab Americans were examined. Finally, this study examined whether any differences found would hold in the presence of other demographic variables.

This study found that a single factor emerged in the SWLS, accounting for 49.1% of the variance. The one-factor solution obtained in the present study is consistent with studies in other populations, whereas the variance accounted for is less than the original 66% found in the original 5-item scale (e.g., Diener et al., 1985; Pavot & Diener, 1993). Similar to other studies, the last two items on the SWLS were found to have the weakest convergence with other items. Pavot and Diener (1993) hypothesized that the last item does not converge well as it asks about the past. This same hypothesis could be applied to the second to last item as well (i.e., “So far I have gotten the important things I want in life”), whereas the first three items are clear in asking about current conditions. However, this hypothesis has not been tested and may have implication for future research. Overall, this study found the SWLS to have good evidence for factorial validity with this sample of Arab Americans.

In the present study, the SWLS demonstrated good convergence with related measures such as the Michigan Happiness Item, positive overall mental health, social support, extraversion, and positive affect. These findings were similar to findings in other populations (Pavot et al., 1991; Diener et al., 1985). As found in other studies, the SWLS in this sample was found to have significantly negative correlations with depression, anxiety, neuroticism, and negative affect. Unlike other studies, the SWLS in the current study was not significantly correlated to physical well-being. Other studies have found that perceptions of physical health, assessed via a self-report measure of physical well-being as used in this study, are significantly correlated to subjective well-being (Diener et al., 1999). The average physical well-being score ($M=52.7$) in the current study sample was also comparable to the average mean score in other populations ($M=50.8$) (Utah Health Status Survey, 2001). It is possible that the physical well-being scores were uncorrelated to satisfaction with life scores, at least in part, due to low variability in the distribution of scores in physical well-being.

This present study found that women experienced higher levels of satisfaction with life than men. This finding somewhat fits a general pattern in the literature in that if differences are found, women usually experience higher levels of satisfaction. However, this study differs in that after controlling for other variables, this difference is maintained, whereas in other studies, this difference is usually small and disappears when other demographic variables are controlled (Diener, Suh, Lucas, and Smith, 1999). Although the difference is maintained as significant after other demographic variables are controlled for, the difference is small. Diener et al. (1999) proposed this gender difference occurs because, “women experience, on average, both positive and negative

emotions more strongly and frequently than men” (p. 292), report higher levels of positive affect, and may be more open to intense emotional experiences based on societal prescribed gender roles (Wood et al., 1989). Though this may be a plausible explanation, it is also possible that cultural factors may be at play in the current study sample regarding the expression and/or experience of satisfaction with life. Studies have found that Arab American women are more highly educated compared to the general US population (Read and Oselin, 2008). Studies have also found that attaining education for Arab American women is not always to further career, but rather a general resource for the family and child-rearing (Cainker and Read, 2014). Other studies have found that although educated Arab American women are viewed as being oppressed for choosing to stay at home rather than pursue a career, they may actually be “acting with agency on a value system they believe in, one that prioritizes family” (Cainker and Read, 2014, p.96). Furthermore, Cainker and Read (2014) referred to a study by Read and Oselin (2008) that “found that many of the women they interviewed were “satisfied with their roles” (p. 96). The same might be true in the current study sample, a possibility that could be examined in future research.

Social support was positively correlated with SWLS as hypothesized. Although statistically significant differences were found among the three relationship status groups in the study (i.e., single, married, separated/divorced/widowed) in how they experienced satisfaction with life, these differences in mean scores were small and only 4% of the variance in SWLS was accounted for by marital status. This same trend in small effect sizes when calculating differences is noted across all other variables in this study sample. When assessing average scores of the three relationship status groups, those who were

separated, divorced or widowed had the lowest satisfaction with life scores. Family is central to traditional Arab cultural values. Due to family being one of the most important social institutions, marriage is highly honored, while divorce is highly disapproved of (Cainkar and Read, 2014). As such, it is plausible that some of these values may hold true to some degree in this sample of Arab Americans, and if one is divorced, separated, or widowed, this may impact an individual's satisfaction with life.

The overall variance of the SWLS accounted for by all the other study variables was 13.7%. This indicates that there is a significant amount of variance unaccounted for by the variables used in this study. This highlights an area for future research in exploring other variables that account for satisfaction with life. Just as the literature on acculturation suggests psychological health is complex and mediated by variables such as ethnic identity, perceived discriminatory experiences, perceived support, personal control, socio-demographic factors, self-concept, and religion, the factors influencing satisfaction with life also appear complex. Future research is needed to explore these and more mediating factors beyond the variables identified in this study.

The average satisfaction with life score on the SWLS for this sample of Arab Americans was 25, or being slightly satisfied with life. As noted earlier, Western populations tend to rate satisfaction in the slightly satisfied range, while non-Western groups, such as Arabs in the West Bank (Abdallah, 2012), Chinese students (Shoa and Diener, 1992), and Soviet students (Balatsky and Diener, 1993) reported levels of satisfaction with life in the slightly dissatisfied range. This study found that this sample of Arab Americans tended to report similar levels of satisfaction with life to Western populations. This indicates that to some degree, Arab Americans appear to rate and

possibly experience satisfaction with life as it is conceptualized by Western cultures. The higher levels of satisfaction with life may be a result of the demographic characteristics of this sample. Two-thirds of the sample were female, a group that typically has higher SWLS scores than men. This sample was also more educated, another characteristic that has been linked to higher levels of subjective well-being (Diener et al., 1999).

Additionally, as noted earlier in the literature review, Padela and Heisler (2010)'s research found that higher levels of hedonic well-being were found among more highly educated Arab Americans. This may also be true in the present study sample, not just in terms of education, but also marital status, as half of this sample were married.

Interestingly, Arab immigrants in this study reported lower levels of satisfaction with life compared to first of later generation Arab Americans. Although at face value this appears to indicate that Arab immigrants experience lower levels of satisfaction with life compared to Arab Americans born and raised in America, it may actually be that due to cultural differences: Arab immigrants may simply be interpreting the questions and reporting levels of satisfaction in a way that is in line with their Arab counterparts in their home countries. As noted earlier, Arabic-speaking Palestinian undergraduate students in the West Bank reported satisfaction with life scores in the slightly dissatisfied range (17.56) (Abdallah, 2012), which is comparable to other non-Western samples such as Chinese students (Shoa and Diener, 1992). Considering Arab immigrants may be more oriented to the Arabic collectivism than American individualism, the "P" statements and individually oriented questions in the SWLS may affect how an Arab immigrant responds. However, the acculturation level of Arab immigrants was not assessed in this study, and thus this hypothesis has yet to be tested.

In summary, the results related to the psychometric properties of the SWLS in this study provides evidence for the validity of the SWLS with Arab Americans. The reliability and validity evidence found in this study and similar reported ratings of satisfaction with life as other Western populations indicate that the SWLS may effectively be used with Arab Americans. Use of this instrument with Arab Americans in future studies will contribute to the expansion of literature on well-being to this population, moving the body of research away from the deficit model and towards a more holistic approach. Additionally, clinicians and practitioners across several fields may use this instrument with knowledge that it is psychometrically sound when utilized with Arab American individuals.

Limitations

This study has several limitations. Due to reasons of practicality, resource limitations, and time constraints, this study only investigated the hedonic approach to conceptualizing well-being. Testing this construct across groups could be challenging and other components of well-being may not be fully identified or understood yet. Sampling issues also apply to this study as Arab Americans remain difficult to identify in data bases or across data sources, making random sampling a difficult feat. Therefore, convenience sampling was utilized, though the researcher in this study attempted to minimize this issue by making efforts to obtain a sample that is as heterogeneous as possible. These recruitment methods limit participants to those that are affiliated with these organizations or sites, or have access to internet use, therefore impacting the generalizability of the results. Additionally, two-thirds of the sample were female,

skewing the representation of gender in this study. This sample was also skewed in terms of education, with only less than 10% of the sample having earned a high school degree or less. The overrepresentation of higher education status in this sample may have influence over the overall average SWLS score in this sample as those who received a master's degree or higher reported greater levels of life satisfaction than those with less education. Future studies may investigate whether Arab Americans who attained lower levels of education report similar rates of satisfaction with life.

Additionally, although this study sought to reach Arab Americans of all faith backgrounds, the majority (87%) were Muslim, indicating that the results may be more representative of Muslim Arab Americans. It is thought that Muslim Arab Americans may more readily identify as "Arab American" rather than "White American" given the historical trends of immigration and identity, whereas Christian Arab Americans may simply utilize the identity "American" or identify as White as they share the same faith as the dominant culture and may not have opted in participating in the survey for this reason. Additionally, Arab-Americans are a pan-ethnic group, whereas over half of participants of this study were Palestinian, with another 30% being Iraqi or Lebanese, and the remaining participants being from Egypt, Syria, Libya, Saudi Arabia, Yemen, and Jordan. This indicates that the study results do not completely capture the experience of all Arab Americans. Parsing out ethnic differences among Arab Americans may resolve some of the inconsistent findings in the literature noted in Chapter 2 on this population.

Another limitation of this study is that only one of the instruments used has had its validity investigated for use with Arab Americans. There are limited instruments that have had their psychometric properties investigated within the Arab American

population. It is the hope of this researcher that the instruments used in this study, among other instruments, will eventually become the focus of future research. Additionally, the measures used in this study are self-report instruments. Issues such as social desirability bias and selective memory may be consequences of using self-report instruments.

It is notable that the 2016 U.S. Presidential Election occurred during the data collection period of this study. During the election period, controversial sociopolitical issues such as immigration policy, foreign policy, and discussion of a ‘Muslim ban’ for individuals entering the U.S. from the Middle East region were at the center of the election. How this affected Arab Americans in this study is unknown, though it is a notable part of the sociopolitical climate in America, and may have influenced Arab American’s sense of safety participating or self-disclosing levels of symptoms. On the other hand, it may have even propelled Arab Americans to participate in this study in an effort to contribute to expanding the literature and views on Arab Americans, as this study was advertised as a well-being study.

Future Directions

There are many directions for future studies based on gaps identified in the literature and results of the current study. This includes examining evidence for the validity of other instruments with Arab Americans. Continuing to explore additional variables (e.g., optimism) and their connection to SWLS among Arab Americans will expand our understanding of well-being among Arab Americans. A particular variable that may be further assessed is relationship satisfaction and its connection to satisfaction with life and well-being. A limitation of this study is that relationship status was assessed

rather than relationship satisfaction. Previous studies have found relationship satisfaction may have a more causal influence on life satisfaction (Headey, Veenhoven, & Wearing, 1991). Exploring the finding in the current study of a lack of a relationship between physical well-being and satisfaction with life is also indicated. It is unclear why no relationship was found in this study whereas other studies have found a strong correlation with self-rated health measures and subjective well-being. Additionally, investigating eudaimonic measures of well-being may shed light on any cultural nuances of well-being in this population. Exploring the psychometric properties of Ryff's multidimensional instrument on Arab Americans would broaden the overall understanding and conceptualization of well-being with this population. The prioritization of life purpose and quality social relationships in Ryff's conceptualization of positive human health may have implications for the collectivism in Arab Americans. Arab Americans are a pan-ethnic group, creating a challenge for researchers aiming to assess this group at large. As demonstrated in this study and many others, it is challenging to gather a sample that is ethnically representative of the larger Arab American population. It may be useful to focus studies on Arab ethnicities to elucidate cultural nuances of this diverse group.

There is a great deal yet to be learned about well-being among Arab Americans. This study aimed to contribute to broadening the body of literature beyond the deficit model of well-being and include Arab Americans in the larger context of the well-being literature. In many ways, the Satisfaction With Life Scale appears to have strong evidence for its reliability and validity when used with Arab Americans. This study's attention to the intersection of culture and well-being by ensuring an instrument is

culturally appropriate is one of the initial steps in creating an inclusive and validating environment within research, clinical practice, and our overall sociocultural world.

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