

a Dissertation

entitled

The Relationship between Acculturative Stress and Well-being among Foreign-Born  
Arab International Students in the United States: An Exploratory Study

by

Hussam Aldawsari

Submitted to the Graduate Faculty as a partial fulfillment of the requirements for the  
Doctor of Philosophy Degree in Counselor Education and Supervision

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August 2020

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An Abstract of

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Foreign-born Arab international students face many stressors that may increase their acculturative stress levels and may be associated with their overall well-being. The purpose of this study was to investigate the relationship between acculturative stress and well-being, and relevant socio-economic factors among foreign-born Arab international students in the United States. This dissertation was an exploratory study that utilized an ex-post facto framework and purposive sampling to gain participants. T-tests, Pearson correlational coefficient ( $r$ ), and the analysis of variance (ANOVA) were used to obtain the result of this study. The finding from a sample ( $N=73$ ) provided affirmative support for some of the research questions and indicated that there were statistically significant relationships between acculturative stress and social support, and well-being and length of stay. There were significant differences between some English language proficiency groups that were associated with acculturative stress. However, the rest of the findings of this study did not provide affirmative support for the remaining research questions. Implications for international offices, university counseling centers, and faculty members, as well as limitations and recommendations for future studies, were discussed.

For my parents and siblings in the Kingdom of Saudi Arabia, I have been always dedicated, determined, and have worked hard to be the best son and brother of whom you can always be proud. Thank you for being patient while I followed my educational dream. I love you all.

## **Acknowledgements**

This educational journey could not have been successful without the support from my parents and siblings in the Kingdom of Saudi Arabia. I appreciate all of the emotional support and love I have received from you while I was in the United States it has given me the hope and energy to keep going.

To the government of the Kingdom of Saudi Arabia, I cannot thank you enough for making my educational dream come true and for providing me all the sources of support while I studied in the United States.

To my dissertation chair Dr. John Laux and committee members, Dr. Russel Fulmer, Dr. Tahani Dari and Dr. Nader Hakim, I thank you for agreeing to serve on my committee and for your willingness to help improve me academically and professionally.

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## List of Abbreviations

AAI	Arab American Institute
AADC	Arab-American Anti-Discrimination Committee
AAUG	Association of Arab American University Graduates
ANOVA	Analysis of Variance
ASSIS	Acculturative Stress Scale for International Students
CAIR	Council on American-Islamic Relations
COVID-19	Coronavirus Disease 2019
5F-Wel	Five-Factor Wellness Inventory
IIE	Institute of International Education
INA	Immigration and Nationality Act
INS	Immigration and Naturalization Service
IS-Wel.....	Indivisible-Self Model of Wellness
SAFE	Social, Attitudinal, Familial, and Environmental Acculturative Stress Scales
SAFE-R	Acculturation Stress Scale-Revised
SCAS	Sociocultural Adaptation Scale
SOS-10	Schwartz Outcome Scale-10
SPSS	Statistical Package for the Social Sciences
SPWB	Ryff Scale of Psychological Well-Being
U.S.	United States
WEL.....	Wellness Evaluation of Lifestyle Inventory

## **Chapter One**

### **Introduction**

#### **Statement of the Problem**

The number of the foreign-born international students in the United States reached 1,094,792 in the 2018 academic year, which positions the United States as the top country hosting foreign-born students worldwide (Institute of International Education, 2018a). The term ‘foreign-born’ is usually used to refer to being born and raised outside a host country and having a different form of citizenship (Fries-Britt, Mwangi, & Peralta, 2014a). Foreign-born international students experience many different stressors due to cultural changes and the factors associated with psychologically adapting to a new culture, such as lack of understanding of the new language, and a consequential limited ability to communicate with teachers, peers and others in the host culture, and difficulties adapting to professors’ requirements and teaching styles due to differences in cultural expectations (Fries-Britt, Mwangi, & Peralta, 2014b). In addition, stereotyping and discrimination can also impose barriers for foreign-born international students to overcome, which can affect their willingness to adapt to the new host culture (Fries-Britt et al., 2014b). Foreign-born international students in the United States experience a varied spectrum of stressors that impact their level of acculturative stress and overall well-being (Amer & Awad, 2016).

Of the approximately 1 million foreign-born international students in the United States, 76,265 are from one of the 22 Arab countries (Institute of International Education, 2018b). These foreign-born Arab international students share many of the same challenges that all international students face during the process of acculturation, but they

also face some unique challenges. Like all international students, those from Arab countries experience a multitude of stressors during the process of acculturation, such as struggling to gain proficiency in the English language, finding and establishing social support systems, and coping with homesickness. The impacts of these stressors can vary depending on socio-economic factors such as financial support, immigrant status, religious and cultural differences, age, gender, level of education, and different lengths of stay (Berry, 1997; Berry & Hou, 2016; Sandhu & Asrabadi, 1994). Also like many international students in the United States, foreign-born Arab international students experience perceived discrimination, but in some ways that are unique to Arabs (Çiftçi & Zalzal, 2016). Negative media portrayals of Arabs, terrorist stereotypes in the aftermath of 9/11, and the current social-political climate can influence perceived discrimination, which in turn can affect the ability of foreign-born Arab international students to acculturate in a healthy way (Amer & Awad, 2016; Çiftçi & Zalzal, 2016; Goforth, Pham, Chun, Castro-Olivo, & Yosai, 2016).

Although some scholars (Goforth et al., 2016; Ogunsanya, Bamgbade, Thach, Sudhapalli, & Rascati 2018) have investigated the mental health concerns amongst Arab Americans related to acculturative stress and its factors, research on acculturation and well-being specifically among foreign-born Arab international students in the United States is in its infancy (Amer & Awad, 2016; Atari & Han, 2018; Goforth et al., 2016). Amer and Awad (2016) have argued that research on well-being conducted in the United States rarely includes subjects who are students of Arab descent in general and foreign-born Arab international students in particular. The lack of research on this population is concerning, particularly since the number of foreign-born international students from

Arab countries has risen over the last two decades (Amer & Awad, 2016). A review of recent literature reveals that few studies have focused on either overall concerns about well-being or on such variables of acculturative stress as discrimination, the effects of the events of 9/11, and other factors (Goforth et al., 2016). There are even fewer studies related to these topics that have focused on Arab international students' well-being. Moreover, there are as yet no academic studies that address the relationship between acculturative stress and well-being among foreign-born Arab international college students (Atari & Han, 2018).

Due to the gap in the research on this population, this study addresses the problem of how acculturative stress and its factors impacts the overall well-being of foreign-born Arab international students in the United States (Atari & Han, 2018; Çiftçi & Zalzal, 2016; Goforth et al., 2016). This problem of acculturative stress is significant since universities that are unaware of such stress and its causative factors among foreign-born Arab international students (Çiftçi & Zalzal, 2016) experience the trouble of allowing such stress to develop overtime in such a manner that it affects the education and mental and physical health of students, which can in turn lead to student withdrawals (Marks & Conn, 2012). Due to this research gap, universities are often unaware of how to provide culturally relevant supportive services due to the specific and unique needs of Arab international foreign-born students, and in turn risk losing campus diversity and the financial benefits gained from this population of students (Çiftçi & Zalzal, 2016; Martirosyan, Bustamante, & Saxon, 2019).

## **Background of the Problem**

Arab immigration to the United States began in the 1870s (Suleiman, 1999), although the waves of Arab immigrants have ebbed and flowed throughout the year. The history of foreign-born Arab international students immigration to the United States began during the late 1940s and early 1950s. Since then, many Arab states, including Algeria, Lebanon, Egypt, Jordan, Palestine, Libya, Syria, Iraq, Sudan, Morocco, Tunisia, Qatar, Kingdom of Saudi Arabia, and Kuwait, have offered academic scholarships that have allowed students to study abroad at American universities (Al-Qazzaz, 1979; Çiftçi & Zalzal, 2016; Elkholy, 1969). At the same time, the United States passed education and immigration laws that in the middle of the 20th century that promoted cross-cultural education. As a result, foreign-born international Arab students have been among the many minority groups who have temporarily and sometimes permanently immigrated to the United States as students to pursue their dreams of freedom, education, and good fortune (Al-Qazzaz, 1979; Çiftçi & Zalzal, 2016; Elkholy, 1969). For the purpose of this study, the focus will be on foreign-born international Arab students who have temporarily immigrated to the United States for educational purposes and how various factors have affected their acculturation and well-being.

There are many factors that impact the acculturation of foreign-born Arab international students, acculturation being the process involving both psychological adaptation and cultural changes through which immigrants go, including those that arise during their acculturation process in the United States and those that exist prior to their arrival (Berry, 2017; Çiftçi & Zalzal, 2016). During the process of acculturation, many international students (including foreign-born Arab international students) face two

competing challenges: acclimating to the new culture while striving to maintain their cultural identity (Berry, 1997). There are a number of factors that affect the levels of acculturative stress, that stress which results from the acculturation process (Berry, Kim, Minde, & Mok, 1987), and overall well-being, overall health in terms of a healthy body, mind, and spirit (Myers & Sweeney, 2008), among foreign-born international Arabs students. Factors that arise for many foreign-born international students during the acculturation process include dealing with difficulties related to their status as temporary immigrants (sojourners), lack of social support, feelings of homesickness, economic status, lengths of stay (the amount of time an individual has resided in the United States), and English language proficiency (Berry, 2017; Berry, 1997; Çiftçi & Zalzal, 2016). Certain specific factors faced exclusively by Arab students living in the United States pose additional challenges. These factors include perceived and felt discrimination that has resulted from negative portrayals of Arabs in the American media, the social consequences of the events of September 11, and the current political environment (Abu-Ras, 2016; Amer & Awad, 2016; Berry & Hou, 2016; Goforth, Oka, Leong, & Denis, 2014).

As temporary residents in the United States who come for educational purposes, international students have a unique immigration status. Under Federal immigration laws, foreign-born international students are granted non-immigrant student visas that allow them to pursue education in the United States, and must maintain a full course of study. In the research on acculturation, different types of terms are used to define foreign-born international students. Berry (1997, 2017), in his acculturation model, has referred to international students as temporary immigrants as well as sojourners, while other

researchers have referred to them as transient migrants (Yang, 2017). Because this dissertation follows Berry's acculturation model, his terminology of 'sojourners' and 'temporary immigrants' are used interchangeably with 'foreign-born international students.' Regardless of the label, the barriers that stem from this kind of status can make them especially vulnerable to difficulties in the acculturation process, perhaps due to the fact they are aware they will most likely leave the host country at some point in time (Berry, 1997; Berry et al., 1987). As a result, this temporary status may make them hesitant to become involved in the host society, which may result in a lack of social support (Berry, 1997, 2017). Social support, including support among people within the same group as well as among people in the host culture (Berry & Hou, 2016), appears to be one key factor for the acculturation of foreign-born international students, as it aids in their psychological adaptation to the new society (Berry, 1997). Conversely, a lack of social support can impede their psychological adjustment within the new society, which may result in feelings of isolation, loneliness, and homesickness (Abu-Ras & Abu-Bader, 2009), thereby contributing to acculturative stress (Sandhu & Asrabadi, 1994) and lower well-being (Wei et al., 2007).

The financial support status of international students, including whether they are self-funded or funded by a scholarship (Gebregergis, 2018), is another factor that could influence acculturative stress and well-being (Berry, 1997; Berry & Hou, 2016). Varying amounts of financial support can create stress related to budgeting, which is further compounded by the fact that international students are limited by law in their ability to work and receive loans (Çiftçi & Zalzal, 2016; U.S. Citizenship and Immigration Services, 2019).



Difficulties associated with acquiring sufficient academic English language skills can also have a negative effect on the acculturation process (Berry, 1997). The dissimilarities between the native language and the foreign language obviously affect the foreign international student's ability to learn how to read, write, speak, and interact with others (Berry, 1997; Ward & Geeraert, 2016). Troubles with a new language can, in turn, have a negative effect on an individual's acculturative stress and overall well-being, due to the lack of successful social interactions with others in the host society and the attendant increase in stress caused by feelings of being an outsider (Hakim-Larson & Menna, 2016).

The length of stay in a new country is another factor associated with certain negative impacts on an individual's acculturation process (Berry, 1997). The level of acculturative stress and overall well-being of immigrants can often be determined, at least in part, by the length of time spent in a new country (Berry & Hou, 2016). This is due to the fact that, the longer an individual resides in the host country, the longer the time the individual has to deal with negative attitudes, which raises the level of acculturative stress (Berry, 1997; Berry & Hou, 2016).

The matter of perceived discrimination is an important one since the perception of discrimination towards Arabs has become more prevalent among students in the United States (Çiftçi & Zalzala, 2016). The impact of discrimination can affect the lives of Arabs in the United States in harmful ways, which can contribute to acculturative stress and can lead to specific mental health problems such as eating disorders (Kwan, Gordon, & Minnich, 2018) as well as a general increase in mental health issues overall (Ahmed, Kia-Keating, & Tsai, 2011). The earliest documentation of discrimination against Arabs in the

United States occurred a little after the first wave of immigrants in the early 1900s (Naber, 2000). Two influential aspects of American culture have contributed to perceived discrimination and an increase in the risk of acculturative stress and its related effects on overall well-being among foreign-born international Arab students--media portrayal and governmental policies (Abu-Ras, 2016; Çiftçi & Zalzala, 2016; Goforth et al., 2016)--both of which appear to have become increasingly hostile in the post-9/11 era.

The first of these cultural aspects has been the negative portrayal of Arabs in the American media, which burgeoned in 1948 in part because of the Arab-Israeli conflict. This conflict heightened the negativity in the portrayal of Arabs in the American media, which has perhaps encouraged discrimination against Arabs (Semaan, 2013; Shaheen, 1984, 2001, 2003; Suleiman, 1999). Arab men have frequently been represented as violent, barbaric, and abusive, which can be seen for example in the portrayal of a violent caliph in the 1948 Bugs Bunny cartoon produced by Warner Brothers entitled 'Al-Lad-In His Lamp' (Shaheen, 1984; 2001). Media portrayals of Arabs have been further impacted by the terrorist attacks on the World Trade Center and the Pentagon that occurred on September 11, 2001 (Arab American Institute, 2018c). After that date, negative portrayals of Arabs in the media along with perceived discrimination have sharply increased (Shaheen, 2003).

Second, governmental policies in recent years have also contributed to an environment of perceived discrimination among Arabs in the United States. As a consequence of 9/11, the United States government created new immigration policies that specifically targeted individuals of Arab descent (Abdelhady, 2014; Cainkar & Read, 2014). Moreover, recent policies initiated since 2017 have likely led to increased

suspicion, discrimination, and an overall negative environment for Arabs in the United States (Abu-Ras, Suárez & Abu-Bader, 2018). These policies have included a travel ban that, while ostensibly aimed at preventing terrorists from entering the United States, has also discriminatorily limited Arab immigration into the United States in general. This ban and the legal struggles to enforce it have further increased the anti-Arab sentiment among some Americans (Cohen, Solomon, & Kaplin, 2017). The negative political rhetoric from elected officials has also added significantly to a climate of discrimination and violence toward Arab individuals (Abu-Ras, et al., 2018; Arab American Institute, 2018b). Emerging evidence suggests that these negative policies and the harmful rhetoric associated with the policies have influenced the well-being of Arabs in the United States by increasing their fear and stress as they are part of a marginalized, stigmatized, and targeted group (Williams & Medlock, 2017).

Beyond these factors that emerge during the process of acculturation, there are additional pre-existing factors at play during the acculturation process, include age, gender, religion, and level of education (Abu-Ras, 2016; Berry, 1997; Berry & Hou, 2016). Faragallah, Schuman, and Webb (1997) found the age that an individual immigrates to a new country impacts the immigrant's acculturation process. The younger an individual is the easier it is for that individual to assimilate into a new culture (Berry, 1997).

An individual's gender can also influence the acculturation process, especially since gender roles can vary between immigrant and host cultures (Berry, 1997; Berry & Hou, 2016). For instance, Goforth et al. (2016) found that some Arab females often face more challenges in acculturating than some Arab males. Arab females may face more

challenges because in the Arabic culture females often are expected to maintain the family identity within the community (Ajrouch, 1999 as cited in Seeman, 2014). An individual's level of education is also a factor in acculturative stress and well-being (Berry, 1997; Nassar-McMillan, 2011). Pampati, Alattar, Cordoba, Tariq, and Leon (2018) found that the higher the level of education an individual has achieved, the lower (in general) that individual's level of acculturative stress, and vice versa. Religion is another factor that affects Arabs' acculturation and adaptation to the mainstream culture in the United States and can also influence acculturative stress levels and overall well-being (Samhan, 2014). Researchers (Awad, 2010; Goforth et al., 2016; Naff, 1985) have determined that Christian Arabs often have fewer challenges acculturating due to the similarity of their religious beliefs to the dominant religious beliefs in United States; Arabs who are Muslim, in contrast, may face more challenges acculturating due to the visible differences in their religious practices and appearances (Amer & Kayyali, 2016; Samhan, 2014).

### **Theoretical Framework**

In order to understand the relationships associated with the variables of this study, Berry's acculturation model (2003, 2017) and the wellness theory (Myers & Sweeney, 2004, 2005) will provide a theoretical framework. Berry (2017) defined acculturation as a dual process that immigrants go through that involves both psychological and cultural changes. In addition, the framework of Berry's model is based on the assumption of there being four strategies of acculturation: assimilation, integration, marginalization, and separation. Assimilation happens when individuals give up their cultural identity when moving into a new host society. Integration takes place when individuals maintain their

cultural identity while becoming a part of a host society. Marginalization comes about when individuals lose contact with their cultural identity as well as their identity in a host society. Separation occurs when individuals choose to maintain their cultural identity while not participating in a host society (Berry, 2017). However, when individuals going through the process of acculturation embrace one of these acculturation strategies and encounter stressors, acculturative stress arises. Acculturative stress is defined simply as stress that results from the acculturation process (Berry et al., 1987).

Myers and Sweeney defined wellness in terms of holistic health, involving a healthy body, mind, and spirit (Myers & Sweeney, 2008). The framework of this theory is based on five factors: the Essential Self, the Social Self, the Physical Self, the Creative Self, and the Coping Self (Myers & Sweeney, 2004, 2005). The Essential Self involves an individual's sense of purpose and meaning and hope in life. The Social Self is comprised of the elements related to friendship and love. The Physical Self is comprised of the elements related to nutrition and exercise. The Creative Self is constituted by the elements that an individual uses to shape an identity within social interactions. The Coping Self is comprised of those elements that adjust the individual's responses to the events of life and help individuals deal with negative events that arise (Myers & Sweeney, 2004, 2005). For more details about the theories see Chapter 2.

### **Purpose of the Study**

The purpose of this exploratory research study is to explore the relationship between acculturative stress and well-being among foreign-born Arab international students in the United States. The research attempts to identify the levels of acculturative stress as well as levels of well-being for foreign-born Arab international students in the

United States. A knowledge of the relationship between acculturative stress and well-being will lead to an understanding of how acculturative stress affects well-being among this population. A further aim of this study is to gain the relevant information universities can utilize in developing culturally appropriate support services specifically for foreign-born Arab international students that will mitigate the problems associated with acculturative stress. This study uses an ex post facto design. It is assumed that, if levels of acculturative stress are high, then levels of well-being are low and vice versa. This study will also explore some relevant factors that either are present before or come into play during the acculturation process and may affect foreign-born Arab international students' levels of acculturative stress and well-being (Berry, 1997; Berry & Hou, 2016).

In summary, this research study examines the levels of acculturative stress and well-being among Arab foreign-born international students in the United States in order to explicate the relationship between acculturative stress and well-being in this population. The study will also consider the unique factors that contribute to acculturative stress of Arab foreign-born international students. A benefit of this study is that it will provide the requisite information universities need to develop culturally appropriate support services. Information regarding the variables of this study will be obtained from participants' responses to a series of research questions discussed below.

## **Research Questions**

**General Research Question One.** Is there a relationship between acculturative stress and well-being among foreign-born international Arab students studying in the United States?

***Specific Research Question 1.*** Is there a statistically significant inverse relationship between acculturative stress, as measured by the ASSIS, and well-being, as measured by the 5F-Wel, among foreign-born international Arab students studying in the United States?

**General Research Question Two.** Does acculturative stress vary depending on demographic variables (factors existing prior to the acculturation process), among foreign-born international Arab students studying in the United States?

***Specific Research Question 2.*** Is there a statistically significant correlation between acculturative stress, as measured by ASSIS, and participant age?

***Specific Research Question 3.*** Is there a statistically significant difference in acculturative stress between genders?

***Specific Research Question 4.*** Is there a statistically significant difference in acculturative stress among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree?

**General Research Question Three.** Does wellness vary depending on demographic variables (factors existing prior to the acculturation process), among foreign-born Arab international students studying in the United States?

***Specific Research Question 5.*** Is there a statistically significant correlation between wellness, as measured by 5F-Wel, and participant age?

***Specific Research Question 6.*** Is there a statistically significant difference in wellness between genders?

***Specific Research Question 7.*** Is there a statistically significant difference in wellness among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree?

**General Research Question Four.** Does acculturative stress vary across factors that arise during the acculturative processes of foreign-born international Arab students in the United States?

***Specific Research Question 8.*** Is there a statistically significant correlation between acculturative stress and social support?

***Specific Research Question 9.*** Is there a statistically significant difference in acculturative stress between scholarship and self-supporting students?

***Specific Research Question 10.*** Is there a statistically significant relationship between acculturative stress and length of stay?

***Specific Research Question 11.*** Is there a statistically significant difference in acculturative stress and English language proficiency?

**General Research Question Five.** Does well-being vary across factors that arise during the acculturative processes of foreign-born international Arab students in the United States?

***Specific Research Question 12.*** Is there a statistically significant correlation between well-being and homesickness?



***Specific Research Question 13.*** Is there a statistically significant difference in wellness between scholarship and self-supporting students?

***Specific Research Question 14.*** Is there a statistically significant inverse correlation between well-being and perceived discrimination?

***Specific Research Question 15.*** Is there a statistically significant inverse correlation between well-being and length of stay?

***Specific Research Question 16.*** Is there a statistically significant correlation between well-being and English-language proficiency?

### **Significance of the Study**

Many factors affect foreign-born Arab international students in terms of their acculturative stress and overall well-being. By identifying the levels of acculturative stress and well-being of these students, as well as the relationships between the two, this research should be of benefit to many individuals, including those working in higher education, such as counselor educators, counselors, and faculty, as well as to international offices and foreign-born international themselves. This study will be beneficial to counselor educators and counselors because the information it provides may help them identify the tools needed to work effectively with this minority group. An awareness of the unique stressors involved in the acculturation process and the degrees of acculturative stress and well-being for this minority group in the United States can further our understanding of the issues with which Arab international students must deal. The results of this study will aid counselor educators and counselors in becoming sensitive to the subject of race and ethnicity and in turn help them to utilize counseling-based tools such as broaching and psycho-education (Day-Vines et al., 2007).

An awareness of one's likely current levels of acculturative stress and well-being may help foreign-born international students determine when it is wise for them to seek some form of counseling services. Furthermore, this study will aid scholars and researchers in developing a deeper understanding of the levels of acculturative stress and well-being among foreign-born international Arab students. In academia, this minority group has been understudied (Nassar-McMillian, 2003), and there is a dearth of information on the effects of acculturative stress on the overall well-being for this population (Abu-Ras, 2016). This study aims at providing a deeper understanding of two significant variables concerning which future researchers could direct their studies (Amer & Awad, 2016).

### **Definitions of Terms**

**Arab.** Arab is a cultural group that includes individuals who identify as either linguistically or culturally Arab or both and are citizens of one of the 22 Arab countries: Bahrain, Djibouti, Algeria, Egypt, the Comoros Islands, Jordan, Lebanon, Morocco, Iraq, Kuwait, Palestine, Oman, Libya, Qatar, Mauritania, Sudan, Syria, United Arab Emirates, Saudi Arabia, Tunisia, Somalia, and Yemen (Arab American Institute, 2017). See Chapter 2 for a fuller exploration of this term.

**Foreign-Born Arab International Students.** Foreign-born Arab international students are Arab students who currently hold student visas (temporary residents) and live in the United States, and who self-identify as being a citizen of one of the 22 Arab countries.

**Acculturation.** Acculturation is the process of change, both psychologically and culturally, that results from interaction between cultural groups (Berry, 2017).

**Acculturative stress.** Acculturative stress is stress that is rooted in acculturation (Berry et al., 1987).

**Well-being.** Well-being is the portion of an individual's lifestyle that is geared towards their utmost wellness and health and in which their body, mind, and spirit are connected so that life is lived fully as a part of the natural and human community (Myers & Sweeney, 2008).

### **Summary**

This proposed study, which uses an ex post facto research design, seeks an understanding of the relations between acculturative stress and well-being for Arab foreign-born international students who reside in the United States. Chapter I has described the purpose of the study, an overview of the problem and its relevant background, and the significance of the study. Chapter I also listed the research questions and the definitions of the terms used. Chapter II is an in-depth review of the historical and current literature on foreign-born Arab international students in the United States. In addition, a key topic addressed is the lack of literature related to acculturative stress, well-being, and the various factors affecting the acculturation process. Chapter III describes the methodology of the study, including its research design, the participants in the study, and the variables. Furthermore, in Chapter III the instruments that will be used, the methods of data analysis, and the limitations of the study will be discussed.

## **Chapter Two**

### **Review of the Literature**

This dissertation is an exploratory study that investigates the relationship between acculturative stress and well-being among foreign-born Arab international students residing in the United States. As the review of the literature will show, very few studies have investigated psychological issues affecting Arab international students in a college setting in the United States. This paucity is especially evident with respect to psychological variables such as acculturative stress and well-being. This chapter begins with an overview of the immigration patterns and waves of Arab-Americans in general and foreign-born international Arab students in particular. Next, this chapter includes a review of research on socio-economic/demographic variables – both those that exist before and those that arise during the acculturation process – which correlate to acculturative stress and well-being. Further, the author will review Berry's (2003, 2017) acculturation model and Myers and Sweeney's (2004, 2005) wellness theory in relation to this topic. Finally, this chapter will review the various instruments available for measuring the study's variables.

#### **Arabs in the United States**

'Arab' is a term used to define a cultural group that has evolved over time and includes individuals who identify as either linguistically or culturally, or both, as Arabs (Abraham & Abraham, 1983; Samhan, 2007). The term was used in a narrower sense throughout most of history, but many researchers have argued that it became a popular way for all Arabic-speaking people to identify themselves after the Arab-Israeli conflicts when the concept of pan-Arabism emerged as a way to promote unity (Suleiman, 1999).

For example, the Arab League, a geopolitical organization composed of 22 Arabic-speaking nations, emerged in 1945, coinciding with the growing movement to establish the state of Israel, which ultimately occurred in 1948. That year, the First Arab-Israeli War was fought, and then in 1956, the Second Arab-Israeli War, also called the Suez Crisis, occurred. In 1967, the heightening tensions culminated in the Six-Day War, sometimes called the Third Arab-Israeli War, in which Israel and the Arab nations of Egypt, Iraq, Jordan, and Syria were the main belligerents. The Six-Day War again energized the feelings of Arab nationalism in the Arab League as well as among Arab-Americans, as seen in the increase in the establishment of Arab-American organizations. For instance, the establishment of the Association of Arab American University Graduates (AAUG) occurred during that period (Abu-Laban & Suleiman, 1989; Al-Qazzaz, 1979; Elkholy, 1969; Suleiman, 1999). Prior to that, terms that identified national, regional, or tribal identities, such as 'Syrian' or 'Syrian-Lebanese,' were typically more popular than 'Arab' (Suleiman, 1999).

According to the Arab American Institute (AAI, 2017) while the terms *Arab* and *Middle Eastern* are frequently used interchangeably, most Arabs do not prefer the term Middle Eastern as they consider it a vague Western concept, and thus prefer to use the term Arab as a way to preserve their cultural identity (Nassar-McMillan, 2011). It is essential to distinguish between the terms since there are many non-Arabic speaking countries within the boundaries of the Middle East, such as Turkey, Israel, and Iran (AAI, 2017). Moreover, geographic location does not necessarily define a cultural identity. This is especially true of those from the Middle East because not all immigrants from the Middle East are Arab. Many other ethnic and racial groups, who do not share Arab

ancestry, including Kurds, Druze, Assyrians, Blacks, Berbers, Armenians, and Kildanis, live in the same region (Suleiman, 2000). Among many Americans, the term ‘Arab’ is strongly associated with the religion of Islam, often negatively, but there are also Arab Christians, and to a lesser extent Arab Jews, atheists, and members of other religions (Arab American Institute, 2002; Moradi & Hasan, 2004). To avoid these issues of conflated terms, the AAI (2017) broadly defined Arab as including individuals whose ancestry is from one of 22 Arab countries: Bahrain, Djibouti, Algeria, Egypt, the Comoros Islands, Jordan, Lebanon, Morocco, Iraq, Kuwait, Palestine, Oman, Libya, Qatar, Mauritania, Sudan, Syria, United Arab Emirates, Saudi Arabia, Tunisia, Somalia, and Yemen.

The diverse history of the term ‘Arab’ has made research on the topic of Arabs in the United States challenging. A further challenge is the status of Arabs in the United States is unreliable demographic information. The United States Census Bureau, in its 2017 American Community Survey, estimated that there are slightly more than 2 million Arabs in the United States. However, the Census Bureau only captures part of the Arab population through its ‘ancestry’ question, which the Arab American Institute (2018a) has claimed leads to an undercount. Possible reasons for the undercount include the limitations of the ancestry question as distinct from ethnicity and race, the difficulty of sampling small and unevenly distributed ethnic groups, misunderstanding or distrust of government surveys, high levels of exogamy (marriage outside of one’s ethnicity or family), and the exclusion of certain sub-groups, such as Somalis and Sudanese (AAI, 2018a). As a result, the AAI estimates the number may be as high as 3.6 million. Of this, the most recent data, which comes from an AAI-commissioned (2002) survey conducted

by Zogby International, reported that only 24% identified as Muslim, while 63% identified as Christian and the remaining 13% identify as other or no religious affiliation; despite these statistics, the terms Arab and Muslim have become synonymous.

Unfortunately, more recent up-to-date data on the proportion of Arabs identifying as Christian and Muslim is lacking, and it is also worth noting that these demographics do not include international students or other Arabs in the United States who do not have citizenship or legal permanent resident status. Even with a generous estimate of over three million Arab Americans (AAI, 2017; Moradi & Hasan, 2004), they still comprise one of the smallest ethnic minority groups in the country (United States Census Bureau, 2017).

### **Arab Immigration to the United States**

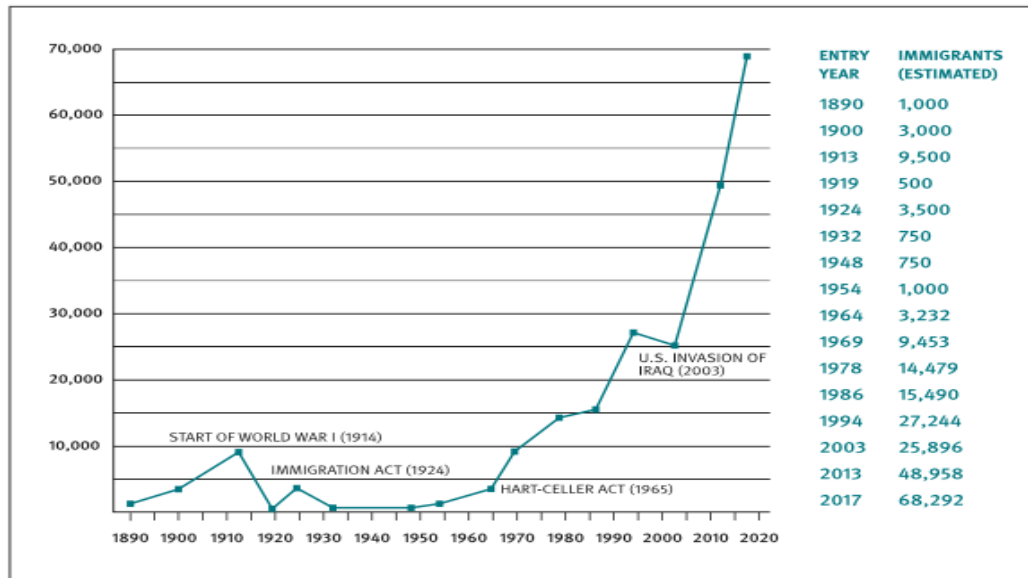
The immigration of Arabs to the United States has taken place in multiple waves since 1870 (Suleiman, 1999). While the number of waves identified by scholars varies, in this dissertation, Arab immigration is divided into five waves based on a synthesis of evidence from the literature. The first wave of Arab immigrants was predominantly Christian, Levantine (Lebanese-Syrian), and mainly men, with more women coming late in the second wave (Abu-Laban & Suleiman, 1989; Suleiman, 1999). These immigrants were predominantly poor, young, undereducated, and unskilled who at first arrived as sojourners seeking temporary work but ended up remaining because of difficulties returning home (Al-Qazzaz, 1979; Suleiman, 1999). The longer they remained, the more they shifted towards more sustainable types of employment as factory workers and entrepreneurs (Abu-Laban & Suleiman, 1989). With the enactment of the United States National Origin Act of 1924, immigration was nearly halted, with no more than 100

immigrants per year accepted from the Middle East (Naff, 1985; Semaan, 2013). As immigration restrictions slowly relaxed between the World Wars, a small second wave of Arab immigrants arrived who were predominantly women and children joining their male relatives already living in the United States, which further cemented the permanence of the first wave (Naff, 1985; Suleiman, 1999).

After World War II, Arab immigration began increasing again in what can be considered the third wave. Compared to the previous two waves, the third wave contained more diverse groups of Arabs, including immigrants from Palestine, Iraq, Yemen, and Egypt as well as Muslims along with Christians (Abu-Laban & Suleiman, 1989). The third wave also saw more educated and affluent immigrants who arrived as families rather than as individuals (Abu-Laban & Suleiman, 1989; Naff, 1985; Suleiman, 1999). During this post-WWII period, the United States also experienced an increase in Arab international students, which is discussed in greater depth in the following section. A fourth wave of immigration, comprised largely of Iraqi immigrants, began around the early 1990s during the Gulf War and increased with subsequent regional conflicts that caused many to seek refuge in the United States (Cainkar, 2000; Nassar-McMillan, 2003). The fifth and most recent wave resembles the fourth wave (and is sometimes considered a continuation that wave) (Semaan, 2013; 2014; 2015). Further destabilization of governments in Syria, Egypt, Somalia, and Iraq, as well as other countries in the region have led the fourth and fifth waves to immigrate to the United States to avoid wars and political issues in their home countries (AAI, 2018a; Jamil et al., 2010). These final two waves have resulted in the greatest number of Arab immigrants to the United States



(see Figure 1).



**Figure 1.** Trends in immigration from Arab countries from 1890-2017. Data compiled by the Arab American National Museum with Randa Kayyali, *Arab Americans' History: Culture and Contributions*, 2019, p. 8.

## Foreign-Born Arab Students in the United States

The term 'foreign-born students' refers to students who were born and raised outside the United States and whose residency and citizenship status varies (Fries-Britt et al., 2014a). There are two different types of foreign-born Arab students living in the United States. The first type consists of Arab-American students who are first-generation immigrants. These students were born outside of the United States but currently reside in the United States as permanent residents or naturalized citizens and consider this their home country (Arab American Institute, 2019). However, the focus of this dissertation is not on the first type of foreign-born Arab students but rather on the second type.

The second type of foreign-born Arab students consists of Arab international students who reside in the United States temporarily for educational purposes and plan to

return to their home country once they graduate (AAI, 2019). Historically, Arab international students began immigrating to the United States during the third wave of immigration when education missions from Arab countries began looking to America for educational opportunities in the late 1940s and early 1950s (Al-Qazzaz, 1979; Elkholy, 1969). After World War II, many Arab states created academic scholarships that allowed students to study abroad at American universities (Al-Qazzaz, 1979; Elkholy, 1969). Simultaneously, after World War II the United States began passing laws to promote cross-cultural education as well as to establish and define visa statuses for international students, such as the Fulbright Act of 1946, the Immigration and Nationality Act (INA) of 1965, and the Fulbright-Hays Act of 1961. The INA is particularly important for defining an international student under section F-1 as “an alien having a residence in a foreign country which he has no intention of abandoning, who is a bonafide student qualified to pursue a full course of study,” while their spouses, children are defined under section F2 (8 USC § 1101). These provisions removed the ban on international students established in the National Origin Act of 1924.

By 1973, the estimated number of Arab international students studying in the United States was roughly 7,000, and they came from only 14 of the 22 Arab countries. Just six years later, in 1979, the number of foreign-born students had risen to over 23,000 (Al-Qazzaz, 1979). By the 2012-2013 academic year, the number of Arab foreign-born international students had reached approximately 64,000 and included students from all 22 Arab nations (Çiftçi & Zalzal, 2016). The Institute of International Education (IIE, 2018b) reports that during the 2017-2018 school year, 89,048 Arab foreign-born international students were seeking an education at United States colleges and

universities. Today, Arab students can be found at most American universities (Çiftçi & Zalzal, 2016). Arab international students hail from the 22 Arab countries, some of whom may have received scholarship opportunities to study abroad while others have been self-funded (Çiftçi & Zalzal, 2016). In the 2012-2013 academic year, the Kingdom of Saudi Arabia sent approximately 45,000 students; Kuwait sent approximately 5,000; the United Arab Emirates sent approximately 2,000; and Egypt sent approximately 2,600 (Al-Hattami & Al-Ahdal, 2014; Norris, 2011; Çiftçi & Zalzal, 2016).

While most international students intend to return home, over the years some of these students have stayed in the United States upon graduating because of employment opportunities, political tension in their home country, or marriage to American citizens (Çiftçi & Zalzal, 2016; Naff, 1994). In the 1960s, 60% of Arabs chose to live permanently in the United States; from Jordan in particular, as many as 80% of students chose to stay after graduating (Elkholy, 1969). Similarly, in the 1970s, Al-Qazzaz (1979) reported that the majority of Egyptian students did not return to their home country but instead chose to pursue work opportunities in the United States. Currently, however, most Arab international students return home and do not become permanent residents in the United States (Çiftçi & Zalzal, 2016). Those international students who do decide to permanently reside in the United States after completing their studies become the first type of foreign-born Arab immigrants, who are not the focus of this dissertation.

Very little research, either on acculturative stress or well-being, has focused on the foreign-born Arab international students, especially at the college level (Atari & Han, 2018; Çiftçi & Zalzal, 2016; Goforth et al., 2014; Shammass, 2017). For the purpose of this dissertation, the research will focus on only international Arab students (temporary

immigrants) in the United States (AAI, 2019; Çiftçi & Zalzal, 2016). The focus will be on this group of Arab international students because little is known about their well-being and the challenges they face in their acculturation to the United States, such as homesickness, lack of social support, limited language proficiency, and perceived discrimination (Çiftçi & Zalzal, 2016; Fries-Britt et al., 2014a). In order to understand the acculturative stress and its effects on well-being experienced by Arab international students, the following section will introduce the important terminologies of the variables being studied.

### **Acculturative Stress and Well-Being**

In order to understand the relationship between acculturative stress and well-being there are a couple of important terminologies that need to be identified. In this section, acculturation, stress, acculturative stress and well-being are defined. It is worth noting that while there are different definitions for these terms, the definitions below are adopted from the acculturation model (Berry, 2017) and wellness theory (Myers, Sweeney, & Witmer, 2000) framework of this study.

To varying degrees, immigrant groups go through a process of *acculturation*, which is defined as a “dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members,” and which also describes the adaptations that occur during this dual process (Berry, 2017, p. 15). Acculturation can also allude to changes in the minority immigrant groups as a result of engagement with the majority or host society. Acculturation is most frequently known as the process of adaptation among immigrants (Schwartz & Zamboanga, 2008). In other words, it is actions that an individual undertakes to navigate their heritage norms

and the dominant cultures simultaneously (Berry, 2017). In addition, Berry et al. (1987) explain that such acculturation is very challenging for immigrants, especially those who are members of groups who are or have experienced negative stereotyping or discrimination.

The process of acculturation can contribute to stress. *Stress* as a concept has been widely used in psychological literature. It is postulated as the psychological and physiological condition of an organism that occurs when stressors in the environment are experienced, a condition which needs reducing in order for ‘normal’ functioning to take place (Berry et al., 1987). Such reducing occurs during the process of coping, which involves satisfactory adaptation to the new circumstances (Berry et al., 1987).

Together, *acculturative stress* “refers to one kind of stress, in which the stressors are identified as having their source in the process of acculturation” (Berry et al, 1987, p. 492), as well as to specific identifiers of stress that take place during the acculturation process, which could include altered mental health (depression, confusion, and anxiety), identity confusion, increased psychosomatic symptoms, and feelings of alienation and marginality. The core idea of acculturative stress is that such stress is rooted in negative events and significant challenges that are faced and deemed problematic. If an individual is unable to manage these by making simple changes to their behaviors easily, acculturative stress occurs (Sam & Berry, 2010). Acculturative stress can cause a decline in an individual’s overall well-being and health, including social, psychological, and somatic aspects of health (Berry et al., 1987; Wei, Liao, Heppner, Chao, & Ku, 2012). In addition, it occurs when the anxiety of acclimating to differing cultural customs, norms,

laws, and language increases individual stress (Aprahamian, Kaplan, Windham, Sutter, & Visser, 2011).

In contrast to acculturative stress, well-being, or wellness in some research, is the optimum condition of the all-around health an individual can obtain (Ohrt & Cunningham, 2012). In this state of well-being, the mind, spirit, and body are interwoven to live life fully as a part of the natural and human community (Myers et al., 2000). However, well-being is not the absence of stress; rather, it is the level of comfort that individuals are able to maintain even though they face times of stress, such as through the acculturation process, which mitigates the effects of such stress (Bergnehr, 2018).

### **Research on Acculturative Stress**

Acculturative stress is experienced whenever two or more cultures come into prolonged contact, but the degree to which it is experienced can vary (Berry, 2017). Acculturative stress is a challenge faced by all students, but is experienced by Arab students in unique ways due to their cultural values and ways of daily living (Amer & Awad, 2016). Foreign-born Arab international students are not immune to experiences of acculturative stress. However, after a comprehensive review of research on acculturative stress, there is little to no literature about foreign-born Arab international students specifically.

The dearth of research may be due to the fact that this group of students is usually included with other groups of international student groups. For example, Bai (2016) conducted a study about acculturative stress among 152 international student participants, only 19 of whom were Arab international students. Moreover, some scholars do not distinguish between the terms 'Arab' and 'Middle Eastern' (AAI, 2017), which in turn

makes it more complicated to find them in academia. For instance, Poyrazli, Thukral, and Duru (2010) conducted a study about acculturative stress among international students, which included Middle Eastern students without any description of what the term ‘Middle Eastern student’ meant. Likewise, Tavakoli, Lumley, Hijazi, Slavin-Spenny, and Parris (2009) investigated acculturative stress among 118 international students, and reported that 10% of their participants were Middle Eastern without specifying the number of Arab and non-Arab Middle Easterners. Finally, some studies on acculturative stress focus on Arab-American immigrants but not Arab international students. For example, Wrobel, Farrag, and Hymes (2009) examined acculturative stress among elderly Arab American, Goforth et al. (2016) examined the acculturative stress among Arab-American students within K-12 education programs, and Goforth et al. (2014) investigated acculturative stress among Muslim Arab-American adolescents. Because this comprehensive review of the current literature about Arab international students’ acculturative stress could not identify any existing literature on this specific group, the literature used for this dissertation is based on the following groups: Arab-American immigrants in the United States as well as Asian international students and other populations of international students.

A quantitative study by Ogunsanya et al. (2018) investigated the impact of acculturative stress and perceived stress on health outcomes (both physical and mental) in a sampling of 140 individuals, 89 of who were foreign-born international graduate students. The researchers utilized the 12-item Short Form (SF-12, Ware, Kosinski, & Keller, 1996) to measure physical and mental components and their association with the Graduate Stress Inventory-Revised Scale (GSI-R, Rocha-Singh, 1994), the Acculturate

stress Scale for International Students (ASSIS, Sandhu & Asrabadi, 1994), and the Brief COPE Scale (Carver, 1997). The findings of this study indicated that international students in the United States experienced both perceived stress and acculturative stress that significantly impacted their health outcomes (both physical and mental; Ogunsanya et al., 2018).

Some studies have also explored the impact of experiences of acculturative stress among Arab students within K-12 education programs. For instance, Goforth et al. (2016) conducted a quantitative study that examined the relationships between acculturative stress and mental health and religious practices. Their study looked at 88 Arab-American adolescent students ages 11 to 18, most of whom (67%) were born in the United States (second-generation Arab Americans) and the rest of the participants were born outside of the United States (first-generation Arab Americans). The researchers used the Societal, Academic, Familial, and Environmental Acculturative Stress Scale (SAFE-C), the Children version of Chavez, Moran, Reid, & Lopez, 1997, as well as the Youth Self-Report (YSR), the youth version of Achenbach & Rescorla, 2001, and the Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS, Fetzer Institute & National Institute on Aging Working Group, 1999). The study found that acculturative stress is a significant indicator of mental health issues but that religious practices were associated with lower acculturative stress. The study found that acculturative stress is a significant indicator of mental health issues but that religious practices were associated with lower acculturative stress (Goforth et al., 2016).

A quantitative study conducted by Bai (2016) investigated the relationship between acculturative stress and its predictors, including perceived support, English



proficiency, and academic burden. In order to ascertain the relationship between these predictors and acculturative stress among international students, Bai collected data from 152 foreign-born students, of whom 19 were Middle Eastern students (temporary immigrants in the United States for educational purposes). In this study, Bai utilized the TOFEL scores as a measure of English proficiency, GPA as a measure of academic achievement, a 9-item scale developed by the author as a measure of perceived support from the university, and the Acculturative Stress Scale for International Students (ASSIS, Sandhu & Asrabadi, 1994) to measure acculturative stress. The study found that the participants who identified themselves as Middle Eastern students demonstrated higher levels of acculturative stress than foreign students from other countries. Furthermore, Bai found that, the greater the perceived support from the university, the lower the level of the acculturative stress and vice versa. Bai noted that the results of her study have important implications when it comes to helping professionals involved in higher education develop successful programs that serve foreign-born students (Bai, 2016).

Another quantitative study by Goforth et al. (2014) explored the effects of acculturation, religiosity, and acculturative stress on psychological adjustment among 128 Muslim Arab-American adolescents ages 11-21. The instruments utilized in this study were the Vancouver Index of Acculturation (VIA, Ryder, Alden, & Paulhus, 2000), Societal, Academic, Familial, and Environmental Acculturative Stress Scale: Children's Version (SAFE-C, Chavez et al., 1997), Brief Multidimensional Measure of Religiousness/Spirituality (BMMRS, 1999). Their study found that acculturation and acculturative stress were significant predictors of mental health problems (Goforth et al., 2014).

In a quantitative study, Poyrazli et al. (2010) investigated the relationship between acculturative stress and the factors of personality, race-ethnicity, age, and gender among temporary immigrant minority students. They studied 613 students, 5% of whom identified themselves as Middle Eastern students. To measure the variables studied, Poyrazli and his colleagues used the Acculturative Stress Scale for International Students (ASSIS; Sandhu & Asrabadi, 1994) and the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991). The results indicated higher levels of acculturative stress among temporary immigrant minority students from the Middle East than among those from Asia, North America, Africa, Middle and South America, and Europe (Poyrazli et al., 2010).

In a quantitative study, Wrobel et al. (2009) investigated the effect of acculturative stress and a range of demographic factors have on depression. Their study involved 200 elderly Arab American participants exhibiting a wide range of demographic variables, including immigration status, years since immigration to the United States, level of education, gender, English proficiency, age, and country of origin. Wrobel and her colleagues used the Multi-dimensional Acculturative Stress Inventory (MASI, Rodriquez, Myers, Mira, Flores, & Garcia-Hernandez, 2002) and the Geriatric Depression Scale (GDS, Yesavage et al., 1983). They found that higher levels of acculturative stress were linked to significant degrees of depression among those who were foreign-born or temporary immigrants and that these individuals faced more challenges than those who had a more permanent status (Wrobel et al., 2009).

The studies mentioned above indicate that higher levels of acculturative stress have a direct effect on the mental health of Arab American immigrants groups and

foreign-born international students. In addition, the degree of acculturative stress often varies depending on factors associated with acculturation. In order to have a clearer picture of the impact of acculturative stress on foreign-born Arab international students, one must understand their current levels of well-being.

### **Research on Well-Being**

Studies of psychological well-being have been prompted by the need to identify the abilities, skills, and predispositions individuals exemplify that allow them to manage the challenges they face during their lifetimes (Kałużna-Wielobób, 2017). However, as Atari and Han (2018) noted, few investigations have been conducted into the well-being of Arabs in the United States in general, and it appears none of the existing studies have focused on foreign-born Arab international students in particular. The paucity of research on this topic is remarkable because, as Shammass (2017) noted in her study, “(f)or more than a century, Arabs have lived in the United States as citizens or legal residents, but still Arab students have received very little scholarly attention from researchers in the field of higher education” (p. 100). Even though little is known about the well-being of Arab international students, a small number of academic studies investigating well-being have focused on examining the Arab population in general, which have included a small number of students in their overall studies. Yet the existence of specific risk factors that have a negative effect on the psychological well-being of individuals of Arab descent in general and Arab international students in the United States in particular means that such research is necessary (Abu-Ras, 2016; Amer & Awad, 2016; Goforth et al., 2016).

Previous research on the well-being of Arab-American populations suggests a connection between discrimination and lower-levels of well-being. Hakim, Molina, and

Branscombe (2018) conducted two quantitative studies on how discrimination affects the social identification process and well-being among Christian and Muslim Arab Americans. In the first study Hakim and his colleagues conducted, involving 228 Muslim Arab-American participants, the researchers conducted secondary analyses of the results of 2007 Pew Center Survey (Pew Research Center, 2007). The researchers used self-created and standardized measures of perceptions of discrimination, identification as American, and level of well-being. The researchers found that higher levels of discrimination resulted in lower levels of well-being among the participants. In the second study Hakim and his colleagues conducted, involving 1,001 Arab American participants from both Christian and Muslim backgrounds, the researchers conducted secondary analyses of the 2003 Detroit Arab American Study (Detroit Arab American Study Team, 2009). The researchers utilized the same sort of measures as used in the first study but added religious identification to the list of variables. The results of this study were similar to the results of the first, although the researchers also found that the participants who experienced more discrimination identified more closely with their ethnic and religious background, which appeared to act as a protector factor to preserve their sense of well-being in a discriminatory situation (Hakim et al., 2018).

In a quantitative research study, Atari and Han (2018) investigated the relationship between well-being and perceived discrimination among Arabs in the United States. Their sample comprised 156 Arab Americans, of whom 46 self-identified as students. The generational composition of this sampling was 61% second-generation Arab Americans with one parent foreign-born, 21% first-generation foreign-born Arab Americans, and 14% third-generation Arab Americans having both parents native-born

Arab Americans. The researchers used the Schedule of Racist Events Modified for Use with Arab American persons (SRE-AA, Moradi & Hassan, 2004), the Ethnic Identity Scale (EIS, Umaña-Taylor, Yazedjian, & Bámaca-Gómez, 2004), and the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Their results, like those of Hakim, Molina, and Branscombe, indicated that, for this sample of Arab Americans, high levels of perceived discrimination were associated with low levels of well-being (Atari & Han, 2018).

Henry, Stiles, Biran, and Hinkle (2008) conducted a quantitative study to investigate the relationship between subjective well-being and parental acculturation behaviors among Arab American college students ages between 18 to 26 years old. Their study examined 44 participants who identified themselves as Arab immigrants from one of the 22 Arab countries, including 64% foreign-born and 36% born in the United States. The researchers used the Perceived Parental Acculturation Behaviors Scale (PPABS; Henry, Biran, & Stiles, 2006), Autonomy-Control Scale (ACS; De Man, 1987), and the Index of Well-Being (IWB; Campbell, Converse, & Rodgers, 1976). They found that perceived parental control was moderating factor in the relationship between perceived parental acculturation behaviors and students' subjective well-being. Subjective well-being was highest among students who perceived their parents as being open to American culture but having a high-control parenting style as well as among students who perceive their parents as preserving Arab culture but with a low-control parenting style.

Based on a comprehensive review of the literature on well-being among international students, Alharbi and Smith (2018) reported there is little known about their well-being. In addition, based on the author's knowledge, there are no studies about well-being of foreign-born Arab international students in particular; however, research on the

well-being of other international students may provide some useful information. In a quantitative research study, Luo, Wu, Fang, and Brunsting (2019) investigated demographic factors (including citizenship, gender, home country, age, degree sought), domestic student social support, perceived language competence, and psychological well-being among 216 international students in the United States. Of the total number of participants, 171 of the international students in this study came from East Asian countries and the rest from North and Central America, Europe, South America, Africa, Central Asia and the Middle East. The measures utilized in this study the Social Support Scale (Carver, 2006), Psychological Well-Being Scale (Ryff, 1989a, 1989b), and perceived competence with the English language was measured via a single item question. The result of this study showed that there was a significant negative correlation between well-being and perceived English language competence. The results also showed that there was a positive correlation between well-being and domestic student social support. The relationship between domestic student social support and perceived English language proficiency was found to be no significant.

In another quantitative research study, Brunsting et al. (2019) conducted a one-year study that examined social emotional experiences, sources of perceived social support (international students, domestic students, and faculty) and well-being (loneliness, psychological well-being and belonging) among 126 international students in the United States. Ninety-three of the participants were from East Asia and Pacific countries and the rest of the participants were from Sub-Saharan Africa, Europe, Central Asia, South Asia, Latin America, Caribbean, North American, North Africa and the Middle East. The measures utilized in this study the Social Support Scale (Carver, 2006),

Psychological Well-Being Scale (Ryff, 1989a, 1989b), Student Belonging Scale (Dahill-Brown & Jayawickreme, 2016), and Loneliness Scale (Hughes, Waite, Hawkley, & Cacioppo, 2004). The results of this study indicated that international students who had higher perceived social support from domestic students had higher levels of belonging in the spring of the academic year. The study also found that international students who had higher perceived levels of social support from faculty had lower levels of loneliness and higher levels of psychological well-being in the spring of the year. Social support from other international students did not show a significant relationship with the variables of the study.

In sum, there are only a few studies that have examined the well-being of Arabs in the United States, and none have specifically focused on the well-being foreign-born international students. The studies included above have examined the connection between well-being and such related factors as perceived discrimination, religion, perceived parenting styles. Overall, these studies show that Arab Americans who perceive more discrimination and feel more excluded from American culture have lower levels of well-being. Such research has just begun to scratch the surface, and more work exploring the well-being among foreign-born Arab international students in particular is necessary. In the next sections, what is known about the effects of acculturative stress on well-being and the factors that correlate with well-being and acculturative stress among foreign-born international students will be discussed.

### **The Effect of Acculturative Stress on Well-Being**

Acculturation is associated with the cultural and psychological adaptations (well-being, Berry, 2017; Berry, & Hou, 2016) that occur when people from one culture have

contact with people from another culture (Berry, 2017). Any negative factor that occurs during the acculturation process has an effect on an individual's psychological adaptation (well-being) and raises the level of acculturative stress (Berry et al., 1987). In other words, acculturative stress is the negative emotional response or reaction that an individual experiences during the acculturation process (Marks & Conn, 2012). In addition, the severity of the acculturative stress is dependent on several factors, such as socioeconomic factors that exist before and occur during the acculturation process, which in turn affects the overall well-being (Berry, 1997; Çiftçi & Zalzalá, 2016; Crow, 2012). Acculturative stress among foreign-born international students can be a continual process, occurring over an extended period of time, having negative effects on international students as well as the universities they attend (Marks & Conn, 2012).

In the case of foreign-born international students, when the acculturative stress affects their well-being and extends over a long period, can lead to serious mental health problems (Goforth et al., 2016; Wrobel et al., 2009), such as anxiety, depression, eating disorders, and personality disorders (Marks & Conn, 2012; Crow, 2012). In addition, as these problems persist, physical health problems (Ogunsanya et al., 2018) can arise such as chronic pain, heart conditions, and high blood pressure (Marks & Conn, 2012).

Prolonged acculturative stress may well affect foreign-born international students academic performance and educational success (Bai, 2016). This may lead to higher rates of attrition among foreign-born international students and a consequential negative impact on universities at two levels (García, Garza, & Yeaton-Hromada, 2019): loss of diversity on campus and loss of university funding.



The United States has been for years hosting foreign-born international individuals from various countries for temporary and permanent student or work status as a means of securing new talent and encouraging a diverse campus environment. Foreign-born international students thus make a desirable contribution to the diversity of college campuses and promote a more significant cultural experience for students in the host community (Poulakis, Dike, & Massa, 2017). Foreign-born international students enhance college campuses by bringing an awareness of their diverse culture and heritage, which furthers multicultural appreciation. Unfortunately, due to their different cultural origins, multicultural international students contend with unique factors that affect their acculturative stress, and each group has different factors that heighten their acculturative stress (Zhang & Garcia-Murillo, 2018). When universities do not pay enough attention to the unique needs of foreign-born international students and their acculturative stress and its factors, the academic performance of these students suffers, which can lead to international students dropping out and withdrawing from universities and communities (Hansen, Shneydrman, McNamara, & Grace, 2018). Sometimes foreign-born international students who have troubles with acculturative stress come to feel their academic goals are not achievable due to a lack of supportive services and often feel compelled to leave school without completing their program (Martirosyan et al., 2019). Furthermore, when universities do not understand and appreciate the problems and difficulties foreign-born international students face, universities cannot provide the type of support foreign-born international students need.

Also, universities will lose the funding from foreign-born international students when students withdraw from their studies due to their troubles coping and an attendant

lack of supportive services (Dear, 2018). Furthermore, according to the IIE (2018b), foreign-born international students have a significant economic impact on the United States; in 2017 they contributed over \$42 billion to universities and the overall economy. Around 65% of international students hold scholarships that assist them in paying their tuition, books and supplies, household expenses, transportation, car and health insurance, and other miscellaneous expenses that arise. Dear (2018) states that the withdrawal of foreign-born international students from colleges and universities has a significant impact on university finances and budgets. Martirosyan et al., (2019) recommended that university administrators give attention to and be aware of the unique needs of foreign-born international students in order to maintain the benefits that accrue from foreign-born international student enrollment and retention.

If the findings of this research show that higher acculturative stress among foreign-born Arab international students relates to lower well-being, then it would suggest that universities should take into consideration ways to reduce acculturative stress among this population, such as by providing culturally relevant support services to address the specific and unique needs of such students. For example, Çiftçi and Zalzal (2016) recommended that university organizations and offices, especially international offices and counseling centers, collaborate to provide comprehensive interventions for Arab international students. University counseling centers can provide a variety of psychoeducation services to aid Arab international students in learning coping skills in order to adjust to a new culture to reduce acculturative stress and maintain overall well-being (Akhtar & Kröner-Herwig, 2015; Çiftçi & Zalzal, 2016; Poyrazli et al., 2010). In addition to psychoeducation, social support programs and services can help by promoting

bonding within international student groups as well as bridging between international groups and host society (Berry & Hou, 2016). For the social support groups within the same group or status (e.g. foreign-born Arab international student or/and international student in general) can provide Arab international students a place to share experiences and learn from the experiences of others in order to help them feel they are not alone as they go through the process of adapting to the host society (Çiftçi & Zalzal, 2016). Social support programs between international students and members of the host community can be done through international offices by facilitating social interaction opportunities in which international students can practice their English language skills and increase their confidence within other social settings as well as the classroom (Çiftçi & Zalzal, 2016). One specific way to reduce acculturative stress and improve well-being would be a mentoring program for new international students (e.g., Arab international students) coordinated by the university's international office to assist with learning about and gaining access to university and community resources (Çiftçi & Zalzal, 2016).

### **Socio-Economic Factors that Correlate with Acculturative Stress and Well-Being**

Berry (1997) describes a range of socio-economic factors that affect the acculturation process and can be predictors of an individual's acculturative stress and well-being: antecedent factors existing before acculturation (e.g., age, gender, religion, level of education), and subsequent factors that arise during the process of acculturation (immigrant status, lack of social support, homesickness, financial support status) (e.g., perceived discrimination due to negative portrayals in the media; negative political environment and its policies; length of stay; level of English proficiency; immigrant

status; social support; homesickness; and financial support status; Abu-Ras, 2016; Berry, 1997; Berry & Hou, 2016).

**Antecedent Factors that Affect Acculturation.** There are factors existing prior to acculturation that affect the process of acculturation for foreign-born Arab international students in the United States. These include but are not restricted to: age, gender, level of education, and religion (Abu-Ras, 2016; Berry, 1997; Berry & Hou, 2016; Goforth, 2014). All of the following factors discussed below are significant variables affecting the correlation between acculturative stress and well-being (Nassar-McMillan, 2011).

**Age.** An individual's age has an influence on the effects of the acculturation process (Berry, 1997). The age of an individual has been associated with a reduction in the influence of the individual's own culture and an increase in the influence of the new culture (Berry & Hou, 2016). Individuals who immigrate to new countries at younger ages, for instance as preschoolers to early elementary students, tend to have less difficulty accepting the practices and values of the new country, and the process of acculturation goes smoothly. In contrast, when individuals are older and thus the process of acculturation begins later in life, the process is more difficult (Berry, 1997; Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Immigrants who come to the United States at younger ages often integrate and assimilate more easily than older immigrants, who are more likely to separate or marginalize themselves from the majority or host culture (Berry & Hou, 2016) as a result of a higher level of acculturative stress (Sam & Berry, 2010). As the reason is that younger immigrants are more likely to be flexible and adaptable to the transition into the host culture as they have less influence of their native

culture. Where adult immigrants have had more influences from their native culture and are less likely to adapt to the transition into the host culture (Berry, 1997; Berry & Hou, 2016). It also may be that younger students interact more fully in the schools than adults in the workplace.

The age when an individual immigrates has been linked to acculturative stress among Arabs in the United States (Hakim-Larson & Menna, 2016). Faragallah et al., (1997) conducted an exploratory study and found that younger Arab immigrants to the United States who spent an extended time between visits to their country of origin had high levels of satisfaction with their life and adapted well, whereas older Arab immigrants reported less satisfaction with life and had less ability to adapt to the new culture. More research is necessary to explore whether this pattern holds true within populations of Arab college and graduate students studying in the United States.

**Gender.** Researchers (Corona et al., 2017; Sirin, Ryce, Gupta, & Rogers-Sirin, 2013) have studied the role of gender in the acculturation process. Gender is a cultural phenomenon, and, consequently, gender roles vary among societies (Ajrouch, 2004; Berry, 1997). Gender roles can even vary among cultural subgroups (Stephan & Aprahamian, 2016). Sometimes, the gender roles of a host society can conflict with immigrants' perceptions of gender. Different expectations about what behaviors are and are not appropriate for different genders can cause internal and external conflicts (Amer, 2014; Ajrouch, 2004; Berry, 1997; Ruby, 2006). Such conflicts may affect the levels of the acculturative stress and overall well-being.

Berry et al. (1987) found that an individual's gender correlated with acculturative stress scores, whereby female participants from different accelerating groups reported

higher levels of acculturative stress. Moreover, Berry et al. 1987 reported that in the literature, exceptions to this pattern are rare. However, Berry et al., 1987; Sirin et al., 2013) caution that it is unclear whether females actually experience higher stress or are more willing than males to report feeling stress. If this finding indicates actual differences in acculturative stress, these gender differences in acculturation may be dependent on the differences in the behaviors and treatments toward females between the culture of the acculturating group and the host culture (Berry et al., 1987; Berry, 1997). This implication is further supported by the finding that more tightly structured, conservative, and traditional groups tended to have the greatest gender differences (Berry et al., 1987). Likewise, Khawaja (2016) reported that the larger the cultural gap in gender roles, the more likely females were to experience challenges acculturating when immersed in a new culture.

Some empirical evidence on the acculturation of first- and second-generation immigrants (Stuart and Ward, 2018; Sirin et al., 2013; Katsiaficas, Suarez-Orozco, Sirin, & Gupta, 2013) has supported Berry's claims about gender differences in acculturation. Goforth et al. (2016) found that some females in their study experienced more acculturative stress than some males. They speculate that this difference may be due to some females having fewer opportunities to participate in the host culture because of the nature of cultural rules and expectations that may pose limitations on their social behaviors. A lack of opportunity for some females--particularly those with an upbringing with specific values--may make it more difficult for them to conform to different cultural norms in the host society while maintaining traditional values at the same time. Women, in contrast, are viewed with more respect and may be responsible for taking care of the

family and home as well as maintaining cultural values (Amer, 2014; Hakim-Larson & Menna, 2016). Thus, it may be more challenging for some female immigrants, especially those who hold more traditional values, to acculturate than traditional males (Amer, 2014). The level of challenges that they experience in turn may affect their acculturative stress and well-being levels.

***Level of Education.*** The education of both women and men is valued highly in Arab societies, and, as a result Arab in the United States are often well educated (Nassar-McMillan, 2011). There are several reasons why education is highly valued among Arabs in the United States. First, education is in itself a resource, as problem-solving and analytical skills are learned through formal education and can contribute to greater adaptability. Secondly, education correlates with factors like occupational status, income level, and networks of support. Lastly, education, for immigrants, may help them adjust to the features of the new society in which they settle (Berry, 1997). For all of these reasons, individuals with a higher level of education have generally shown less acculturative stress. For instance, being an educated Arab in the United States facilitates the process of acculturation, and, as a result, they have lower levels of acculturative stress than less educated Arab in the United States (Khawaja, 2016).

In a study by Pampati et al. (2018), the researchers examined the relationship between environmental stressors and mental health among Arab Americans. They also examined the effect of the level of education on that relationship among Arab Americans. Their results showed that individuals with higher degrees of education displayed lower levels of stress and vice versa.

**Religion.** Some researchers (Allen, 2010; Corona et al., 2017; Stuart and Ward, 2018; Philip, Neuer Colburn, Underwood, and Bayne, 2019) have investigated the role of religion in the acculturation process. Religion, among other things, is a social phenomenon and is a significant factor in the process of acculturation (Allen, 2010; Berry, 1997). In addition, religion in some cultures is considered a source of support and healing (Kira, Amer, & Wrobel, 2014). The roles within religious institutions may vary within a religion and between different religions. The more similar the religious roles and practices of an immigrant's religion are to those of the religion of the dominate culture the less the immigrant tends to experiences acculturative stress; the less similar the religious roles and practices, the more the immigrant tends to experience acculturative stress (Allen, 2010; Kira et al., 2014; Berry, 1997). For some immigrant groups who find themselves in the minority by having have different religious beliefs than the majority, the practice of their religion may become a way of bonding interpersonally and culturally with those of a similar culture (Allen, 2010). For immigrant groups that have religious beliefs and practices that are similar to those of the majority, the practice of their religion may serve as a bridge between them and the host society (Allen, 2010).

According to Berry (1997), religion is one of the factors of cultural distance--the degree dissimilarity between cultures--that can affect acculturation for immigrants because it may require more cultural learning. Cultural distance may cause culture/internal conflict and affect one's psychological adaptation. It is worth nothing that the religion factor could be approached in two ways, as it can be both a protective and a risk factor at the same time (Berry, 1997; Corona et al., 2017). For Arabs in the United States, religion can influence their acculturation process and adaptation, whether directly



or indirectly, into American mainstream culture. Arabs in the United States are diverse in their religious beliefs, and religion plays a critical part in many Arabs' lives and can be a factor in predicting acculturative stress (Samhan, 2014). Historically, the majority of Arabs in the United States have been Christian. Christian Arabs have reportedly had an easier time acculturating and adapting to mainstream American culture because of their similar religious beliefs and ability to intermarry (Amer, 2014; Samhan, 2014). In addition, it is worth noting that Christian Arabs' minority status within the Arab world and the ways in which many of them left their home countries out of fear of religious persecution, may cause them to feel less attached to the Arab world and more receptive to adapting to American culture (Amer, 2014; Amer & Kayyali, 2016). More recently, from the third wave of Arab immigration until today, most Arab immigrants to the United States have been Muslim. These Arab Muslims have beliefs stemming from their culture and values that encourage their attendance at Islamic and Arabic schools and cultural centers (Samhan, 2014). Some Arab Muslim maintains values, traditions, and practices that may be evident and impose challenges in the mainstream host culture. Moreover, integration between genders is not prevalent in Islam (Awad, 2010). Muslims are usually visible as a religious minority due to certain outward indicators, such as praying five times a day, a having beard for men and wearing a hijab for women, which can make these individuals vulnerable for bigotry and discrimination (Awad, 2010).

Kira et al., (2014) have speculated that Muslim Arabs may have more difficulty than Christian Arabs in transitioning to the dominant culture in the United States because of religious differences. This speculation is consistent with Berry's (1997) concept of cultural distance. Due to this distance, Muslims may become visible targets for social

exclusion and discrimination (Amer & Kayyali, 2016), which in turn may affect acculturative stress levels. However, it is risky to generalize the degree of cultural difference too much because, as Awad (2010) noted, retaining traditional Arab values and practices is different from one group to another or even from one individual to another, even within a specific belief or religious system, all of which may affect the level of acculturation to varying degrees.

A study conducted by Hakim et al. (2018) investigated the relationship between discrimination and well-being and found that Christian Arab Americans perceived less discrimination than their Muslim Arab-American counterparts, although this study did not address the issue of acculturation. Moreover, Hakim et al. found Muslims Arab Americans who showed religious identification experienced higher levels of discrimination. Similarly, Awad (2010) investigated the impact of acculturation and religious affiliation on perceived discrimination among Middle Eastern and Arabs in the United States and found that higher acculturation resulted in higher levels of discrimination for Muslim Arab Americans while the opposite was true for Christian Arabs. In other words, Christian and Muslim Arab Americans with low levels of acculturation reported similar levels of discrimination while high levels of acculturation resulted in lower discrimination for Christian Arabs and higher discrimination for Muslims. Saleem, Dubow, Lee, and Husmann (2018) found in their study of 171 Arab Muslim adolescents that a higher reported sense of integration between one's Muslim and American identities helped act as a buffer that decreases the detrimental effects of discrimination. The results of Hakim et al., (2018) and Saleem et al., (2018) show that Muslim Arab American perceive more discrimination due to the strong religious and

ethnic identities, while at the same time it is a protective factor, which aligns with Berry's (1997) assertion that these moderating factors can act "as both risk factors and protective factors depending on their degree or level" (p. 11).

In summary, there are several factors that affect the acculturative stress and well-being of Arabs in the United States before the process of acculturation begins (Abu-Ras, 2016; Berry, 1997; Berry & Hou, 2016; Goforth et al., 2016). The younger an individual is when they begin the acculturation process, the less acculturative stress they face; those who are older when they begin the process experience the most acculturative stress (Berry, 1997; Berry & Hou, 2016; Schwartz et al., 2010). The gender of an individual plays a direct role in the acculturation process, given the different cultural expectations of each gender (Berry et al., 1987; Berry, 1997). One's level of education affects the acculturation process: more educated individuals are better equipped to deal with the stress than less educated individuals (Berry, 1997; Khawaja, 2016). When their religious practices are similar to the practices in the host country, individuals often face less acculturative stress than those whose religion is more distinct from the dominant religion in the host country (Samhan, 2014). In addition to these factors, there are also factors that emerge when an individual is going through the process of acculturation. These factors will now be discussed in the following section.

**Factors that Emerge During the Process of Acculturation.** Arabs in the United States deal with unique factors that arise during the acculturation process. Negative portrayals in the American media, the effects in the aftermath of 9/11 and the current policies and political environment have increased their perceptions of discrimination, which is linked to their greater levels of acculturative stress and to negative affects on

their overall well-being (Abu-Ras, 2016; Goforth et al., 2016). In addition, immigrant status, social support, homesickness, financial support status, lengths of stay in the United States, as well as levels of English proficiency, are also significant factors that may contribute to acculturative stress (Berry, 1997; Berry & Hou, 2016).

***Immigrant Status.*** In order to understand the acculturative stress and its effects on well-being experienced by Arab international students, the type of immigration status associated with such students must be taken into consideration (Berry, 2017).

Acculturation research typically distinguishes between four different types of immigrant status: voluntary immigrant, asylum seeker, refugee, and sojourner (Berry, 2017). Each group varies according to its options for immigration, the type of involvement in the acculturation process, and the nature of social support. For example, individuals who voluntarily involve themselves in the acculturative process typically have fewer complications than those individuals with limited options (e.g., sojourners) or no options (e.g., asylum seekers and refugees) in the matter (Berry, 2017).

It is worth noting that the term ‘sojourners’ typically refers to individuals who are in transit in the host society and are there only for a temporary period of time. For instance, tourists, temporary workers, international students, or business are all sojourners in the usual sense of the term (Berry, 2017). However, the types of ‘sojourners’ that are the focus of this dissertation are international students, and so these terms are used interchangeably. Those who are in transit and are temporarily in contact with individuals of the host culture, and do not have consistent social support, are particularly vulnerable. Thus, sojourners often experience challenges related to increased acculturative stress and that may affect their overall well-being when compared to more established immigrant

groups (Berry et al., 1987). For sojourners, the process of involvement in the host society can be complicated by their knowledge that they will eventually either return home or are move someplace else. Due to this, sojourners may be hesitant to become completely involved, to form close relationships, or to identify with the host society (Berry, 2017). Lantrip et al. (2015) conducted a study that examined ethnic identity and depression, acculturative stress, and well-being among students of Asian and European descent. The study was comprised of 198 participants (128 of European descent and 70 of Asian descent). Their data indicated that, for the European participants, 92% of their parents were born in the United States and 8% were foreign-born, whereas, for the Asian participants, 6% of their parents were born in the United States and 94% were foreign-born. The results of this study found that students of Asian descent reported higher levels of acculturative stress and depression and lower well-being than those of European decent. This observed difference may to the fact many of the Asian participants had moved to the United States and experienced the stressors of relocation and adversity (Lantrip et al., 2015).

Sojourners experience changes in life due to the environmental change involved in moving into a new host culture. Such a change requires them to face psychological adaptation to the new culture and in turn additional stress (Berry, 2017). Sojourners may deal with a number of stressors related to being distanced from their home environment, such as a lack of social support, an increased feeling of homesickness, a change in economic status in the new environment, and lack of English language proficiency. These stressors may affect their acculturative stress and overall well-being (Misra, Crist, & Burant, 2003). These stressors will be described in more detail in the following sections.

***Social support.*** A critical variable that affects the levels of acculturative stress and well-being among immigrants is the degree of social support (Berry & Hou, 2016). Social support plays a critical role in the psychological adaptation of an individual within the host country (Berry, 1997). In acculturation research, two types of social support have been recognized: the first is the support received from individuals of the same cultural group or of the same immigration status, and the second is the support received from individuals within the host culture who have different ethnic backgrounds (Berry & Hou, 2016). Sojourners who have the support of their fellow international students or people of the same ethnicity tend to have a stronger bond to such individuals (Berry & Hou, 2016). When sojourners who have the support of members of the host culture, the gap between the two cultures is more often successfully bridged (Berry & Hou, 2016). In turn, sojourners who have a stronger bond to members of the same ethnic group or those of the same immigration status or who have more contacts with people in the host culture are more likely to have a more successful acculturation process as well as achieve successful psychological adaptation into the host society (Berry, 1997). On the other hand, when sojourners are not successful in obtaining at least one or both of these two types of social support that may affect their process of acculturation and they are most likely prone to less psychological adaptation into the host society and therefore they are more prone to acculturative stress and well-being issues (Berry & Hou, 2016).

Based on research from Arab immigrants who are not international students as well as research from international students from other Asian cultures, it is likely that social support is important to Arab international students in the United States because they originated from a collectivist culture. For these students living within or close to an

Arab community can be a great source of this type of support (Nassar-McMillian, 2011). Research from non-international student Arab immigrants shows that Arab communities often provide emotional support to one another, and this in turn reduces stress (Abu-Ras & Abu-Bader, 2009). When Arabs in the United States are without the social support that is customary in their culture, loneliness and isolation may occur, which may in turn impede an individual's adjustment to the host society and increase a vulnerability to stress (Abu-Ras & Abu-Bader, 2009). A study by Abu-Ras and Abu-Bader (2009) of 350 Arabs in the United States (317 of whom were foreign-born first-generation immigrants and 33 of whom were second or later generation immigrants) examined the relationship between various demographic factors and socio-cultural groups and symptoms of posttraumatic stress disorder (PTSD) and depression. The results of this study found that individuals who lacked social support from members of their native culture were more likely to experience depression and PTSD symptoms and that depression was high among those with less support from their family.

Some studies have shown that social support is a predictor factor that impacts acculturative stress among international students from collective societies in the United States, such as non-Arab Asian international students. For example, Ye (2006) examined acculturative stress, social support, and the use of online social support among 112 Chinese international students in the United States. The results of this study indicated that students who were content with their interpersonal support systems had less perceived hate, negative feelings, and perceived discrimination. The results also showed that students who had formed online interpersonal groups and who received much online emotional support had lower levels of acculturative stress in relation to perceived hate. In

another study, Ra and Trusty (2017) studied the impact of social support and coping on acculturation and acculturative stress among East Asian International Students in the United States. The results indicated that social support was negatively and significantly related to acculturative stress. They also found that coping was negatively related to acculturative stress. Ra and Trusty (2017) found that experiences acculturative stress experiences lead East Asian international students to seek out social support and find coping strategies to deal with stressors, which lead to a decrease in acculturative stress. They also speculated that those who had lower levels of acculturative stress and high levels of psychological well-being may have more social support and higher levels of coping.

***Homesickness.*** The term ‘homesickness’ can be defined as the behavioral, somatic and emotional reactions associated with moving away from a familiar environment (Vingerhoets, 2005). In other words, it is a reaction to the loss of social and emotional support as a result of being separated from significant others, such as family and friends, as well as limited contact with members of the host society (Sandhu & Asrabadi, 1994). Homesickness is considered one of the significant factors that affect acculturative stress levels and well-being among international students (Wei et al., 2007). International students often find themselves missing significant individuals and places while trying to build new social relationships and networks, all while transitioning to a new environment and culture (Kegel, 2009). Gebregergis (2018) conducted a study that examined acculturative stress and its relation to depression disorders and certain socio-demographic factors (including age, level of education, homesickness, financial support, culture shock, language proficiency, previous travel experience, discrimination,



friendships within the host culture, and marital status). The participants in this study were 506 international students who were studying in China. The results of the study indicated that discrimination, homesickness, and culture shock were the three main causes of acculturative stress. The socio-demographic factors were associated with higher levels of acculturative stress among the participants of the study.

***Financial Support.*** Economic status in the host country is one of the important factors affecting an immigrant's adaptation to the new environment/society. An immigrant's economic circumstance can be an indicator of the levels of acculturative stress and well-being (Berry & Hou, 2016). A self-sufficient economic status means that all needs are provided for, and it allows immigrants the chance to interact positively in the host society. An insecure economic status, however, may hinder an immigrant's psychological adjustment to the new environment (Berry & Hou, 2016).

In the case of temporary immigrants/sojourners/international students, securing financial support is one of the main challenges faced in the new environment. Gebregergis (2018) categorizes international students into two groups: "scholarship students or self-supporting students"(p.71). Among the scholarship students, financial support is in the form of scholarships: either from the host country or from country of origin, provided by government agencies, universities, or associations. Among the self-supporting students, financial support comes from the family or from work within or outside the university. Gebregergis (2018) stated that there has been a little research devoted to the matter of financial support as a factor in acculturative stress.

International students may encounter a number of specific economic difficulties or challenges. Moving away from the family household and living on one's own may

mean learning new skills, such as budget management (Çiftçi & Zalzal, 2016).

International students whose immigration status is as temporary immigrant (i.e. those who hold a visa such as an F-1 visa) do not have the same rights as their peers (native born students). For instance, in the United States, they are not allowed to work outside the university, and, if they are granted permission to work within the university, they can only be employed part-time and must maintain their status as a full time student (U.S. Citizenship and Immigration Services, 2019). In addition, they often have restricted access to student loans offered by U.S. agencies due to specific government and university regulations (Çiftçi & Zalzal, 2016).

Gebregergis (2018) studied the relations between acculturative stress, depression disorders, and socio-demographic factors among international students in China. Financial support was one of the socio-demographic factors considered, and his study found that the scholarships students had higher levels of acculturative stress than the self-supporting students. Gebregergis speculated that this result could be due to the fact that scholarships do not always cover all of a student's daily living expenses (Gebregergis, 2018).

***English proficiency.*** According to Berry (1997) the greater the linguistic dissimilarity between two cultures the greater the difficulty of acculturation, which leads to more stress. This has been borne out in the case of foreign-born Arab immigrants (e.g., international students). A recognizable foreign accent or a failure to speak English fluently identifies an individual as an outsider and may encourage native-born individuals to discriminate and express contempt toward that individual. According to Ward and Geeraert (2016), the degree of dissimilarity between two cultures has a proportional

effect on the difficulty to integrate into a new culture. Also, cultural and linguistic dissimilarities increase the level of acculturative stress and can negatively impact sociocultural and psychological adaptations. Proficiency with English can be instrumental in adapting to mainstream culture for Arabs in the United States (Hakim-Larson & Menna, 2016). For example, Arab immigrants who do not speak English usually have limited social interactions within the host society. Because language is key for interactions between people of two different cultures, Arabs who are not proficient in English are prone to higher levels of acculturative stress (Hakim-Larson & Menna, 2016).

Difficulties in learning how to read, write, and speak the language of the new culture, while also maintaining their fluency in their native language, cause a majority of immigrants to face issues that affect their acculturation process and may increase their acculturative stress (Hakim-Larson & Menna, 2016). Foreign-born Arab immigrants (especially international students) in the United States, may face other issues related to coping with a new language, such as the challenges that arise from having a pronounced accent, that also may cause increased acculturative stress (Hakim-Larson & Menna, 2016). In fact, a study by Wrobel et al. (2009) that examined the relationship between depression and acculturative stress found that lower levels of English language proficiency for foreign-born Arabs in the United States (first-generation immigrants and temporary-immigrants) were linked to greater levels of acculturative stress. In addition, the challenges of attaining English language proficiency faced by those who are recent first-generation immigrants or immigrants with temporary residential status, may be a major factor contributing to their higher levels of acculturative stress than second-generation (and beyond) Arab Americans.

***Length of Stay.*** The length of time spent in a new society is a significant predictor of how well immigrants will adapt and acculturate (Berry & Hou, 2016). The longer the time immigrants spend in the host society the more issues with which they must cope, such as felt discrimination due to being foreigners, which then affects their acculturative stress (Berry, 1997) and overall well-being (Berry & Hou, 2016). Recent immigrants (e.g. international students) who have lived the majority of their life in one cultural setting and then make a cultural change may struggle to acculturate and experience acculturative stress as a consequence (Berry, 1997). The length of stay in the host culture and immigrant status is essential to consider in gaining an understanding of the acculturation process of Arabs in the United States and how it affects their well-being.

A recent study has shown that the length of stay in the United States is linked to lower well-being. Amin and Driver (2019) studied the relationship between length of stay in the United States, gender, and psychological distress. They found that Arab immigrants' length of time spent in the United States was associated with negative mental health issues. In addition, their findings showed that the longer the individuals stayed in the United States, the higher psychological distress they exhibited. Furthermore, the length of stay in the host culture is connected with perceived discrimination: the longer the time spent in the host country, the more perceived discrimination an individual from a foreign culture experiences (Lee, O'Neill, Ihara, & Chae, 2013). The factors that increase the level of perceived discrimination among Arabs in the United States will be discussed in the next section.

***Perceived Discrimination.*** Jones (1997) defined discrimination as the part of prejudiced behavior that results when individuals are treated unequally based on their

membership in an ethnic group. In addition, Meyer (2003) states that discrimination is perceived as a range of stressors that includes prejudice and certain implicit and explicit events that individual's experience. In addition, perceived discrimination can be defined as an individual's feeling of exclusion as a result of overt and covert racial and prejudiced actions and remarks by other individuals in the host community (Shammas, 2009).

Experiences of discrimination can have negative consequences for immigrants. More specifically, discrimination causes immigrants to feel unwelcome and as if they do not belong in the host country (Berry, 1997). Perceived discrimination is a strong predictor of negative sociocultural and psychological adjustment (Sam & Berry, 2010). When an individual experiences racism and/or discrimination, it diminishes their sense of belonging in a culture (Berry & Hou, 2016). In addition, experiences of discrimination intensify the connection immigrants have to their country of origin and advance the development of what has been called "reactive identification" phenomenon (Berry & Hou, 2016, p.261). This phenomenon transpires especially when immigrants feel rebuffed or unwelcomed in a host society at large and in turn finds themselves more appreciative of their cultural and ethnic heritage (Schwartz et al., 2010). In a study by Berry, Phinney, Sam, and Vedder, 2006 of immigrant adolescents, experiences of discrimination were found to be lower among those following the strategy of integration and higher among those following the strategy of separation. The researchers also reported that participants, who experienced discrimination, became to a greater extent oriented toward their own ethnic group or alternately became indifferent toward their connection to both the society at large and their ethnic group. While discrimination experiences are only one factor in acculturation, research suggests that they are the most important factor impacting the

well-being of immigrant adolescents (Berry, et al., 2006). Schwartz et al. (2010) argue that when individuals' experience discrimination, it introduces them to the unfortunate prospect that their ethnic minority group is being viewed as undesirable or inferior. These individuals then encounter the prospect of integrating themselves into a new society that they realize may not accept or welcome them.

Arab immigrants in the United States are at an increased risk of developing acculturative stress concerns due to the stressors they face before, during, and after they immigrate to the United States. Immigrants experience significant psychological stressors on a daily basis, which include experiencing discrimination and feelings of being unwelcome (Abu-Ras, 2016). For Arabs in the United States, interactions with those of the dominant culture have increased their awareness of prejudices and biases among people of the host community (Khawaja, 2016). Westerners often perceive Arabs with suspicion and fear and thus limit their interactions with them. At the same time, Arabs in the United States who are distressed by maltreatment tend to avoid engaging with individuals from the West (Khawaja, 2016). The negative portrayal of Arabs in the media, the devastating events of 9/11 and its aftermath, as well as the results of the current political environment have also increased the level of discrimination Arabs in the United States perceive, which in turn increases their acculturative stress and decreases their well-being.

*Media portrayals of Arabs.* Discrimination against Arabs in the United States has been documented since the early 1900s (Naber, 2000), well before the attacks on September 11, 2001. After the Arab-Israeli conflict in 1948, there was a shift from Arabs being largely invisible to a situation in which Arabs were portrayed negatively (Semaan,

2013). Early stereotypical images of Arab individuals in the West appeared in various media, with Arabs being stereotyped in movies (Nasir, 1979), cartoons, comics (Lendenmann, 1983), and in press coverage (Suleiman, 1988). In response to these negative mass media portrayals, the Arab-American Anti-Discrimination Committee (AADC) was established in 1980 to aid and advocate for the victims of discrimination against people of Arabic descent (Abu-Laban & Suleiman, 1989; Suleiman, 1999). At the time, the mainstream media depicted Arab men as violent, corrupt, barbaric and abusive, which bolstered the prevailing negative image of Arabic men. As a result, the general view was that all Arabs are terrorists (Shaheen, 1984). Negative media portrayals of Arab men in the 1990s became more frequent, with Arabic men being depicted as subhuman, which made it significantly more difficult to be an Arab man in the United States during that time (Artz & Pollock, 1995; Stockton, 1994). Due to the increased negative portrayals in the media, many Americans lost the ability or the desire to distinguish between Arabs and Muslims or between Arabs and foreigners, regardless of their gender. Anyone who looked Arabic was regarded with the same negative sentiments (Suleiman, 1999).

Although many recent Arab immigrants are well-educated professionals, media depictions of Arabs still consistently highlight negative behavior, such as incidents of terrorism and religious intolerance. The images depicted in the media have shaped most Americans' views of people of Arabic descent (Suleiman, 1999). Repetitive negative depictions of Arabic people in the movies as barbaric and as religious fanatics have created a negative Arab identity that is difficult to shake (Shaheen, 2003). Viewing Arabs through the eyes of American media creates a lasting and damaging image of Arabs.

While negative stereotypes of other groups have mostly diminished or disappeared in American media, stereotypical images of Arabs have increased in the past three decades (Alsultany, 2013; Shaheen, 2001). The impact of American media is great because its cultural reach is vast. Because of this, it has become difficult for Americans to separate Arabs and Muslims from terrorists. Thus is the power of the media. The media, including Hollywood movies and television in general, has continually reinforced negative stereotypes of Arabs and has portrayed them as anti-American. These views have not just been communicated to American audiences, but to billions of others around the world who watch American television (Shaheen, 1984, 2003).

The historical misrepresentation of Arabs has also reached into classrooms and poses concerns for Arab student's academic and social growth (Tabbah, Miranda, & Wheaton, 2016). The media-inspired image of Arabs has impacted how Arab students are viewed by non-Arab educators and their peers. The negative image of Arab students has in turn affected the way Arab students are treated and viewed within schools (Melhem & Punyanunt-Carter, 2019). Furthermore, the negative perception of Arab students and other Arab foreign-born international students, inspired by the media, has resulted an increase in racial/ethnic discrimination, mistrust, and suspicion as well as hate crimes (Çiftçi & Zalzala, 2016) and other forms of maltreatment (Tabbah et al., 2016). For instance, a recent incident in 2015 involved an Arab student who brought a homemade, repurposed clock to school to show his teacher. His teacher reported the incident to the police, who handcuffed the student and took him to the principal's office. The student was subsequently arrested and interrogated by police, without the opportunity to contact his parents, for an hour and a half. The teacher and the school administration acted



merely on the suspicion that the student had brought a bomb to school. Upon further investigation, it was discovered to be a false allegation by the school (Tabbah et al., 2016).

The media has the power to create stories that can impact perceptions of reality. Such stories can involve mischaracterizing and misclassifying an entire group of people in such a fashion that for many what is repeated in the media is taken to be a reality. In contemporary society, the media is the single most powerful influence on groups of people (Shaheen, 1984, 2001). Americans have held unfavorable opinions of Arabs since 1980s, but the September 11th terrorist attacks have had the most significant impact on helping to shape attitudes toward Arab Americans. The media proliferation of negative Arab stereotypes following these attacks has contributed to a significant internalized dislike for Arab individuals in the United States (Ajrouch, 2005; Alsultany, 2013; Naber, 2000).

*The effects of September 11, 2001 on Arab Americans.* Following the horrific event on the United States that occurred on September 11, 2001, negative portrayals of Arabs in the media increased dramatically, which in turn reinforced the image of Arabs as being prone to violence. These attacks contributed to an increase in anti-Muslim attitudes and contributed to an enhanced fear of Muslims, such fear becoming known as Islamophobia (Council on American-Islamic Relations, 2012). As a result, prejudicial treatment and discrimination toward Middle Easterners and Arabs significantly increased after September 11<sup>th</sup> (Ajrouch, 2005; Naber, 2000). Arab defamation in the media (Shaheen, 2003) led to a heightened concern for the safety of Arabs in the United States since they faced increased racial discrimination. The Council on American-Islamic

Relations (CAIR, 2012) reported as many as 645 hate crimes in the United States in just seven days after September 11<sup>th</sup>. In the years after this tragedy, hate crimes towards Arab communities continued to rise in the United States (AAI, 2018c).

As a consequence of the events of September 11, Arabs in the United States have faced an increase in discriminatory policies from the United States government from that time into the present (AAI, 2018c; Takyar, 2019). Such policies include using secret evidence in cases of deportation, profiling individuals at airports, and abusing power in conducting interrogations, raids, and arrests (Cainkar & Read, 2014). The United States government created a range of new immigration policies that targeted those of Middle Eastern descent, and of the 20 new rules and initiatives adopted since September 2001, 15 specifically targeted Arabs (Abdelhady, 2014). These policies and initiatives allowed government agencies to detain more than 1,200 individuals of South Asian, Arab, and Muslim heritage within the year following the 9/11 attacks (Human Rights Watch Report, 2002). In the same time period, more than 8,000 individuals were questioned, international students were monitored, and 16% of the 130,000 Arabs in the United States registered with the Immigration and Naturalization Service (INS) were deported (Çiftçi & Zalzal, 2016). Such discriminatory policies contribute to the negative stereotyping of people of Arab ethnicity. The ‘no-fly’ lists and ‘watch lists’ sanctioned by the U. S. government without due cause have offered a public sanction for discrimination (Deflem & McDonough, 2015). As a result, there has been a well-documented increase in discrimination and harassment of persons perceived to be of Arab heritage in the United States (AAI, 2018c; Awad & Amayreh, 2016).

Furthermore, the effects of policies pursued post 9/11 have included the separation of families and the deportation or disruption of the lives and studies of thousands of students (Samha, 2014; Çiftçi & Zalzal, 2016). Consequently, Arabs in the United States have reported a pervasive sense of vulnerability and insecurity (Awad & Amayreh, 2016). In these ways, the traumatic events of September 11<sup>th</sup> renewed the negative characterizations and discrimination of Arabs in the United States, which in turn intensified their already existing economic, religious, political, and psychological challenges (Padela & Heisler, 2010; Takyar, 2019).

*The impact of current policies in the present political environment.* The most recent factor that has promoted an increase in the discrimination against Muslims and Arabs in the United States has been the political environment fostered by the current administration since 2016 and its attendant policies (Abu-Ras, et al., 2018). For example, the current administration enforced policies to ban, or a “complete and total shutdown” (Cohen et al., 2017, p.5) of the entry of Muslims into the United States in 2017, ostensibly to combat terrorism (Abu-Ras et al., 2018). Such policies have provoked an increase in the anti-Muslim xenophobia and bigotry toward individuals of Arab descent that have reached their zenith during this time (AAI, 2018b; Cohen et al., 2017). The current policies primarily ban targeted countries that have a majority of citizens that are Arab and Muslim (Abu-Ras et al., 2018). The targeted countries included a number of the 22 Arab countries, such as Syria, Yemen, Libya, and Somalia. As a result of this ban, Arab Muslims in the United States have reported that they find it more difficult than before to identify as a Muslim or Arab in the United States, and, according to the Pew Research Center (2017), 48% experienced at least one incident of discrimination in 2016.

These actions by officials of the United States government underscore a trend of anti-Muslim and anti-Arab bias in both rhetoric and policy. Furthermore, in 2016, there was a reported 38% increase in hate crimes in Arab communities, and crimes targeting specific Arabs in the United States rose almost 20% (AAI, 2018b).

Negative current policies significantly contribute today to anti-Muslim and anti-Arabic sentiment, which fosters increasingly widespread hostility and increases the potential for violence and discrimination (AAI, 2018b). The intention of current political policies to guarantee safety in America is unfair to the Arab population, since the emphasis on the war against terrorism results in demonizing all immigrants, particularly those of Arab descent (Cohen et al., 2017). The current political climate has exacerbated the already preexisting negative attitudes toward ethnic and racial minorities as well as Arabs and other immigrants in the United States (Williams & Medlock, 2017).

Because of the recognition of how the previously described factors have lead to perceived discrimination, a majority of the studies on Arabs in the United States has focused on the examination of the relationship between such discrimination and psychological distress. Such research has shown that discrimination affects psychological outcomes, such as well-being, particularly for Arab Americans who have experienced discrimination and have reported high degrees of acculturative stress (Ahmed, et al., 2011; Moradi & Hasan, 2004). Exposure to ethnic or racial antagonism in the media and in society at large is a predictor of acculturative stress among the individuals of the group targeted (Padela & Heisler, 2010).

Events connected to the current political environment and policies have heightened the anxiety and fear in many Arabs in the United States. Williams and

Medlock (2017) stated that an environment of increased suspicion and hostility has had an unfavorable influence on the well-being of Arabs in the United States due to the increase in the level of fear and stress experienced by the members of a targeted, stigmatized, or marginalized group (Williams & Medlock, 2017). They also indicates that the anti-immigrant initiatives and policies have resulted in animosity towards immigrants that has resulted in their perceiving themselves as being vulnerable and threatened. The result of these perceptions has been to increase the level of acculturative stress among both immigrants who have been specifically targeted by such policies and even those who have not been directly targeted (Williams & Medlock, 2017).

For example, Kwan et al. (2018) in a quantitative study examined the correlation between perceived discrimination, acculturative stress, and eating disorders. Their study involved a sampling of 187 ethnic minority college students (some who self-identified as foreign-born Arab students), 12.2% of which were temporary immigrants for education purposes. The researchers utilized the Societal, Attitudinal, Familial, and Environmental Acculturative Stress Scale (SAFE, Mena, Padilla, & Maldonado, 1987), the Experiences of Discrimination Questionnaire (EOD, Williams, Yu, Jackson, & Anderson, 1997), the Eating Disorder Examination Questionnaire (EDE-Q, Fairburn & Beglin, 1994), the Eating Disorder Inventory (EDI, Garner, Olmstead, & Polivy, 1983), and the Drive for Muscularity Scale (DMS, McCreary & Sasse, 2000). Their findings indicated that perceived discrimination and acculturative stress were significantly correlated with eating disorders for both genders. The significance of perceived discrimination was also correlated in both genders to concerns that are related to eating, weight, shape, and muscularity (Kwan et al., 2018).

Shammas (2015) conducted a quantitative study that investigated the social relationships in comparison to other ethnic groups and involved a sample of 753 Arab and Muslim students from several community colleges in the United States, six in southern Michigan and 15 in Southern California. The students identified themselves as Arab Americans, non-Arab Americans, Muslim Americans, and non-Muslim Americans, with 44% being first-generation immigrants, 19% being students who moved to the United States at the age of 12 or younger, and 37% being second-generation immigrant who were born in the United States. Of the total number of participants, 496 were of Arab descent, 316 were Arab Muslims, 192 were Christians, and 20 were of other faiths. The researcher created the Campus Friendship Scale to measure the study variables. The results indicated that Arab and Muslim American students were more likely to perceive ethnic or religious discrimination than non-Arab and Muslim students. The results also showed that a sense of belonging was rare among participants who perceived discrimination. As a consequence, Arab and Muslim students tend to be likely to develop friendships with others who share the same ethnicity, and that they are more likely to integrate into the campus community when they have a strong ethnic identity (Shammas, 2015).

Ahmed et al. (2011) conducted a quantitative study involving high school students ages 13-18, with a sample size of 240, who identified themselves as Arab or Arab Americans, in order to investigate the relationship between discrimination and acculturative stress and their effect on mental health. Ahmed and her colleagues utilized the Perceived Racism Scale-Child (PRS-C, Nyborg 2000), The Societal, Attitudinal, Environmental, and Familial Acculturative Stress Scale (SAFE, Padilla, Wagatsuma, &

Lindholm, 1985), Multigroup Ethnic Identity Measure (MEIM, Phinney, 1992), Brief Religious Coping Measure (Brief RCOPE, Pargament, Smith, Koenig, & Perez, 1998), and Religious Support Scale (RSS, Fiala, Bjorck, Gorsuch, 2002). They found that among all students, discrimination and acculturative stress had a direct negative influence on mental health. Participants who reported higher perceived discrimination also reported higher levels of acculturative stress, anxiety, depression, and externalizing and internalizing symptoms and reported less religious support (Ahmed et al., 2011).

It is worth noting that most of the research in academia with regard to the mental health of Arabs in the United States has focused on socio-political stressors specific to Arabs, such as the portrayal of Arabs in the media, discrimination, and the current political environment, all of which affect the levels of acculturative stress among individuals of this minority group (Amer & Hovey, 2012). Such research has found that while perceived discrimination is only one factor that directly affects acculturative stress among foreign-born Arab students; however, it appears to be the most prominent factor that causes significant issues in regard to mental health and negative well-being (Sandhu & Asrabadi, 1994; Berry & Hou, 2016). Nonetheless, the focusing solely on these socio-political stressors means that as of yet researchers lack a more complete picture of the relationship between the range of factors which influence acculturative stress and individual well-being.

In summary, immigrant status, social support, homesickness, financial support status, English proficiency, length of the stay, and perceive discrimination are factors that arise during the acculturation process among individuals in the new society (Abu-Ras, 2016; Goforth et al., 2016; Berry, 1997; Berry & Hou, 2016). The ability to speak

English well is a key factor that determines the extent of social interaction between immigrants and people from the host culture in the United States. Any difficulties that immigrants face speaking English as native speakers do will result in increased acculturative stress due to problems with communication (Hakim-Larson & Menna, 2016). The longer the length of stay in the host country the more issues with which immigrants must deal. Resolution of these issues leads to acculturation. The process of resolving these issues can lead to acculturative stress. The greater the number of issues and the longer the issues are experienced, the highly the likelihood of immigrants experiencing high levels of acculturative stress (Berry, 1997; Berry & Hou, 2016). Perceptions among Arabs of discrimination fostered by images in the media and in the political and social environment of today and immediately after the events of the 9/11 have negatively impacted Arabs' acculturation process and well-being (AAI, 2018c; Abu-Ras, et al., 2018; Shaheen, 2003). In order to assess how these stressors that exist prior to and during the acculturation process affect the levels of acculturative stress and well-being, the Acculturation Model developed by Berry (2003) and Myers and Sweeney's Wellness Theory (2004) will be used to better understand the variables being studied.

### **Theories: Wellness and Acculturation**

This section discusses Berry's Acculturation Model, (2003, 2017) and the Wellness Theory developed by Myers and Sweeney (2004, 2005), in order to better understand and clarify the likely relationship between acculturative stress and well-being among foreign-born Arab students. The wellness theory explored here views an individual holistically as an entity including the mind, body, and spirit (Myers et al.,



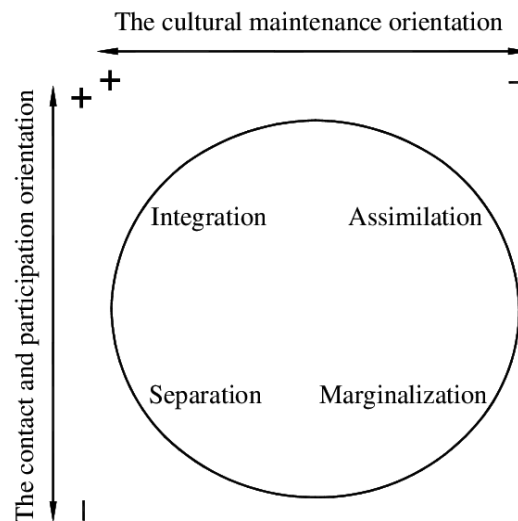
2000). The acculturation model and its strategies of assimilation, separation, integration, and marginalization provide us with an overview of the phases that an individual goes through during the acculturation process (Berry, 2017).

**Berry's Acculturation Model.** The idea of acculturation was first introduced by Redfield, Linton, and Herskovits (1936). They viewed acculturation as describing the circumstances that result when a group of people who come from one culture are in continual contact with individuals from another culture, leading to an ensuing shift in the original cultural shape of one of the two groups (Redfield et al., 1936). Building on the work by Redfield, Linton, and Herskovits, Berry's (1974) acculturation model includes a description of acculturation strategies. Berry updated his theory in 1980. Berry continued to update his framework and finalized it in 2003; the later version emphasizes the need for continuous dimensions, as depicted in figure 2 (Berry, 2003; Berry, 2017). Sam and Berry (2010) defined acculturation as the development of psychological and cultural adaptations that manifest as a result of meetings between dissimilar cultures that influences an individual's social activity and overall well-being.

Acculturation is a multi-dimensional process in which an individual's cultural heritage and the receiving culture's values, identifications, and practices merge after contact occurs among individuals of different cultural groups, with one the majority group and the other the minority group (Berry & Hou, 2016). The process is bi-directional, resulting in reactions and actions on the part of both groups (Sam & Berry, 2010). Individuals in both majority and minority cultural groups confront what Berry conceptualized as the two main issues in regard to acculturation, which are then resolved by the individuals (collectively and severally) in encounters with each other. The two

issues are: 1) cultural maintenance, which is the degree to which cultural identity and characteristics are deemed significant and their maintenance is worked towards; 2) contact and participation, which is the degree to which individuals either become integrated with other cultures or remain among their native cultures (Berry, 2017).

By considering these two issues concurrently, Berry (2017) formed a conceptual framework in which four possible acculturation strategies emerge. These issues can be addressed in terms of attitudinal dimensions that are represented by bipolar arrows, where negative or positive responses intersect in quadrants defined by the four possible acculturation strategies. The acculturation strategies are assimilation, integration, marginalization, and separation and are framed in terms of the group (the majority group or the minority group) that is being considered. It is worth noting that the four strategies of acculturation are not static, neither are they outcome centered, but rather each can change depending on the situation faced by an individual at a particular time (Sam & Berry, 2010).



**Figure 2.** Acculturation strategies in Ethnocultural groups. Adopted from Berry (2003).

Assimilation occurs when an individual does not preserve her or his cultural identities and seeks out frequent interaction with individuals from other cultures. In contrast, separation takes place when an individual values embracing his/her native culture and tries to avoid interactions with individuals from a different culture. When an individual wants to both maintain their native culture and yet also interact with individuals from other cultures, what results is what Berry termed integration (Berry, 1997). In a case of integration, according to Berry's model an individual has the option (but not the obligation) to maintain her or his cultural identity while meanwhile participating as a part of a minority group in a larger social network (Kruusvall, Vetik, & Berry, 2009). Lastly, marginalization results when an individual displays a lack of interest in maintaining relationships with their native culture or other cultures, often due to being forced to give up their native cultural, experiences of discrimination or exclusion (Berry, 1997; Berry, 2017; Kruusvall et al., 2009). These four acculturation strategies reflect the alternate ways that individuals and groups from the minority culture try to acculturate in the majority culture (Berry, 2009). A clear link has been shown between these acculturation strategies and discrimination: in cases where there is a greater level of perceived discrimination, individuals or a group tends to lean more towards marginalization and away from integration. Frequently, individuals who perceive discrimination tend to separate themselves, whereas individuals who perceive less discrimination are apt to assimilate or integrate into the culture of the majority (Sam & Berry, 2010).

It is important to note that the members of an ethnic minority often do not have the freedom of choice when it comes to how they acculturate or relate to the dominant

ethnic majority. When the majority group puts constraints on the choices of individuals in the minority group, the majority group thereby puts constraints on the nature of the acculturation process. As a consequence, integration can be chosen freely and sought after in a successful manner by individuals of the minority group only when the majority is inclusive and open towards cultural diversity. Thus, for integration to be successful, one requirement is mutual accommodation, which requires both groups to accept the right of all members of any group to live in culturally different manners. For there to be mutual accommodation, the minority group needs to adopt some of the core values of the dominant society, and the majority group needs to adapt national institutions that are concerned with such matters such as health, education, and labor, in order to meet the needs of all social groups residing jointly in a diverse society (Berry, 2017).

Thus, this acculturation model suggests a ‘double-edged’ phenomena: the acculturation process can be positive and can expand an individual's life opportunities and improve well-being, on the one hand, or, on the other hand, the process can negatively affect an individual's well-being in such a way as to lead to serious mental health issues. The key element of acculturation research involves understanding the factors that influence the preferences of the minority (Berry, 2006; Berry, 2017).

Conflicts and inconsistencies among the different acculturation strategies are a source of difficulty for those who are acculturating. For example, conflicts arise when an individual does not accept the cultural elements of the dominant society or an individual of a minority group faces problems when individuals in the dominant culture are opposed to immigrants maintaining their culture. In addition, the children of immigrant parents deal with inconsistency when they start to assimilate into the dominant culture and are scorned

by their parents for doing so. When individuals experience such serious issues related to the acculturation process acculturative stress occurs (Berry, 1997; Berry, 2017).

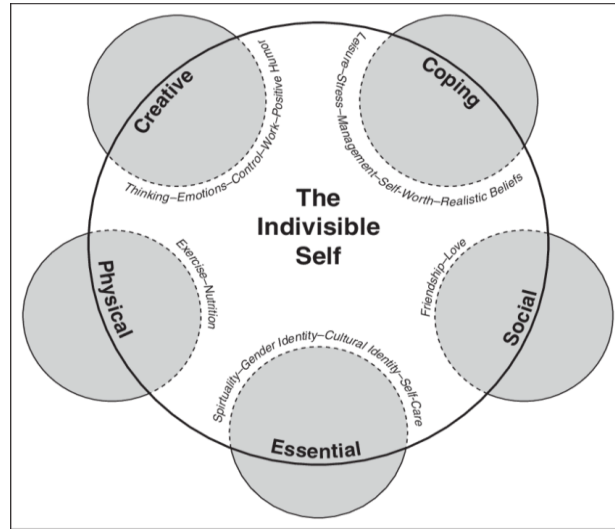
In brief, the Acculturation Model is a model that helps to explain the nature of the acculturation stages immigrants go through, whether assimilation, marginalization, integration or separation. Any conflicts and difficulties that arise during any of the acculturation stages and that leads to acculturative stress among minorities can be understood in terms of the model (Berry, 2003; Berry, 2017). In order to understand how acculturative stress resulting from conflicts or difficulties can be mitigated, the wellness theory will be introduced.

**Wellness Theory.** The Wheel of Wellness is currently the only model founded on counseling theories that has been modified to include findings related to issues of diversity (Myers & Sweeney, 2004; 2005; 2007). The Wheel of Wellness grew from analyses of existing knowledge pertaining to the factors determining wellness. Individual Psychology (Adler, 1954) provided a basis for an underlying theory that describes and explains the factors of well-being (Myers & Sweeney 2004). Adler (1954) realized that a concept of holism is essential to developing a theory that gives us an ability to understand the psychological nature of human beings.

Building on Adler's holistic approach, Sweeney and Witmer first formed the Wheel of Wellness in 1991; it was later amended in 1992. To support the Wellness theory and its components the Wellness Evaluation of Lifestyle (WEL) inventory was created in 1996 (Myers et al., 2000; Sweeney & Witmer, 1991; Witmer & Sweeney, 1992; Myers, Witmer & Sweeney, 1996). A decade later, Myers and Sweeney created an updated version of the wellness model called the Indivisible-Self Model of Wellness (IS-Wel)

based on a deeper analysis of the Wellness Evaluation of Lifestyle (WEL) inventory developed from the Wheel of Wellness (Myers & Sweeney, 2004; 2005). Both the Wheel of Wellness model and the Indivisible-Self model are based on counseling theories that utilize holistic approaches to conceptualize individuals. Myers and Sweeney (2005) selected components of several theories to transition the IS-Wel model into a stand-alone framework with two specific components based on concepts from Adlerian theory. The framework provided by the IS-Wel model encompasses both multicultural and developmental perspectives (Myers & Sweeney, 2005). These perspectives are grounded in the overall wellness paradigm that recognizes the cultures with which an individual identifies together with the individual's experiences over the span of life (Myers & Sweeney, 2005; 2007, 2008).

To understand the components that helped to shape the IS-Wel model, one should begin with the Adlerian concepts, which provide the unifying theme (Myers & Sweeney, 2005). Adler's holism and his particular holistic approach are inseparable theoretical elements that helped form Adler's understanding of the factors that shape an individual into who he or she is (Myers & Sweeney, 2005). Adlerian holism refers to the idea of 'the indivisibility of self,' and purposiveness is an abstract term that characterizes interactions (Myers & Sweeney, 2005). Interactions are constituted by the ways individuals relate to their environment in relation to other variables, including cultural identity, that help to define the whole self. This perspective was used to develop the five factors of the IS-Wel model: the Essential Self, the Social Self, the Physical Self, the Creative Self, and the Coping Self, as depicted in figure 3 (Myers & Sweeney, 2004).



**Figure 3.** The Indivisible Self: An evidence-based model of wellness. Adopted from Myers and Sweeney, (2004, 2005).

The Physical Self factor comprises components that determine health, such as nutrition and exercise (Moe, Perera-Diltz, & Rodriguez, 2012; Myers & Sweeney, 2004). These factors are important as they change as a person ages (Myers & Sweeney, 2004). The principle of holism encourages individuals to consider how nutrition and exercise impact wellness and mental health (Moe et al., 2012).

The Essential Self factor comprises the components of self-care, cultural and gender identity, and spirituality. The component of spirituality is key to an individual overall wellness (Myers & Sweeney, 2004; 2005). Spirituality includes both the capacity to interpret life-events as having meaning as well as the feeling of interconnectedness with oneself and others. Spirituality may (but need not) include formal practices related to religious affiliations (Myers et al., 2000). When considering the multicultural perspective, cultural identity and gender are thought to reflect distinctions in life experiences (Myers & Sweeney, 2005). Behaviors of self-care include an effort by

individuals to gain and maintain maximum functioning over their span of life (Moe et al., 2012; Myers & Sweeney, 2005). Myers and Sweeney (2005) have argued that the process of making meaning from life experiences is crucial in life, whether in a healthy manner or careless manner.

The Creative Self factor is comprised of five components: work, control, positive humor, emotions, and thinking. Myers and Sweeney (2005, 2004) describe the Creative Self-components as a mixture of the facets that shape one's identity within social relationships. These components are the building blocks of the strengths and talents an individual can use to create a meaningful world (Moe et al., 2012).

The Coping Self factor is comprised of four components: stress management, realistic beliefs, self-worth, and leisure (Myers & Sweeney, 2004; 2005). The Coping Self accounts for how an individual can cope with the stressors of life and the challenges associated with conflicts between personal beliefs, behavioral patterns, and social systems. Coping skills are those skills used daily to cope with life stressors. A lack of attention to the Coping Self may lead to an increase in daily stress and difficulties (Moe et al., 2012).

The final factor is the Social Self. It is comprised of two components: love and friendship. Myers and Sweeney (2004, 2005) view these components in terms of a spectrum of experiences that are challenging to separate, other than by definition. Friendship includes the creation and maintenance of caring and stable relationships outside of one's immediate family or significant others. Love encompasses the experiences in close, functional relationships with members of the immediate family or a romantic partner (Moe et al., 2012). Myers and Sweeney (2004, 2005) explain that



intimacy and friendship improve the quality and length of life, but if one has neither she or he may be alienated, isolated, or separated from others. These experiences of separation, alienation, and isolation are what make an individual susceptible to poor health and premature death. Furthermore, Myers and Sweeney (2004, 2005) point out that an individual's social support within the family can increase individual wellness and therefore promote a healthy family system.

### **Measures of Acculturative Stress and Well-Being**

In this section, an overview of proposed measures of acculturative stress and well-being is presented. Two of the measures of acculturative stress and two measures of well-being will be rejected in favor of the Acculturative Stress Scale for International Students (ASSIS) and the Five-Factor Wellness Inventory (5F-Wel). The ASSIS will be utilized to measure the levels of acculturative stress, and the 5F-Wel will be utilized to measure the wellness/well-being of foreign-born Arab students in the United States.

**Measures of Acculturative Stress.** The literature on acculturative stress draws on several measures that have helped researchers and counselors measure acculturative stress among their participants. These measures are culturally appropriate to use to measure acculturative stress for foreign-born and international students. In this section, a brief overview is provided of some measures that have been used to measure acculturative stress with immigrants and international students to the United States, such as foreign-born citizens and sojourners.

One scale that has been used to measure acculturative stress is the Sociocultural Adaptation Scale (SCAS, Ward & Kennedy, 1999). SCAS was developed to measure multicultural competence among sojourning students. The SCAS measures the

sociocultural adaptation of sojourning students and consists of two domains. The first domain is psychological, including the emotional/ affective, and seeks to measure psychological well-being or satisfaction in life. This domain in this assessment is connected with stress due to the demands placed on the acculturation and coping skills necessary to function in a new environment. The second domain is sociocultural, which includes behavioral components that involve an individual's capacity to fit in within the new culture. This domain is understood within the cultural learning or social skills paradigm (Ward & Kennedy, 1999).

According to Ward and Kennedy (1999), the SCAS is a flexible instrument, most early versions having 20-23 items that can be modified to fit the sample population. The original version was developed to assess the competence of individuals to communicate between cultures with an emphasis on behavioral aspects, whereas the updated and current version of the SCAS has 29 items and incorporates an assessment of cognitive aspects. The SCAS is a self-reported assessment that uses a five-point Likert scale (from no difficulty, to extreme difficulty) on which individuals are asked to rate themselves to indicate how difficult things are for them in each area. The psychometric properties of the 29-item version of the SACS were originally developed based on a study by Ward and Kennedy that involved 108 students from Singapore who were studying abroad in different countries, including China, United Kingdom, New Zealand, Australia, and the United States. The reliability of the 29-item version had an alpha of .89 and construct validity of .31 (Ward & Kennedy, 1999). While this instrument was designed to measure sociocultural adaptation (general acculturation) and partly to measure stress due to acculturation, this measure does not specifically assess the acculturative stress of foreign-

born students (Ward & Kennedy, 1999). For this reason this instrument is not well suited to the purposes of this study.

Another scale used to measure acculturative stress is the Social, Attitudinal, Familial, and Environmental Acculturative Stress Scales (SAFE, Mena et al., 1987). SAFE was developed to assess negative stressors experienced by immigrants and later generations of college students going through the acculturation process. The SAFE consists of 24 items that individuals are asked to rate on a five-point Likert scale (from 1 - not stressful -- to 5 --extremely stressful) in terms of how they perceive each item to be stressful within their life (Mena et al., 1987). The psychometric properties of the SAFE were generated from the study by Mena and his colleagues and involved first generation immigrants: 1 from India, 1 from South Africa, 61 from Asia, 7 from Europe, 9 from South America, 3 from Canada, 4 from the Middle East. The reliability of this version had an alpha level .89 (Mena et al., 1987).

In addition, Amer (2002) revised the SAFE scale to the Social, Attitudinal, Familial, and Environmental Acculturative Stress Scales-Arabic (SAFE-R) to be more appropriate to the Arab American culture. She added four items to the original measure that better take into account the experiences of what Arab-Americans going through in the United States. The responses to these four items reflect the specific stressors that are related to experiences of discrimination, portrayals of Arab in the media, and government foreign policies relating to this ethnic group (Amer, 2002). The psychometric properties of the Arabic version (SAFE-R) had a person reliability of .86 and item reliability of .97 (Amer, 2002).

However, a close review of the Arabic version (SAFE-R) reveals that this version was standardized based on a sample of second-generation Arab Americans who born in the United States, which makes SAFE-R more suitable for use with later generations (i.e., second, third, etc. generations) of Arab American immigrants (Amer, 2002). For instance, certain items do not apply to foreign-born immigrants, such as item 6: 'My family does not want me to move away but I would like to.' This does not apply to most foreign-born students because they relocate primarily for educational purposes. However, second and third generation students typically have nearby support since they usually live near or with their families and attend schools that are near their family in order to lower financial costs.

The final scale proposed to measure acculturative stress, the Acculturative Stress Scale for International Students (ASSIS), is the most applicable measure for foreign-born and international Arab American students. Sandhu and Asrabadi (1994) created the Acculturative Stress Scale with foreign and global students in mind. The purpose of the assessment is to assess the levels of stress experienced by foreign students that are the result of studying abroad in a new country with a different culture and as a result of adjustment difficulties. This assessment was established based on the counseling literature that is relevant to international students. The original version consisted of 125 items and 12 themes. After a pilot study and extensive consultations with senior professors in the counseling fields with backgrounds of multicultural counseling, the ASSIS was revised to 78 items. The most updated and recent version of ASSIS includes 36 items, and it contains six main subscales/factors: Perceived Discrimination, Homesickness, Perceived Hate, Fear, Stress Due to Change, and Guilt. Additionally, the

current version contains items that they do not fit under any of the six subclasses/factors, which are categorized under what Sandhu and Asrabdi called ‘Miscellaneous.’ The assessment is self-reported and its items are answered using a five-point Likert scale (from 1= strongly disagree to 4= strongly agree). The total scores of ASSIS range from 36 to 180, where higher scores on ASSIS means higher levels of acculturative stress.

Foreign-born students (first-generation immigrant and international students) experience elevated levels of acculturative stress because of limited access to and knowledge of available resources, the challenges of both fitting in and maintaining their native culture, perceived discrimination, and experiences of hate in the United States. The ASSIS has demonstrated its utility in measuring and identifying acculturative stress in global and foreign-born students. The ability of the ASSIS to comprehensively measure acculturative stress is its greatest asset (Sandhu & Asrabadi, 1994). Greater details, including psychometric data, about the instruments selected for this study are provided in chapter 3.

**Well-Being Measures.** In the counseling and psychology fields, several scales have been developed to measure participants’ well-being. Measures in the psychology field are founded on positive psychology, and measures in the counseling field are based mainly on aspects related to counseling. This section offers an overview of the most widely used measures of well-being in both fields. For the purposes of the present study, two of measures founded in psychology will be rejected, and one measure founded in the field of counseling will be adopted.

One scale that has been used to measure well-being is the Ryff Scale of Psychological Well-Being (SPWB) that was developed by Ryff (1989a). The SPWB

assess six areas of psychological well-being: personal growth, autonomy, environmental mastery, self-acceptance, positive relationships with others, and purpose in life. The SPWB has six subscales that correspond to each of these six aspects of well-being. Self-acceptance refers to the condition of individuals holding positive views of themselves as well as accepting their past. Individuals have positive relations with others when they are able to have affection and empathy for others as well as strong friendships and deep love. Autonomy refers to the condition in which individuals evaluate themselves by their own standards instead of working to gain approval from others. Individuals display environmental mastery when they have the ability to change and adapt to the environment through mental and physical activity. Individuals have a purpose in life when they have a clear understanding of their life's purpose and pursue life with intentionality and directedness. Finally, personal growth is the state in which individuals are open to new experiences and continue to further their potential (Ryff, 1989a).

The SPWB scale is a self-report, and its items are rated on a six-point Likert scale (from 1= strongly disagree to 6= strongly agree). In addition, the SPWB has two forms: the original form and a shortened form. The original version consists of 42 items (Ryff, 1989a), and the shortened version consists of 18 items (Ryff & Keyes, 1995). The psychometric properties of the original version were derived from Ryff's original study that involved 321 participants. The internal consistency coefficients of Ryff subscales were: positive relations with others .91, environmental mastery .90, self-acceptance .93, personal growth .87, purpose in life .90, and autonomy .86 (Ryff, 1989a). It is noteworthy that this measure is not holistic in nature (i.e., it does not account for both body and mind

together with spirit). In addition, the (SPWB) scale has not been specifically tested with traditional foreign-born college students (Ryff, 1989a).

Another scale designed to measure well-being is the Schwartz Outcome Scale-10 (SOS-10). Blais and his colleagues (1999) created the original English version of SOS-10 as an outcome measure useful for all therapeutic areas and levels of care as well as for a variety of patients. The SOS-10 was designed to audit outcomes at both the aggregate and individual levels among a wide span of mental health services for adults. The SOS-10 was designed not to rely on a specific theory, a specific instrument, or specific symptoms. The purpose of this measure is to precisely identify an individual's level of distress at the onset of treatment in order to help determine the level of services required for that individual (Blais et al., 1999).

The psychometric properties of the SOS-10 were derived from the study by Blais et al. (1999) that involved 85 participants (57 patients and the rest non-patients). Blais and his colleagues reported that this version of SOS-10 had a Cronbach alpha level of .96 and the scale item correlation had a range between .74 to .90. The divergent and convergent validity of SOS-10 were correlated significantly with the Psychiatric Symptoms Scale -0.66, Beck Hopelessness Scale -0.64, PANAS Negative Affect Scale -0.72, and Fatigue Scale -0.75, Well-being Scale .86, Desire to Live Scale .86, Self-esteem Scale .81, Sense of Coherence Scale .81, Satisfaction With Life Scale 0.78, PANAS Positive Affect Scale 0.67, Mental Health Component Scale .67, and Physical Health Component Scale .36 (Blais et al., 1999).

The SOS-10 is a 10-item measure used to quickly measure an individual's well-being and psychological health by looking at specific areas, including interpersonal

effectiveness, level of optimism, self-appraisal, satisfaction with life, and lack of psychiatric symptoms. The participants' rate themselves according to how often in the past week they have personally felt regarding various factors related to well-being. The participants' rate themselves on a Likert scale from 0 (never) to 6 (all or almost all of the time). The total score is calculated by adding all the scores from each question. A high score indicates better well-being, whereas a lower scores indicate poor well-being (Blais et al., 1999; Blais, 2012).

It is important to highlight that the SOS-10 is a short assessment that is not comprehensive in nature, focusing solely on acute symptoms of distress an individual's experiences in the previous seven days prior to taking the assessment. In addition, it measures psychopathology to determine the level of treatment or services an individual may need. The SOS-10 is not based on a theory, and the development of this instrument was based on insights gleaned from senior clinicians and patient focus groups and is thus prone to subjectivity (Blais et al., 1999).

The final scale that has been developed based on the holistic wellness theory and has been designed to measure well-being is the Five-Factor Wellness Inventory (5F-Wel; Myers & Sweeney, 2005). This measure is the Five-Factor Wellness Inventory (5F-Wel). Myers, Sweeney, and Witmer (2000) first created the Wellness Evaluation of Lifestyle (WEL). After extensive research conducted over a decade Sweeney and Myer (2004; 2005) created the most recent and updated version called the 5F-Wel. The purpose of 5F-Wel is to measure an individual's overall well-being (body, mind, and spirit) based on the Indivisible-Self (IS-Wel) model. This model was developed based on counseling theories. The 5f-Wel is a self-reported assessment. It uses 73 items to measure five



factors/subscales, which are: coping self, essential self, creative self, social self, and physical self. The assessment is scored using a four-point Likert scale (from strongly agree to strongly disagree).

The 5F-Wel was designed to help counselors determine the practices and resources that should be allocated based on the specific wellness needs of an individual (Myers & Sweeney, 2005). The 5F-Wel has been interpreted cross-culturally, which makes this instrument beneficial for clinical and research purposes (Myers & Sweeney, 2005). In addition, it has been widely used with different types of populations including, but not limited to, adolescents, college students (graduate and undergraduate), children, as well as young, middle-aged, and older adults. There are three variations of the 5F-Wel for use with varying ages and populations (Myers & Sweeney, 2005), including adults (5F-Wel-A and revised version 5F-Wel-A2), middle school students (5F-Wel-T) elementary school students (5F-Wel-E; Myers & Sweeney, 2005; 2007). Because of its holistic, theory-based approach, its inclusion of culture as a factor, and its widespread use with different populations, 5F-Wel-A2 is the most appropriate tool for use in this study.

## **Conclusion**

Arab foreign-born international students have temporarily immigrated to the United States to pursue various educational opportunities and other long- or short-term opportunities that may not be available in their home countries. Such students face many challenges in the United States as a result of both pre-existing factors and ones that arise during their acculturation in the United States. These factors include age, gender, length of stay, religion, perceived discrimination, immigration status, social support, financial support, homesickness, level of education, and issues with English proficiency. Such

factors influence an individual's acculturation, which can turn into acculturative stress that affects their overall well-being. Various measures have been developed to quantify acculturative stress and well-being among foreign-born students. In this dissertation, the Acculturative Stress Scale for International Students will be used to measure the levels of acculturative stress (Sandhu & Asrabadi, 1994), and the Five-Factor Wellness Inventory will be used to assess overall well-being (Myers & Sweeney, 2005).

## **Chapter Three**

### **Methodology**

#### **Overview of Method**

The purpose of this dissertation is to examine the relationship between acculturative stress and well-being among foreign-born Arab international students in the United States. The ex post facto design of this dissertation will be used as a framework to explore the correlations between acculturative stress and well-being and between these criterion variables and a range of demographic factors (predictor variables) related to the participants of this study. The main two criterion variables (acculturative stress and well-being) will be measured using the ASSIS and 5F-wel. Finally, the data obtained in this study were analyzed using three statistical tests, t-tests, the Pearson correlational coefficient ( $r$ ) and the analysis of variance (ANOVA).

#### **Research Design**

The design of this dissertation is ex post facto, and it is a systematic empirical inquiry. In counseling research, there are many variables that are impossible for the investigator to manipulate or control for ethical or practical reasons, such as race, gender, personality type, and education (Schenker & Rumrill, 2004). Thus, the research is left to examine relationships and differences between variables that already exist, cannot be manipulated, and are not easily grouped into control and treatment conditions. The most appropriate research design under these conditions is the ex post facto design. The term ex post facto is of Latin origin and means ‘after the fact,’ which means the research takes place after the condition or group is already formed (Heppner, Kivlighan, & Wampold, 2008). In addition, this type of research is a retrospective form of descriptive research

that is used to analyze the differences between groups in a non-experimental manner (Carter, Lubinsky, & Domholdt, 2011). The ex post facto design focuses on the effects of what has already occurred as it pertains to a group of similar variables. In addition, it identifies whether these variables in the group are redundant; however, this design does not permit the investigator to draw any conclusions about causality between the variables being studied (Schenker & Rumrill, 2004).

**Strengths of the Design.** Ex post facto design is a good fit for counseling research as it is aligned to the nature of the counseling field (Heppner, et al., 2008). This design is appropriate in a variety of circumstances where experimental methods are not possible, for example, where a researcher is not able to select, manipulate or control factors needed to study direct cause-and-effect relationships. An ex post facto research design also provides useful information about the phenomena that are being studied, and helps the researcher understand relationships among the variables being investigated. Furthermore, given improvements in statistical methods and designs with partial control features and techniques, studies with an ex post facto design have become more defensible (Lord, 1973).

**Weaknesses of the Design.** Despite the strengths of the ex post facto research design, there are some limitations to this type of design that are worth mentioning. It is impossible for the investigator who pursues this sort of research to have any control over what is already the case and thus over the variables of the study (Kerlinger, 1964). Second, the investigator may face challenges when deciding which are the most relevant factors among the many factors being investigated. The investigator cannot know beforehand whether the phenomenon is the product of just a single variable factor or is

conditional on the interaction of a combination of variables factors. Furthermore, the result of the research may not be in agreement with the findings of different studies, which may suggest that the outcomes are a result of multiple causes or that they result from additional factors, which have not been observed. Lastly, if the investigator is dealing with numerous variables in the research, there is an increased likelihood that the researcher will uncover some seemingly significant results that are actually an artifact of the study (Heppner, et al., 2008).

### **Description of Participants**

The participants in this study are foreign-born Arab international students who are living in the United States. Foreign-born Arab international students are Arab students who have a student visa (and thus are sojourners/temporary immigrants). In order for an individual to meet the inclusion criteria and to participate in this study, the individual must: a) self-identify as a foreign-born Arab international student from any of the 22 Arab countries, b) have an international student visa (and thus qualify as having sojourners/temporary immigrant status), c) be currently enrolled in an undergraduate or graduate program in the United States, d) have a minimum proficiency in the English language, and e) be 18 years old or older.

There were a total of 200 participants who started the survey. Out of the 200, 109 were excluded because they did not complete the entire survey, Ninety-one participants completed the entire survey. Out of these, 18 participants were excluded because they did not met the inclusion criteria of this study due to: they were citizen of the United States, finished their degree (not student), under the age of 18, or are United States born. The

final total of participants that completed the entire survey and met the inclusion criteria of this study is 73.

Out of the 73 participants of the study 19 described their gender identity as female, 41 described their gender as male, and 13 did not state their gender identity. The age of 73 participants ranged between 19 to 48 years ( $M=29.8$ ,  $SD=6.0$ ). Age was normally distributed, with skewness of .258 ( $SE=.283$ ) and kurtosis of .034 ( $SE=.559$ ). The religious affiliation of the 73 participants were as follows: 71 self-identified as Muslim and one self-identified as Agnostic, while the other self-identified as Omnism. The length of stay in the United States of the participants in month ranged between 2 to 120 months ( $M=50.6$ ,  $SD=30.7$ ).

Out of the 22 Arabic countries, participants represent only 6 Arab countries in this study. Of the 73 participants the country of origin were: Egypt (1), Iraq (1), Qatar (1), Syria (1), Kuwait (10), Saudi Arabia (58), and none listed (1). Of the 73 participants their country of birth were: Egypt (1), Iraq (1), Qatar (1), Kuwait (10), Saudi Arabia (57), and none listed (3).

The participants in this study resided in the four regions of the United States. Of the 73 participants in this study 29 resided in the Midwest region (Illinois, Iowa, Kansas, Minnesota, Missouri, Ohio, and Wisconsin), 16 in the Northern region (Connecticut, Maryland, Massachusetts, New York, and Pennsylvania), 15 in the Southern region (Alabama, Florida, Georgia, Mississippi, and Virginia), 12 in the Western region (Arizona, California, Colorado, Hawaii, Idaho, New Mexico, and Utah), and one did not identify their region.

The participants of study were students who hold various types of student visas. The immigration statuses of the 73 participants in this study include: A-1 (1), F-2 (1), J-1 (2), F-1 (65), and (4) did not identify. 67 out of the 73 participants indicated that they received educational support (scholarships) and 6 of them indicated that they are self-supported or receive family support. The sources of educational support/scholarship for 64 of the 73 participants were: Iraqi government (1), Kuwait government (9), Saudi government (52), Fulbright scholarship from American government (1), and scholarship from an American University (1). For 6 of the 73 participants their source of support were family or self-supported: family support (1), self-support (4) and not reported (1).

Arabic was the native language of 72 participants. One person did not report their native language. On the scale of English fluency (very poor, poor, acceptable, good, and very good) Participants self-reported that their present level of English fluency: poor (1), acceptable (13), good (27), and very good (32). On the scale of how comfortable participants are communicating in English (very comfortable, uncomfortable, neither comfortable or uncomfortable, comfortable, and very comfortable): very comfortable (1), uncomfortable (2), neither comfortable nor uncomfortable (16), comfortable (40), and very comfortable (14).

The current educational levels of the participants in this study were: participants who were working on their undergraduate degree (20), participants who had an undergraduate degree and were working on another undergraduate degree (4), participants who had an undergraduate degree and were working on a graduate degree (17), participants who had a graduate degree and were working on another graduate

degree (6), participants who had a masters degree and were working on their doctorate (25), and not reported (1).

**Statistical Power:** In the United States, the estimated number of undergraduate and graduate foreign-born Arab international students who are from the 22 Arab countries is 76,265 (IIE, 2018b). In order to find the required number of participants for this study, we conducted a G.Power set at a confidence level of 95%, a population size of 76,265, and a margin of error of 7%. According to the calculation, the ideal sample size is 196. It is worth noting that, when the margin error is set at 2%, the required number of participants is 2328. The margin error for this study was set as 7% for the practical reason that the current research is not funded and administering the 5F-Wel would be very costly for the larger number of student participants. The adjusted G.Power after finalizing the total number of participants (73) in this study was set at a confidence level of 90%, a population size of 76,265, and a margin of error of 10%. The estimated ideal sample size for this calculation was 68, and this was closer to the represented sample.

### **Sampling Procedures**

A common method of selecting groups for ex post facto design is purposive sampling (Schenker & Rumrill, 2004), which is a type of non-probability sampling (Kandola, Banner, O'Keefe-McCarthy, & Jassal, 2014; Tongco, 2007) and is sometimes called non-random sampling (Fraenkel, Wallen, & Hyun, 2015). The researcher selects participants in a non-random fashion based on the objectives of the study and the nature of the population that is being studied (Schenker & Rumrill, 2004). The participants in this study were recruited via various online methods that included emails to international offices in American universities. However, most international offices in American



universities have been busy due to the Coronavirus Disease 2019 (COVID-19) or they only support their own students' research projects. Once this method did not provide enough research participants, the researcher moved to plan B and contacted Arab American community organizations/associations and they indicated that students who hold international visas could be found easier through student clubs in American universities. With this advice, the researcher moved to plan C and contacted administrators and presidents of Arab student clubs in American universities.

The advantage of the purposive sampling method is particularly reliable when the researcher selects from a cultural group about which the researcher has expert knowledge (Tongco, 2007). This expertise means that the researcher has the knowledge concerning a specific cultural group that will enable the researcher to more reliably use his/her own judgment in securing the data needed to investigate a specific phenomena (Fraenkel et al, 2015; Tongco, 2007). A disadvantage of this kind of sampling method is that the researcher may incorrectly underestimate the extent of the representativeness of the chosen sample relative to the information they are seeking (Fraenkel et al., 2015). Another disadvantage is that purposive sampling can result in lower levels of reliability due to bias. In addition, this type of sampling may have the disadvantage that results may not be generalizable (Dudovskiy, 2016).

### **Instrumentation**

The instruments that will be utilized in this study to solicit information from participants are the consent form (Appendix A) and the demographic questionnaire (Appendix B), the data obtained from the latter representing the predictor variables of this study. In addition, the two instruments that will be used to measure the criterion variables

of this study are the Acculturative Stress Scale for International Students (Sandhu & Asrabadi, 1994; Appendix C) and the Five-Factor Wellness Inventory (Myers & Sweeney, 2005; Appendix D). The following sections present a more detailed overview of the study's instruments.

**Demographic questionnaire.** The researcher designed the demographic questionnaire for this study. It asks for important information that is linked to the variables of the study. Participants in this study will be asked to provide information regarding their socioeconomic status, country of origin, location of birth, age, gender, level of education, religious affiliation, immigration statuses, and their native language. In addition, for the English Language proficiency, a self-reported 5-point Likert scale consisting of three items (Yeh & Inose, 2003) will be used (see Appendix B). It is worth noting that this method of measuring English proficiency has been utilized in the past by senior researchers (Barratt & Huba, 1994; Cross, 1995; Yeh & Inose, 2003) and that it has outstanding psychometric properties. The Cronbach's alpha for this English proficiency measure was 0.78 (Yeh & Inose, 2003).

**Acculturative Stress Scale for International Students (ASSIS).** ASSIS was created to assess the acculturative stress of foreign students in the United States (Sandhu & Asrabadi, 1994). Initially, this scale was composed of 125 items representing 12 themes. These themes were developed from qualitative interviews (involving five females and eight males) focused on the perspectives and experiences of international students. Three professors of multicultural counseling well versed in the literature regarding issues faced by international students analyzed the initial items. Participants in the pilot study (17 undergraduate and nine graduate students) also provided item-specific

feedback. As a result of this feedback, items were revised or removed to prevent repetition, ambiguity, and confusion. The updated 78-item measure (exploring six to nine themes) was then administered to international students from ten different areas in the United States. An analysis of the subsequent result revealed six specific themes (with a total of 36 items) with ten items that were not related to any of the other component factors.

The current version of the ASSIS contains a 36-item scale with six definite subscales (fear, guilt, homesickness, perceived discrimination, perceived hate, stress due to change,) and a seventh non-specific subscale (miscellaneous). Perceived discrimination is measured with eight items in order to determine the levels of perceived discrimination for foreign students. Items on the subscale assessment focus on bias, unfriendliness, and unequal treatment and opportunities (Sandhu & Asrabadi, 1994). Perceived hate is measured with eight items that are used to determine the levels of perceived rejection through communication experiences, whether verbal and non-verbal and other behaviors. Prior research has shown that international students are conscious of being rebuffed in both forms of communication (verbal and non-verbal), as well as in certain behavior displayed by native-born individuals (Sandhu & Asrabadi, 1994). The fear subscale consists of four items that are used to determine the level of anxiety associated with being in an unfamiliar environment. Fear can be associated with a sense of insecurity about being in unknown surroundings, as well as reactions to violence and crime in the United States (Sandhu & Asrabadi, 1994). Homesickness consists of four items that are used to determine the degree of a participant's homesickness. Homesickness can be defined as the deficit of social and emotional support due to the

separation from significant others and the restricted social contact with indigenous nationals, both causes being variables that add to acculturative stress. Factors such as cultural and language barriers also add to the isolation and loneliness among students (Sandhu & Asrabadi, 1994). Stress due to change is measured with three items on the ASSIS. There is naturally more stress placed on individuals who become international students once they migrate to a strange place where they experience different food, modes of behavior, climate, social values and forms of verbal and non-verbal communication (Sandhu & Asrabadi, 1994). The guilt subscale consists of two items. For many foreign-born and international students, the adjustment to a host culture can feel like a betrayal of one's native culture, because individuals may perceive the adoption of the values of the new culture as a betrayal of their culture. International students are caught between the values of their culture and the values of the host culture they try to adapt or do adopt in order to be successful (Sandhu & Asrabadi, 1994). The miscellaneous subscale includes ten items on the ASSIS that do not fall under any of the above categories. These items address additional concerns that international students have which are included in the scale in order to assess acculturative stress comprehensively. These items include concerns about the future, difficulties dealing with a second language, and negative emotional responses to experiences of prejudice and racism (Sandhu & Asrabadi, 1994).

The ASSIS helps the researcher determine the amount of acculturative stress experienced by foreign students. It is a scale rated using a range from 1 to 5 (1= strongly disagree, 3= not sure, to 5= strongly agree). On this scale, a higher score is indicative of a high level of acculturative stress. The total scores of ASSIS range from 36 to 180

(Sandhu & Asrabadi, 1994). Sandhu and Asrabadi (1994) determined the psychometric properties of the current version of ASSIS. Sandhu and Asrabadi conducted a factor analysis in order to establish the validity of the ASSIS, and the six factors accounted for 70.6% of the total explained variance (with the percentage of the variance accounted for by each factor being: perceived Discrimination 38.30%, Homesickness 9.00%, Perceived Hate 7.20%, Fear 6.10%, Stress Due to Change/Culture Shock 3.70%, Guilt 3.20%, and Nonspecific 3.10%). According to Sandhu and Asrabadi (1998), as cited in Poyrazli et al. (2010), ASSIS has a high degree of reliable coefficients. The Chronbach coefficient alpha internal consistency score is .94. The Guttman split-reliability is .96 for the 36-item scale, where the overall Cronbach alpha coefficient for the 36 items is .91, and the alphas for the seven subscales range from .44 to .90. Factor analysis was used to establish the validity of the ASSIS, and the seven factors accounted for 69.7% of the total variance. The specific alpha levels for each subscale are: fear (0.88), guilt (0.44), homesickness (0.89), miscellaneous (0.84), perceived discrimination (0.90), perceived hate (0.90), and stress due to change (0.79). Mean scores on the ASSIS above 109 indicate perceived acculturation stress for foreign students (Sandhu & Asrabadi, 1998, as cited in Poyrazli et al., 2010). The overall Cronbach's alpha for this sample was 0.96. This study used the perceived discrimination and the homesickness subscales. These scales' Cronbach alpha values, respectively, were 0.89 and 0.69.

ASSIS has been often utilized in academic research to measure the acculturative stress among foreign-born students. For instance, Mahmood and Burke (2018) utilized the ASSIS to understand the level of acculturative stress and sociocultural adaption among 413 international students in the United States. In another study, Shadowen,

Williamson, Guerra, Ammigan, and Drexler (2019) utilized the ASSIS to understand acculturative stress and its correlation to depressive symptoms among 490 international students in the United States. In another study, Akhtar and Kröner-Herwig (2015) utilized the ASSIS to understand the level of acculturative stress and its relationship to the socio-demographic variables of gender, age, marital status, level of education, financial support, German language proficiency, and country of origin among 652 international students in Germany. In another study, Poyrazli et al. (2010) utilized the ASSIS in their study to measure the levels of acculturative stress as it was related to the factors of personality, age, gender, and race-ethnicity among 613 international college students in the United States.

**The Five-Factor Wellness Inventory (5F-Wel).** The 5F-Wel (Myers & Sweeney, 2005) was created as a tool to measure the five factors of the Indivisible-Self (IS-Wel) model. It consists of 73 items used to measure the single higher-order factor of the total wellness. It also measures five-second order factors of wellness that include essential, social, physical, creative, and coping factors as well as the 17 discrete scales originally measured by the WEL. Individual responses are scored using a Likert scale from 1 to 4 (1= strongly agree, to 4= strongly disagree; Myers & Sweeney, 2005). The 5F-Wel is an outcome measure used to study wellness as it relates to psychological indicators and to evaluate programs to determine the success of counseling in wellness interventions (Myers & Sweeney, 2008). An individual's state of wellness is assessed according to the five second-order factors and their related 17 first-order factors:

Essential Self: self-care, cultural identity, gender identity and spirituality

Creative Self: emotions, work, thinking, control, and positive humor

Coping Self: self-worth, stress management, leisure, and realistic beliefs

Physical Self: nutrition and exercise

Social Self: friendship and love (Myers & Sweeney, 2004, 2005).

The psychometric properties of the 5F-Wel involved a total of 2,093 individuals who participated in the studies Myers and Sweeney conducted for over a decade (Myers & Sweeney, 2005). According to Myers and Sweeney, the validity and the reliability of the 5F-Wel, as shown by Alpha coefficients, are consistently high, especially for both the first- and the second-order factors, where the coefficient for the first-order factor of Total Wellness was .94 and the coefficients for the second-order factors were as follows: Creative Self .92, Physical and Essential Self .88, and Coping and Social Self .85. The third-order factor alphas range between .70 to .87 for all but two scales, those related to Realistic Beliefs .68 and to Self-Care .66. The 5F-Wel has been used widely and the divergent and convergent validity of the scale has proven itself relative to a variety of concepts such as acculturation, body image, identity, gender role conflict, and self-esteem (Myers & Sweeney, 2005). The 5F-Wel Cronbach alpha value for the data used in this study was 0.93. This study used the 5F-Wel Social Support subscale. This subscale's Cronbach alpha value was 0.77.

The 5F-Wel has been implemented with college student populations that included a multicultural population in a couple of different research studies to understand the levels of well-being among these populations (Myers & Sweeney, 2008). For instance, Wahyun, Nurihsan, and Yusuf (2019) used the 5F-Wel to understand the level of wellness and acceptance of counseling services in 58 Indonesian college students. In another study, by Jang, Lee, Puig, and Lee (2012), the 5F-Wel was utilized in an

examination of the factorial equivalence of this instrument to the wellness levels between Korean counselors in training and American counselors in training. The total of the participants in this study was 256 counselors in training, 133 of whom were Korean and 129 of whom were American. In another study, Ramey and Leibert (2011) administered the 5F-Wel to understand the wellness level among graduate students; the total of the participants was 27, 21 of whom were counseling students while the rest were health science students. Most of the participants in this study were Caucasian (88.9%), and the rest were Latino/Latina (3.7%), African American (3.7%), and Asian/Pacific Islander (3.7%). In yet another study, Myers and Mobley (2004) conducted a study using the 5F-Wel to measure the levels of wellness of traditional and non-traditional undergraduate college students in comparison with non-student adults and with various groups of students based on different demographic variables. A total of 1,567 college students participated in their study, 62% of whom self-identified as Caucasian, 15.5% were African American, and 19% of whom identified as another ethnic background that included Hispanic, Native American, and Asian American (Myers & Mobley, 2004).

### **Variables**

The following describes the criterion and predictor variables to be used in this study and the way that way that they will be coded for the data analyses.

The Criterion variables are:

Acculturative stress (Continuous variable)

Well-being (Continuous variable)

The Predictor variables are:

Age (Continuous variable)



Gender (Categorical variables)

Financial support (Categorical variables)

Homesickness (Continuous variable)

Social Support (Continuous variable)

Language proficiency (Continuous variable)

Length of stay (Continuous variable)

Level of education (Categorical variables)

Perceived discrimination (Continuous variable)

Religion (Categorical variable)

## **Procedures**

The proposal for the study was submitted to the Institutional Review Board (IRB) of the University of Toledo to ensure that the study is conducted in an ethical manner. After gaining the IRB approval, the consent form, the demographic sheet, and the assessment measures was sent online via email targeting foreign-born Arab international students in the United States. The consent form notified participants of any possible harm of participation in the study, which are minimal in survey research (Creswell, 2012; Robinson & Curry, 2008), as well as any risk that may be involved in the participation in this study. Participation in this study was voluntary, and the participants had the complete right to choose not to participate in the study or to terminate their participation in the study at any time. The collected data will be stored and guarded in strict confidence by the researcher on a password-protected computer. Only the researcher and his advisor will have access to this information, and all correspondence, via email, will be kept confidential at all times. Participation in this research was anonymous as well

confidential, thus reducing the chance that the collected data could be made public. Data will only be used once aggregated and analyzed, and individual data will not be examined or reported for the purpose of this study, ensuring that individual participants are not identified through reporting of the data. Finally, upon agreeing to participate in the proposed research study, participants were asked to voluntarily sign a consent form and to fill out a demographic form to ensure they were eligible for this study (Creswell, 2012; Robinson & Curry, 2008).

### **Data Analysis**

Descriptive statistics will be generated in the data analysis that will be used in this exploratory study. The study will use a descriptive statistical analysis, which means the data will be summarized through measures of central tendency (mean, median), standard deviations, percentages and correlations among the variables (Heppner et al., 2008). In addition, the Bonferroni correction method will be utilized to control Type I error while testing the questions of the study (Newman, Fraas, & Laux, 2000). The alpha confidence level of this study will be the standard alpha, set at  $\alpha = 0.05$  (Cohen, 1992). The  $\alpha = 0.05$  will be divided based on the number of general questions ( $\alpha = 0.05/5 = .01$ ) resulting in an adjusted *a priori*  $\alpha = 0.01$  for each statistical test. Three statistical tests – t-test, Pearson's correlation ( $r$ ) and the analysis of variance (ANOVA) – will be employed. The Pearson's correlation ( $r$ ) coefficient will be used in this study to measure the strength of a correlation between two continuous variables (Mukaka, 2012) in order to answer specific research questions (namely, questions 1, 2, 5, 8, 10, 12, 14, and 15). The t-test will be used to determine the significant differences between the mean of two continuous variables in this study (Fraenkel et al., 2015) to answer specific research questions

(namely, questions 3, 6, 9, 13). The analysis of variance (ANOVA) will be utilized to determine the differences between groups using categorical variables (Fraenkel et al., 2015) in order to answer specific research questions (namely, questions 4, 7, 11 and 16).

In addition, there are assumptions involved in use of both statistical tests – both the Pearson's correlation ( $r$ ) and the analysis of variance (ANOVA) – that must be taken into consideration (Howell, 2010; Aron, Coups, & Aron, 2013). For the use of ANOVA, the first assumption is the normality of the population from which the data is taken, which means the dependent or criterion variables being studied must be normally distributed. The second assumption is the homogeneity of variance, which means the two samples being studied, must have equal or nearly equal variances on the dependent or criterion variables. The third assumption is the independence of the samples, which means an individual, cannot belong to two different samples and the dependent or criterion variables associated with the various samples are statically independent (Howell, 2010). For the Pearson's correlation, the assumptions are similar to those involved in the use of ANOVA in that the normality of the population, the homogeneity of the variance, and the independence of the samples are being assumed. However, there are two additional assumptions involved in the use of the Pearson correlation. The fourth assumption is that the measurements of both variables must be continuous, which means that the measurements are ratios or points within an interval. The fifth and final assumption is that the relationship between the two variables is linear (Aron et al., 2013).

## **Summary**

The aim of this chapter was to provide an overview of the information regarding the methodology of the study. The ex post facto design used as a framework for the study

and the design's strengths and weaknesses were discussed. An overview of the criteria satisfied by the participants in the study and the variables involved was provided. The instruments that are used in this study, the 5F-Wel and the ASSIS, are described, as well as the methods of data analysis utilized in this study.

## **Chapter Four**

### **Results**

The purpose of this chapter is to provide an overview of the results and answers to the study's research questions. This exploratory study used both descriptive and inferential statistical analyses. Descriptive data analyses were used to describe the mean, standard deviation, range of scores, skewness and kurtosis for both the Acculturative Stress Scale for International Students (ASSIS) and the Five-Factor Wellness Inventory (5F-Wel). The researcher used three statistical tests – t-test, Pearson's correlation ( $r$ ) and the analysis of variance (ANOVA), to answer the research questions. All data were analyzed using the Statistical Package for the Social Sciences (SPSS), version 24.0 (IBM Corp, 2016).

#### **Descriptive Data**

The total raw sample size of this study included 200 participants. The cleaning data process started by deleting any non-completed responses to the ASSIS and 5F-Wel; thus reducing the number of participants down to 91 out of 200. The data was further cleaned to assess if the 91 participants met the inclusion criteria of this study. As a result of this step, 18 were excluded because they did not meet our criteria: citizen of the United States finished their degree, under the age of 18, or United States born. The final current sample size in this study is 73 foreign-born Arab international students in the United States.

Sandhu and Asrabadi created the ASSIS in 1994 in order to assess the levels of acculturative stress that international students face in the United States. The ASSIS consists of seven subscales: Perceived Discrimination, Homesickness Items, Perceived

Hate, Fear, Stress Due to Change, Guilt, and Miscellaneous. The ASSIS was utilized in this dissertation to determine overall acculturative stress among foreign-born international students. In addition, the Perceived Discrimination and Homesickness subscales were used to determine if these variables have any relationship with the overall well-being of foreign-born Arab international students. The mean of the total score for the ASSIS was 100.6 ( $SD=25.9$ , range=45.00-172.00). The ASSIS' reliability (Cohen's alpha) in this sample was .957. The ASSIS was normally distributed, with skewness of .147 ( $SE=.281$ ) and kurtosis of .036 ( $SE=.555$ ).

Myers and Sweeney created 5F-Wel in 2005 in order to assess individuals' overall well-being. The 5F-Wel consists of five factors of the Indivisible-Self (IS-Wel). These five factors are the essential-self, social-self, physical-self, creative-self, and coping-self. The 5F-Wel was utilized in this dissertation to determine overall well-being among foreign-born international students. In addition, the social-self subscale was utilized to determine if it has any relationship with acculturative stress. The mean of the total score for the 5F-Wel was 76.96 ( $SD = 10.52$ , range=47.74-99.28). The 5F-Wel manual (Myers & Sweeney, 2014) indicates that the normative sample's mean and standard deviation scores were 71.63 and 18.57, respectively. The present sample's scores were less than 1/3 standard deviation above that of the normative sample. The 5F-Wel reliability (Cohen's alpha) in this sample was .928 for the 91 items. The 5F-Wel was normally distributed, with skewness of -.359 ( $SE=.281$ ) and kurtosis of 0.003 ( $SE=.555$ ).

### **General Research Question One**

General Research Question One asked, "Is there a relationship between acculturative stress and well-being among foreign-born international Arab students

studying in the United States?” The specific research question that addressed the general question one is as follows:

Specific Research Question 1: Is there a statistically significant inverse relationship between acculturative stress, as measured by the ASSIS, and well-being, as measured by the 5F-Wel, among foreign-born international Arab students studying in the United States?

The answer to the Specific Research Question 1, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant inverse relationship between acculturative stress ( $M=100.6$ ,  $SD=25.9$ , range=93.00-217.50), as measured by the ASSIS, and well-being ( $M=76.96$ ,  $SD = 10.52$ , range=47.74-99.28), as measured by the 5F-Wel, among foreign-born international Arab students studying in the United States. The result indicated that there is a statistically significant positive relationship between acculturative stress, as measured by the ASSIS, and well-being, as measured by the 5F-Wel [ $r(73)=.423$ ,  $p<.001$ ] among foreign-born international Arab students studying in the United States. According to Cohen (1992), the magnitude of this relationship is in the medium to large range. This result means as the participants' acculturative stress increased, so did their overall well-being. As such, this finding leads the researcher to conclude that the answer to Specific Research Question 1 is no.

### **General Research Question Two**

General Research Question Two asked, “Does acculturative stress vary depending on demographic variables (factors existing prior to the acculturation process), among foreign-born international Arab students studying in the United States?” The specific research questions that addressed the general question two are as follow:

Specific Research Question 2: Is there a statistically significant correlation between accelerative stress, as measured by ASSIS, and participants' age?

Specific Research Question 3: Is there a statistically significant difference in acculturative stress between genders?

Specific Research Question 4: Is there a statistically significant difference in acculturative stress among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree?

The answer to the Specific Research Question 2, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant correlation between acculturative stress ( $M=100.6$ ,  $SD=25.9$ , range=93.00-217.50), as measured by ASSIS, and participants' age ( $M=29.8$ ,  $SD=6.0$ , range=19.00-48.00). The result indicated that there is no statistically significant correlation between acculturative stress, as measured by ASSIS, and participants' age [ $r(73)=.027$ ,  $p=.824$ ]. This result means there is no statistically significant correlation between acculturative stress and age among foreign-born Arab students in the United States.

The answer to the Specific Research Question 3, an independent t-test was calculated to determine if there was a statistically significant difference in acculturative stress between genders. The result indicated that there is no statistically significant difference in acculturative stress between genders; female ( $N=19$ ,  $M=98.3$ ,  $SD=21.5$ ) and



male ( $N= 41$ ,  $M=98.3$ ,  $SD=27.9$ ), [ $t(58)=.004$ ,  $p=.997$ ,  $d = 0.001$ ]. This means there is no statistically significant difference in acculturative stress among genders in this study.

The answer to the Specific Research Question 4, a One-Way Analysis of Variance (ANOVA) was calculated to determine if there was a statistically significant difference in acculturative stress among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree.

The Descriptive Statistics table for this question is as follows: the number of participants, mean, and standard deviation for the participants who are working on an undergraduate degree are ( $N=20$ ,  $M=03.1$ ,  $SD=21.8$ ). The number, mean, and standard deviation for the participants who have an undergraduate degree and are working on another undergraduate degree are ( $N=4$ ,  $M=113.5$ ,  $SD=14.9$ ). The number of participants, mean, and standard deviation for the participants who have an undergraduate degree and are working on a graduate degree are ( $N=17$ ,  $M=101.4$ ,  $SD=25.3$ ). The number of participants, mean, and standard deviation for the participants who have a graduate degree and are working on another graduate degree are ( $N=6$ ,  $M=101.0$ ,  $SD=28.2$ ). The number of participants, mean, and standard deviation for the participants who have a master's degree and are working on a doctorate are ( $N=25$ ,  $M=98.2$ ,  $SD=29.4$ ).

The result in the ANOVA table indicated that there is no statistically significant differences between group means in acculturative stress among students working on an undergraduate degree, having an undergraduate degree and working on another

undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree [ $F(4, 67) = .335, p = .853, \eta^2 = 0.19$ ].

### **General Research Question Three**

General Research Question Three asked, "Does wellness vary depending on demographic variables (factors existing prior to the acculturation process), among foreign-born Arab international students studying in the United States?" The specific research questions that addressed general question three are as follow:

Specific Research Question 5: Is there a statistically significant correlation between wellness, as measured by 5F-Wel, and participant age?

Specific Research Question 6: Is there a statistically significant difference in wellness between genders?

Specific Research Question 7: Is there a statistically significant difference in wellness among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree?

The answer to the Specific Research Question 5, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant correlation between wellness ( $M=76.96, SD=10.52, \text{range}=47.74\text{-}99.28$ ), as measured by 5F-Wel, and participants' age ( $M=29.8, SD=6.0, \text{range}=19.00\text{-}48.00$ ). The result indicated that there is no statistically significant correlation between wellness, as measured by 5F-Wel, and

participants' age [ $r(73) = -.197, p = .098$ ]. This result means there is no statistically significant correlation between wellness and the participants' age in this sample.

The answer to the Specific Research Question 6, an independent t-test was calculated to determine if there was a significant difference in wellness between genders. The result indicated that there is no statistically significant difference in wellness between genders; female ( $N=19, M=78.57, SD=11.91$ ) and male ( $N=41, M=77.04, SD=10.42$ ), [ $t(58) = .485, p = .629, d = 0.13$ ]. This result means there is no statistically significant difference in wellness between genders (female and male).

The answer to the Specific Research Question 7, a One-Way Analysis of Variance (ANOVA) was calculated to determine if there was a significant difference in wellness among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree.

The Descriptive Statistics tables for this question are as follows: the number of participants, mean, and standard deviation for the participants who are working on an undergraduate degree are ( $N=20, M=79.40, SD=10.34$ ). The number of participants, mean, and standard deviation for the participants who have an undergraduate degree and working on another undergraduate degree are ( $N=4, M=81.16, SD=6.84$ ). The number of participants, mean, and standard deviation for the participants who have an undergraduate degree and working on a graduate degree are ( $N=17, M=77.95, SD=8.94$ ). The number of participants, mean, and standard deviation for the participants who have a graduate degree and are working on another graduate degree are ( $N=6, M=74.66, SD=12.69$ ). The

number of participants, mean, and standard deviation for the participants who have a master's degree, and I am working on a doctorate are ( $N=25$ ,  $M=73.82$ ,  $SD=11.43$ ).

The result in the ANOVA table indicated that there is no statistically significant differences between group means in wellness among students working on an undergraduate degree, having an undergraduate degree and working on another undergraduate degree, having an undergraduate degree and working on a graduate degree, having a graduate degree and working on another graduate degree, and having a master's degree and working on a doctorate degree [ $F(4, 71) = 1.09$ ,  $p = .367$ ,  $\eta^2 = 0.06$ ].

#### **General Research Question Four**

General Research Question Four asked, "Does acculturative stress vary across factors that arise during the acculturative processes foreign-born international Arab students in the United States?" The specific research questions that addressed the general question four are as follow:

Specific Research Question 8. Is there a statistically significant correlation between acculturative stress and social support?

Specific Research Question 9. Is there a statistically significant difference in acculturative stress between scholarship and self-supporting students?

Specific Research Question 10. Is there a statistically significant relationship between acculturative stress and length of stay?

Specific Research Question 11. Is there a statistically significant difference in acculturative stress and English language proficiency?

The answer to the Specific Research Question 8, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant correlation between

acculturative stress ( $M=100.6$ ,  $SD=25.9$ , range=93.00-217.50) and social support ( $M=44.39$ ,  $SD=11.07$ , range=25.00-75.00). The result indicated that there is a positive statistically significant correlation between acculturative stress and social support [ $r(73)=.237$ ,  $p<.005$ ]. According to Cohen (1992), the power of this relationship is small to medium. This result means as the acculturative stress increases, the social support increases as well.

The answer to the Specific Research Question 9, an independent t-test was calculated to determine if there is a statistically significant difference in acculturative stress between scholarship and self-supporting students. The result indicated that there is no statistically significant difference in acculturative stress between scholarship ( $N = 67$ ,  $M=99.9$ ,  $SD=25.7$ ) and self-supporting students ( $N= 6$ ,  $M=108.8$ ,  $SD=29.6$ ), [ $t(71)=.800$ ,  $p=.427$ ,  $d = 0.32$ ]. This result means there is no statistically significant difference in acculturative stress between scholarship students and self-supporting students.

The answer to the Specific Research Question 10, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant relationship between acculturative stress ( $M=100.6$ ,  $SD=25.9$ , range=93.00-217.50) and length of stay ( $M=50.6$ ,  $SD=30.7$ , range=2.00-120.00). The result indicated that there is no statistically significant relationship between acculturative stress and length of stay [ $r(73)= -.227$ ,  $p>.057$ ]. This result means there is no statistically significant relationship between acculturative stress and length of stay in this sample.

The answer to the Specific Research Question 11, a One-Way Analysis of Variance (ANOVA) was calculated to determine if there was a statistically significant difference in acculturative stress and English language proficiency.

There are three rating scales of English language proficiency (acceptable, good, and very good). The Descriptive Statistics table for this question as follows: the number of participants, mean, and standard deviation for the participants who rated themselves “acceptable” at the English language proficiency are ( $N=13$ ,  $M=102.6$ ,  $SD=19.0$ ). The number of participants, mean, and standard deviation for the participants who rated themselves “good” at the English language proficiency are ( $N=27$ ,  $M=109.4$ ,  $SD=27.9$ ). The number of participants, mean, and standard deviation for the participants who rated themselves “very good” at the English language proficiency are ( $N=32$ ,  $M=91.3$ ,  $SD=24.0$ ).

The result of the ANOVA table indicated that there is a statistically significant difference between groups means in acculturative stress among students who rated themselves “acceptable,” students who rated themselves “good,” and students who rated themselves “very good” in English language proficiency [ $F(2, 69) = 3.97$ ,  $p = .023$ ,  $\eta^2 = 0.10$ ].

Further, conducting the Post Hoc test using Tukey’s HSD indicated that the “good” and “very good” rating scales were significantly different ( $p=.018$ ). However, the other rating scales comparisons were not statistically significantly different. This means that the “acceptable” rating scale and the “good” rating scale are not significantly different ( $p=.698$ , greater than the standard .05 alpha level). In addition, it means that the “acceptable” rating scale and the “very good” rating scale are not significantly different ( $p=.354$ , greater than the standard .05 alpha level).

## **General Research Question Five**

General Research Question Five asked, “Does well-being vary across factors that arise during the acculturative processes foreign-born international Arab students in the United States.” The specific research questions that addressed the general question five are as follow:

Specific Research Question 12. Is there a statistically significant correlation between well-being and homesickness?

Specific Research Question 13. Is there a statistically significant difference in wellness between scholarship and self-supporting students?

Specific Research Question 14. Is there a statistically significant inverse correlation between well-being and perceived discrimination?

Specific Research Question 15. Is there a statistically significant inverse correlation between well-being and length of stay?

Specific Research Question 16. Is there a statistically significant correlation between well-being and English-language proficiency?

The answer to the Specific Research Question 12, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant correlation between well-being ( $M=76.96$ ,  $SD= 10.52$ , range=47.74-99.28) and homesickness ( $M=22.28$ ,  $SD=6.47$ , range=8-38). The result indicated that there is no statistically significant correlation between well-being and homesickness [ $r(73)=.193$ ,  $p=.102$ ]. This result means there is no correlation between well-being and homesickness in this sample.

The answer to the Specific Research Question 13, an independent t-test was calculated to determine if there was a statistically significant difference in wellness

between scholarship and self-supporting students. The result indicated that there is no statistically significant difference in wellness between scholarship ( $N = 67$ ,  $M=76.81$ ,  $SD=10.79$ ) and self-supporting students ( $N = 6$ ,  $M=78.64$ ,  $SD=7.28$ ), [ $t(71)=-.405$   $p=.687$ ,  $d = 0.20$ ]. This result means there is no difference in wellness between scholarship students and self-supporting students.

The answer to the Specific Research Question 14, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant inverse correlation between well-being ( $M=76.96$ ,  $SD= 10.52$ , range=47.74-99.28) and perceived discrimination ( $M=12.7$ ,  $SD=3.51$ , range=4-20). The result indicated that there is a positive statistically significant correlation between well-being and perceived discrimination [ $r(73)=.446$ ,  $p<.001$ ]. According to Cohen (1992), the power of this relationship is medium to large. This result means as the well-being increases, the perceived discrimination increases as well.

The answer to the Specific Research Question 15, a Pearson Correlation coefficient was calculated to determine if there was a statistically significant inverse correlation between well-being ( $M=76.96$ ,  $SD= 10.52$ , range=47.74-99.28) and length of stay ( $M=50.6$ ,  $SD=-30.7$ , range=2.00-120.00). The result indicated that there is a negative statistically significant correlation between well-being and length of stay [ $r(73)=-.407$ ,  $p<.001$ ]. According to Cohen (1992), the power of this relationship is medium to large. This result means as the length of stay increases in the United States, the well-being decreases.



The answer to the Specific Research Question 16, a One-Way Analysis of Variance (ANOVA), was calculated to determine if there was a significant correlation between well-being and English-language proficiency.

There are three rating scales of English language proficiency (acceptable, good, and very good). The Descriptive Statistics table for this question as follows: the number of participants, mean, and standard deviation for the participants who rated themselves “acceptable” at the English language proficiency are ( $N=13$ ,  $M=81.03$ ,  $SD=8.55$ ). The number of participants, mean, and standard deviation for the participants who rated themselves “good” at the English language proficiency are ( $N=27$ ,  $M=78.55$ ,  $SD=8.78$ ). The number of participants, mean, and standard deviation for the participants who rated themselves “very good” at the English language proficiency are ( $N=32$ ,  $M=73.72$ ,  $SD=10.55$ ).

The result of the ANOVA table indicated that there is a statistically significant difference between groups means in well-being among students who rated themselves “acceptable,” students who rated themselves “good,” and students who rated themselves “very good” at the English language proficiency [ $F(2, 71) = 2.93$ ,  $p = .060$   $\eta^2 = 0.09$ ].

Further, conducting the Post Hoc test using Tukey’s HSD indicated that all the  $p$ -values are greater than the standard alpha significance level of .05. This means the ANOVA was significant, while at the same time, the Post Hoc test was non-significant. There are a couple of speculations that explain these kinds of situations when they occur in ANOVA interpretation that explains this current result for this question. The first speculation could be due to the small sample size of the groups being interpreted. The

second speculation could be due to the ANOVA p-value being very close to the standard .05 alpha significance level.

### **Summary of the Findings**

This chapter provided an overview of the results/findings of this quantitative study that aimed to study the relationship between acculturative stress and well-being among foreign-born Arab international students in the United States as an exploratory study. The results/findings were presented based on the descriptive statistical analysis method.

Briefly, these data provided affirmative support for research questions 8, 11, and 15. The data did not provide affirmative support for research questions 1-7, 9-10, 12-14 and 16. These data indicated that the more acculturative stress experienced by the participants, the higher their social-self scores. Social-self means a social support that an individual receives through friendships and love (Myers & Sweeney, 2008). That is, the more stress people felt, the more they experienced social support through their connections with their friends, intimate relationships, and family. These participants' overall well-being scores were positively correlated with their perceived discrimination. Perceived discrimination means the level of discrimination that an individual feels as a foreign-student living in a host country (Sandhu & Asrabadi, 1994). The longer participants had lived in the country the lower their well-being scores. Finally, participants' self-reported English language proficiency differentiated acculturative stress scores among two proficiency groups. Those participants who rated their English proficiency to be very good had ASSIS scores that were 18 points higher than those who rated their English proficiency scores to be good. Unexpectedly, acculturative stress

scores were found to be positively correlated with well-being scores. That is, the more participants rated their acculturative stress, the higher they rated their overall well-being. No other statistically significant differences or relationships emerged that would support any of the other research questions. These findings will more fully explored and interpreted in the context of the current literature in Chapter 5.

## **Chapter Five**

### **Discussion**

The purpose of this chapter is to discuss the findings of this study. Chapter 5 starts with a brief overview of the background of this study. This is followed by a presentation of the study's findings and their integration into the relevant literature. In addition, implications of the findings of this study and their connection to international offices, university counseling centers, and faculty in American universities are presented. Finally, the limitations of this study and suggestions for future research are provided.

### **Background and Study Findings**

The purpose of this dissertation was to study the relationship between acculturative stress and well-being among foreign-born Arab international students in the United States. The study also examined relevant factors that affect the acculturation process that impacts the levels of acculturative stress and well-being among this population (Abu-Ras, 2016; Berry, 1997; Berry & Hou, 2016). A further purpose of this study was to gain relevant information universities can use to develop culturally appropriate support services specifically for foreign-born Arab international students that will mitigate the problems associated with acculturative stress.

There are 76,265 foreign-born Arab students studying in the United States (IIE, 2018b). Arab international students face common challenges with other international students and, at the same time, also face unique challenges that are common amongst Arabs in the United States. These challenges are relevant to the socio-economic factors that are present prior (age, gender, level of education, and religion) to the acculturation process (Abu-Ras, 2016; Berry, 1997; Berry & Hou, 2016; Goforth, 2014). In addition,

factors that arise during (perceived discrimination, immigrant status, social support, homesickness, financial support status, lengths of stay in the United States, levels of English proficiency) the acculturation process in the United States (Abu-Ras, 2016; Goforth et al., 2016; Berry, 1997; Berry & Hou, 2016).

This study had 73 foreign-born Arab international students, 41 of whom were male and 19 of whom were female. The age ranges of the participants were 19 to 48 years. Religious affiliations were reported as: 71 were Muslims, one was Agnostic, and one was an Omnist. The length of stay in the United States ranged from 2 to 120 months. The countries of origin for the participants were: Egypt (1), Iraq (1), Qatar (1), Syria (1), Kuwait (10), Saudi Arabia (58), and none listed (1). Of the 73 participants reported their countries of birth were: Egypt (1), Iraq (1), Qatar (1), Kuwait (10), Saudi Arabia (57), and none listed (3). All the participants were foreign-born, and they resided in the four regions of the United States: Midwest region, Northern region, Southern region, and Western region. In addition, all the participants were students who hold various types of students' visas: A-1 (1), F-2 (1), J-1 (2), and F-1 (65). Sixty-four of the participants hold scholarships from: Iraqi government (1), Kuwait government (9), Saudi government (52), Fulbright scholarship from the American government (1), and scholarship from an American University (1). Six of the participants' sources of support were: family support (1), and self-support (4). Participant's present level of English fluency was: poor (1), acceptable (13), good (27), and very good (32). When it comes to English language proficiency, participants comfort communicating in English was: very comfortable (1), uncomfortable (2), neither comfortable nor uncomfortable (16), comfortable (40), and very comfortable (14). Participants current educational levels were: undergraduate degree

(20), had an undergraduate degree and were working on another undergraduate degree (4), had an undergraduate degree and were working on a graduate degree (17), had a graduate degree and were working on another graduate degree (6), and had a masters degree and were working on their doctorate (25).

This was an exploratory study that used an ex post facto design as a framework. In addition, this study used a non-random probability purposeful sampling (Schenker & Rumrill, 2004) to obtain participants. Three statistical tests were used to answer the research questions of this study. The t-test was used to answer questions 3, 6, 9, and 13. Pearson's product-moment correlations were used to answer research questions 1, 2, 5, 8, 10, 12, 14, and 15. The analysis of variance (ANOVA) was used to answer research questions 4, 7, 11, and 16.

On the one hand, the findings of this study produced positive responses to research questions 8, 11, and 15 as there was a significant relationship between acculturative stress and social support, and well-being and length of stay. In addition, there was a statistically significant difference in acculturative stress between English language proficiency groups. On the other hand, the findings of this study were failed to provide supportive answers to research questions 1-7, 9-10, 12-14, and 16 as there was no significant relationship, or there was a significant relationship, but it was the opposite of what was expected in this study. There was not a significant relationship between acculturative stress and participants' age, acculturative stress and genders, wellness and participants' age, wellness and genders, acculturative stress and types of educational support, acculturative stress and length of stay, well-being and homesickness, and wellness and types of educational support. In addition, there was no significant difference

found in acculturative stress among students working on different educational levels, in wellness among students working on different educational levels, and in well-being among English-language proficiency groups. In addition, there was a significant relationship, but it was the opposite of what was expected, between the total scores of acculturative stress and total scores of well-being, and well-being and perceived discrimination.

In sum, the results of this study indicated that there was an association between acculturative stress and social support. This would indicate the more foreign-born Arab international students experience acculturative stress, the more they seek social support from friends, family, and intimate relationships. Also, there was a significant difference in Acculturative stress among two of the English language proficiency groups.

Participants who rated their proficiency as “very good” scored 18 points higher on the acculturative stress scale than those who rated themselves as “good.” In addition, there was an association between well-being and length of stay. This would indicate the more time this population spends in the United States, the lower their overall well-being.

Incidentally, the results of this study indicated that there was a positive association between acculturative stress and well-being, as well as well-being and perceived discrimination. This means the more acculturative stress the participants experienced, the higher their overall well-being. This study also showed that the more experiences of perceived discrimination participants had, the higher their well-being. Having briefly explained the findings, the following section will interpret these findings within the context of the research upon which this study was predicated. The reader will be presented with how the findings of the study are congruent with and diverge from the

findings by previous researchers. In addition, the following section will give hypotheses as to the reasons why the present findings are similar or differ from previous findings.

### **Integration of Findings into the Literature**

The purpose of this dissertation was to understand the relationship between acculturative stress and well-being among foreign-born Arab international students in the United States. Some scholars (e.g., Goforth et al., 2014, 2016; Wrobel et al., 2009) have investigated only acculturative stress among Arabs in the United States and some (e.g., Bai, 2016; Ogunsanya et al., 2018; Poyrazli et al., 2010) only international students. In addition, some scholars (e.g., Atari & Han, 2018; Hakim et al., 2018) only investigated the well-being of Arab in the United States and international students (e.g., Brunsting et al., 2019; Luo et al., 2019). However, there was no study that investigated acculturative stress and well-being among foreign-born Arab international students in the United States. The author of this dissertation utilized literature reviews of Arabs in the United States and international students from other races for this study, due to the commonality Arab foreign-born students have with these groups. The following paragraphs detail the integration of the findings/data with the literature from this dissertation, starting with the findings that support the research questions and moving to the findings that do not support the research questions of this study.

Many scholars (e.g., Berry, 1997; Berry & Hou, 2016; Ye, 2006) have studied social support and its effect on the acculturation process and well-being among immigrant groups. In this study, it was found that there was a significant correlation between acculturative stress and social support. This result indicated that the more foreign-born Arab international students experience acculturative stress, the more they



seek social support. This result was consistent with Ye (2006), who investigated acculturative stress and online social support among international Chinese students and reported that international students seek online social support in order to lower acculturative stress levels. In addition, Bai (2016) reported that international students sought perceived support in order to have less acculturative stress.

English proficiency is the main tool that affects an immigrant's adaptation to the host culture in the United States (Hakim-Larson & Menna, 2016). The result of this study showed that English language proficiency was associated with foreign-born Arab international students' acculturative stress. This result aligns with the previous studies among Arabs in the United States, such as Wrobel et al. (2009) who reported in her study that Arabs who had lower levels of English language proficiency had higher levels of acculturative stress. In addition, other researchers investigated the effect of English proficiency on the acculturative stress among international students. For instance, Gebregeris (2018) and had consistent results with Wrobel et al. (2009) among international Chinese students, where language proficiency was an indicating factor of acculturative stress.

The length of time spent in the host culture can affect the acculturation process and overall well-being of immigrants (Berry, 1997; Berry & Hou, 2016). In this study, there was a significant negative correlation between well-being and length of stay. This result indicated that the more time foreign-born Arab international students spend in the United States, the more the negative association to their overall well-being. Previous studies conducted with Arab immigrants in the United States showed the same results. Amin and Driver (2019) reported in their findings that Arab immigrants who spent more

time in the United States had more negative mental health issues. In addition to other immigrants, Berry and Hou (2016) investigated acculturation and well-being among immigrants and found that the length of time in the host culture was associated with negative well-being.

There was a significant positive relationship between acculturative stress and well-being among foreign-born international Arab students studying in the United States. The results mean the more this population experiences acculturative stress, the higher the overall well-being. This result is not consistent with previous research in academia, as most research showed a negative relationship between variables. The acculturative stress variable, Ogunsanya, et al. (2018), indicated that international students experience high acculturative stress, which impacts their physical and mental health. In addition, Goforth et al. (2016) found that adolescent Arab students who have higher acculturative stress were prone to more mental health concerns. Bai (2016) reported that 22.4 percent of the international students in her study were experiencing higher levels of acculturative stress, and she reported students who are from the Middle East scored the highest levels of acculturative stress compared to other international students. Similarly, Atari and Han's (2018) findings showed an inverse relationship between well-being and perceived discrimination such that individuals who scored lower levels of well-being had higher levels of perceived discrimination among a sample of students and non-students Arabs in the United States. In addition, Hakim et al. (2018) found consistent results with those of Atari and Han (2018).

There are some possible reasons for the results of this question. First, this study used two instruments that were not translated nor standardized to the Arabic culture,

which may affect the validity of the findings of this study. Second, the previous studies in academia used mental health instruments (focus on negative aspects) to examine the relationship with acculturative stress for their samples, not well-being (focus on positive aspects). These differences may go to explain why this study's results differ from those produced by similar studies. Third, this study was conducted during the pandemic of Coronavirus 2019 (COVID-19), and people were encouraged to pay extra attention to their overall well-being, which may affect the result of the study to be going at the same direction.

Another psychology/mental health based speculation is the Yerkes-Dodson law stress performance curve (Yerkes & Dodson, 1908). They categorized the relationship between productivity and stress into three levels: low arousal, optimal arousal, and high arousal. Low arousal means individuals have minimal stress to increase their interest and attention to be productive. High arousal means individuals have severe stress that impairs their performance and productivity. Optimal arousal means individuals have reached their optimal arousal in which performance and productivity are at the peak level (Yerkes & Dodson, 1908). Since the results of this study showed a positive association between acculturative stress and well-being, we speculate that the individuals who completed the survey of the study were at the optimal arousal stress level on the Yerkes-Dodson curve. Where the rest of the participants who opened, but did not complete the survey, maybe at either the low or high arousal stress levels.

A final speculation is acculturation based that may explain the positive association between acculturative stress and well-being is that the 5F-Wel has some factors that are considered as mitigating/protective factors among groups of immigrants

(Abu-Ras, 2016; Berry, 1997; Leong, Park, & Kalibatseva, 2013). The 5F-Wel measures factors, such as cultural identity, gender identity, religion/spirituality, and social support (Myers & Sweeney, 2004, 2005), and these are protective factors that can be viewed as promoting resilience, which in turn mitigate the effect of acculturative stress among Arabs in the United States (Abu-Ras, 2016; Amer, 2014; Ng, Haslam, Haslam, & Cruwys, 2018; Wrobel & Paterson, 2014). This means the positive association between acculturative stress and well-being can be explained that Arab international students experience acculturative stress, but the protective factors, in the well-being inventory, may buffer the negative association on the well-being of this population.

Experiences of perceived discrimination are one of the main factors of the acculturation process that has the most significant impact on the well-being of immigrants (Berry et al., 2006). However, in this study, there was a significant positive correlation between well-being and perceived discrimination. This means the more foreign-born Arab international students perceived that they were discriminated against, the higher they reported their overall well-being. This is counterintuitive and inconsistent with the findings of Ahmed et al. (2011), who reported in their study that Arab students who perceived higher levels of discrimination scored higher levels of acculturative stress and had more mental health issues. Berry et al. (2006) investigated acculturation and adaption among youth immigrant population and found that perceived discrimination has a negative effect on an individual's well-being. Kwan et al. (2018) found that perceived discrimination and acculturative stress are predictors of mental health issues among undergraduate minority college students. In addition, Atari and Han (2018) and Hakim et al. (2018) found that perceived discrimination was linked to lower well-being among

Arabs in the United States. There are a couple of possible speculations for the results of this question. First, foreign-born Arab international students are aware of the perceived discrimination toward them and have various sources of resilience/protective factors (Abu-Ras, 2016) to mitigate the effect of discrimination and protect their overall well-being. Another speculation is that international Arab students are aware of the perceived discrimination but not exposed to all forms of perceived discrimination factors such as the media, as they may only watch Arabic media and separate themselves from the host culture and interact mainly with other Arab international students. This is known as “ethnic community” (Pamuk, 2004, p. 291) which means foreign-born immigrants have settled in the host country near others of their ethnic group by choice due to the fact they can receive support through their community (Pamuk, 2004; Wei, Wang, Heppner, & Du, 2012). Many of those foreign-born individuals usually can be characterized as having protective factors, such as strong ethnic identities and religious belief systems (Abu-Ras, 2016; Kumar, Seay, & Karabenick, 2015; Wrobel & Paterson, 2014). Since the participants in this study were born and raised outside of the United States, we speculate that they have a stronger ethnic identity. In addition, 71 out of 73 participants identified themselves as Muslims. This shows consistent results with Hakim et al., 2018 in which they found that Muslim participants in their study who had a strong ethnic identity and strong religious beliefs had high perceived discrimination, but at the same time their ethnic identity and religious beliefs helped to mitigate the negative effects on their well-being.

In this dissertation, there was no significant correlation between acculturative stress and participants’ age, and wellness and participants’ age. Even though

acculturation research emphasizes that age plays a significant role in the acculturation process among immigrants (Berry, 1997), however, the results of this study were not consistent with previous studies' findings. For example, Faragallah et al. (1997) reported that younger Arab immigrants acculturated easier than older immigrants. A possible reason for this discrepancy is that acculturation research differentiates between childhood and adult populations (Berry, 1997), and the population of this study was adults (undergraduate and graduate students).

There was no significant difference in acculturative stress between genders and in wellness between genders among foreign-born Arab international students. Acculturation research indicated that gender might play a role in the process of acculturation; however, this is dependent on the cultural background of the immigrants and the dominant culture in the host country (Berry, 1997). Berry et al. (1987) reported that females had higher acculturative stress scores than males among multiple immigration status (refugee, immigrants, sojourners, and native people) and multiple age groups, including teenagers to adults (16-40). He speculated that female participants maybe be more open to reporting their feelings than male participants. In addition, Goforth et al. (2016) found that some females had higher acculturative stress than males among adolescents (11-18) first and second-generation Arab American participants. In contrast, the result of this study showed that there were no differences between males and females. The possible speculation is that the previous studies included multiple groups of immigrants in their studies, wherein this study only one group of temporary immigrant sojourners (foreign-born Arab international students) was studied. Further possible speculation is that these scholars included varied age spans (adolescents, teenagers, and adults) in their studies,

and in this study, only adult participants were included. The final speculation for this result is that most students in this sample were highly educated, and they have or are working on graduate degrees. This may also mean that both males and females in this study were open to reporting their feelings genuinely.

The level of education is another factor that may affect the acculturation process among immigrants (Berry, 1997) due to the fact that it may help them adjust to the host society. However, in this study, there were no significant differences in wellness between various educational levels and in acculturative stress between various educational levels among foreign-born Arab international students. This result was contrary to Pampati et al. (2018), who found that Arab refugees and immigrants with higher levels of education had lower levels of stress. In addition, she reported that the levels of education in her study as less than high school, high school, college, and higher than college. The possible reason for this result was that the scholars who conducted these studies had participants who are permanent Arab American immigrants and refugees. In addition, they were not students, and they had varying levels of education from less than high school too greater than college. This may explain the differentiation between their result and this study results due to the fact the participants in this study are temporary immigrants (Arab international students) and must be at least a college student in order to participate in this study. In addition, Brunsting et al. (2019) reported that undergraduate students had lower levels of well-being than graduate students among international students from a different cultural background that include: Europe and Central Asia, East Asia and Pacific, Latin America and Caribbean, South Asia (India), Middle East and North Africa, North America, and Sub-Saharan Africa. A possible speculation is that these scholars included participants

from a wide range of different regions worldwide, in which these participants may have significantly different cultural backgrounds (traditional to liberal), which may cause individuals to have different educational levels at the same time different levels of well-being. Where in this study, only one minority group is included. Even though there are multiple cultural backgrounds within this minority group itself as well as varied education levels, this may not be significantly associated with their overall well-being.

There was no significant correlation between well-being and homesickness. However, homesickness is considered to be a significant factor that affects acculturative stress levels and well-being among international students (Wei et al., 2007). Gebregeris (2018) found that homesickness was one of the main causes of acculturative stress among international students. There are a couple of speculations for this result. First, foreign-born Arab international students are from collective groups, and there is a large number in the United States. This makes socializing and interacting with individuals from their culture or even from their homeland easier, which may reduce the levels of homesickness. Another speculation is that the average age in this sample was 30 years old, which may explain that these individuals could be married and have their families with them in the United States.

There was no significant difference in acculturative stress and in wellness between scholarship students and self-supporting students. Even though financial support is an important factor that affects adaptation to a new environment of immigrants, in addition, financial support can be an indicator of acculturative stress and well-being levels (Berry & Hou, 2016). Similarly, Gebregeris (2018) found that financial support is one of the predictors of acculturative stress. Grebregeris (2018) also found that students



with a scholarship had higher levels of acculturative stress than those who were self-supported. The result of this study was not in agreement with the previous studies in academia. There is a couple of reason to explain the results of this study. First, most students (67 out of 73) in this sample hold a scholarship, and only a small number were self-supporting, which may affect the variance between these two groups of students. Another speculation is that both groups may have sufficient financial support, whether from government, families, or themselves.

### **Implications**

This dissertation aimed to have a better understanding of the acculturative stress and well-being among foreign-born Arab international students in the United States. Some findings in this study have provided associations between acculturative stress and social support, acculturative stress and English language proficiency, and well-being and length of stay. Based on these findings, the following paragraphs will provide implications that universities may take into consideration in order to help foreign-born Arab international students adapt culturally and psychologically in the new environment within American universities (Çiftçi & Zalzal, 2016). This can begin with the University Divisions of Student Affairs and specifically international offices and university counseling centers, and end with the university faculty members.

**International Offices.** International offices are considered to be the first gate in American Universities that international students reach out to (from applying to school, arrivals, registering, during learning, living, and leaving). International offices are a mediator between international students and academic departments, and international students and immigration office (updating and maintaining their status through

international offices). International offices can offer a lot of services in order to mitigate the acculturative stress and help maintain the well-being of Arab international students.

There was an association between acculturative stress and social support among foreign-born Arab international students. There is a recommendation that international offices in American universities can provide an American culture class or a culture class that has mutual social learning between individuals from the host culture and Arab international students. These kinds of classes may help individuals understand the differences between the two cultures, the differences within each culture itself (to avoid any specific mindset and/or stereotyping), teach academic expectations in American universities and foster the appropriate behaviors in the mainstream culture in order to empower Arab international students with a variety of social support in the United States.

In addition, there was an association between acculturative stress and English language proficiency. A further implication is that international offices can offer English conversation opportunities that pair Arab international students with a native English speaker to improve English language proficiency levels. This idea may assist Arab international students in feeling more comfortable to practice and communicate in English in the host community. This also may assist them to gain confidence and reduce their acculturative stress.

Moreover, there was an association between well-being and length of stay. A final implication is that international offices could provide a mentoring program for senior Arab international students by pairing them with an Arab American student or an individual from the host culture in order to assist them with learning about and gaining access to university and community resources (Ciftci & Zalzal, 2016). In addition, these

pairing programs may help Arab international students feel a stronger sense of belonging within the host culture, which may reduce the effect of the length of stay on the overall well-being.

**Counseling Centers.** University-counseling centers can provide a variety of individual psychoeducational services to aid Arab international students in learning coping skills in order to help reduce or mitigate any potential negative effect on their overall well being due to the length of time they have spent in the United States (Poyrazli et al., 2014). In addition, psychoeducation can use specific programs such as stress and time management and well-being strategies to maintain and aid with the stressors that arise from spending a longer time period in the host culture (Akhtar & Kröner-Herwig, 2015).

For the association between acculturative stress and social support, another service that counseling centers can provide is group counseling that is based on social support services. These counseling social group services can take two forms, one form is that of the same ethnic group or status, and a second form is that of collaboration with members of the host community (Berry & Hou, 2016). For the social support groups with the same ethnic group or status (e.g., foreign-born Arab international student or/and international student in general) counseling centers can provide Arab international students a place to share experiences, learn from experiences of others, as well as to help them feel they are not alone as they go through the process of adapting to the host society (Ciftci & Zalzal, 2016). For the social support with members of the host community (Berry & Hou, 2016) this can be done through a collaboration between counseling centers and university divisions of student affairs facilitating social interaction opportunities in

which international students can practice their social skills, feel welcomed, and increase their confidence within other social settings as well as the classroom (Ciftci & Zalzal, 2016).

**Faculty Members.** A final implication involves providing education programs for faculty and other staff members to aid in their knowledge and understanding of individuals from the Arab culture (Ciftci & Zalzal, 2016). Faculty at American universities should be mindful that Arab international students most likely are coming from a collective group (Abu-Ras, 2016; Wrobel & Paterson, 2014), and social support is very important to them. Social support does not only include having family, intimate relationships, and friendships, it also includes moral support. Moral support is considered a part of social support that faculty members and other staff members in American universities can provide (Bai, 2016) through positive interactions and conversations. Moral support from the faculty may assist foreign-born Arab international students to have appropriate and positive experiences, which in turn may mitigate the effect of the length of time spent in the host culture on their overall well-being.

In addition, there were differences in acculturative stress between English language proficiency groups. This means Arab international student English language proficiency varied. It is very important that faculty members at American universities, keep in mind that Arab international students, like any other international students, English is a second or third language for them. This means not everything that is explained in the classroom will be understood completely, unlike native students. Faculty may consider providing students mentors within the class/department that pair a native student with international students in order to discuss their overall understanding of class

material or subjects. In addition, for some international students, it may be time-consuming to process to order to gain a complete understanding of information or topics, to write, and often requires translating from their native language to English. This extra time means that international students spend more time on assignments and projects than their native counterparts. Also, some international students need help with reviewing written work; therefore, they gain assistance from university writing centers. Faculty may understand the timeline of assignments and projects assigned may require extra time.

### **Description of Limitations**

All research studies have limitations that constrain the results and implications. This section identifies the limitations of the present study. The two instruments being used do not have an Arabic translated version. This, in and of itself is not a major limitation given that all participants English speaking skills are sufficient to study in English speaking universities. However, these instruments use American idioms and are based in Western cultural values. As such, they were not standardized according to Arabic culture. This may have caused some participants to slightly misunderstand some items on the survey. Further, while care was taken to include culturally diverse individuals in the standardization samples, there is no evidence or mention that persons from Arabic speaking cultures were included in the standardization sample.

A further limitation arose due to the cost of implementing the 5F-Well instrument. Employing the instrument at the 2% margin of error is very costly due to the fact that the calculated sample size (2328) was large. The researcher was thus forced to reduce the margin of error to 7% (which resulted in a minimum sample size of 196) in order to be able to afford to conduct the survey. This a priori reduction of the sample size, coupled

with the high number of participants eliminated from the final sample due to their not having completed all of the instruments calls into question the generalizability of the results and the power of the analyses. It is possible that a greater number of participants could have allowed the study's analyses greater power to detect differences between the groups or relationships between the variables.

In regard to the 5F-Wel instrument, some participants had criticism in regard to the standardization of some items in the instrument used for this study. For example, item number 65, "I believe in God or a spiritual being greater than myself" (Myers & Sweeney, 2014, p. 52), participants recommended this should be "I believe in Allah." However, the inclusion criterion of this study was to include Arab individuals from the 22 Arab countries, regardless of their belief system. Another limitation was in regards to the gender identity question in the demographic survey. Some participants reported that they did not understand the question; instead they wrote something about their personality or just left it blank.

Furthermore, another limitation is related to the recruitment method that was utilized in this study. The researcher reached out to international offices in American Universities during the onset of the Coronavirus 2019 (COVID-19) Pandemic, which may have negatively affected most schools' collaboration. In addition, some international offices will only assist their students' research projects. As a result, this affected the sample size or the ideal number of participants that this study was supposed to have from 200 to 73. The sample size was also reduced due to the fact that many participants opened the survey but did not complete it, where feedback from some participants indicated that this survey was too lengthy and was only available in English. Another

hypothesis for this small sample size is that some international offices may have wanted to review the survey before they responded or forwarded it to their students.

A further limitation has to do with the generalizability of the findings. The findings can only be generalized to individuals who are similar to the participants of this study (Fraenkel et al., 2015). Another limitation is posed by the time-consuming search for an adequate number of foreign-born Arab international student participants in American universities. Additionally, a further limitation related to the methodology of the study is its purposive sampling, which can be prone to subjectivity. However, the ex post facto design limits this subjectivity, as it does not allow the researcher to control or manipulate the variables in the study.

### **Recommendation for Future Research**

This study aimed to provide a deeper understanding of two significant variables (acculturative stress and well-being) concerning foreign-born Arab international students. This was an exploratory study, which means it could be used as a leading study for future researchers who are interested in studying foreign-born Arab international students. There are some recommendations for future researches that plan to study this population.

Future researchers could translate and standardize the ASSIS and the 5F-Wel into the standard Arabic language and to the Arabic culture to utilize with a future Arab sample or using instruments that are already translated and standardized into Arabic. A further recommendation for future researchers may be to add or use an acculturation instrument such as the Acculturation Rating Scale (ARSMA-II) with Arab American population (Jadalla & Lee, 2015) or utilizing the Male Arabic Acculturation Scale (Barry, 2005) with the Arab population, in general, in the United States.

In addition, future researchers may study the relationship between acculturative stress, well-being, and mental health. This may give a wider range of understanding of the effect of acculturative stress on foreign-born Arab international students. This also may show both positive and negative aspects on the overall well-being and mental health among this population.

Another recommendation is that future researchers may replicate this study utilizing different research methodologies, such as a qualitative method, in order to have a more in-depth investigation into the acculturative stress and well-being phenomena. Future researchers may utilize another theoretical framework, such as the intersectional identities theory, in order to understand the sociopolitical identities aspect that affects the Arab minority group in the United States. A further recommendation for future researchers is to take another look at a way to redo this study. For example, investigating the etic (within the social group) and emic (outside the social group) and examine them by utilizing the Life Change Units (LCU's) stress scale (Holmes & Rahe, 1967).

In addition, future researchers may include first-generation foreign-born Arab American students in order to recruit more Arab students through the Arab American community/organizations, as well as to have more diversity in participants from the 22 Arab countries. In addition, this will allow future researchers to have the ability to make comparisons and contrasts between these two groups.

Future researchers should also pay attention to the length of their survey and make sure that the entire survey's average time is between 10-15 minutes in length maximum. Future researchers may also pay attention to the time of recruitment of participants and try to avoid any significant negative time period, such as the time of a



pandemic (COVID-19), if possible. In addition, future researchers should not contact international offices in order to assist them with the recruitment process of Arab international students or international students in general. Instead, they should contact department chairs, program coordinators, and Arab student clubs on university campuses in order to receive assistance and collaboration to recruit potential participants.

## **Summary**

Foreign-born Arab international students face acculturative stress, which affects their overall well-being. There are socio-economic predictor variables that are considered to be antecedent factors (age, gender, and level of education) and others that are considered to be merging factors (social support, homesickness, financial support, English proficiency, length of stay and perceived discrimination) that affect the acculturation process. The purpose of this dissertation was to examine the criterion variables: acculturative stress and well-being, and the relevant predictor variables among foreign-born Arab international students in the United States. The findings of this study indicated that only three predictor variables were significant and affected the levels of acculturative stress and overall well-being. These predictor variables were social support, length of stay, and English language proficiency, and the rest of the criterion and predictor variables were not significant.

There are several implications for international offices, counseling centers, and faculty in American universities that may assist them when working with foreign-born Arab international students. Recruitment methods and the timeline of the recruitment were major limitations in this study. Lastly, there are various recommendations for future researchers that will help direct their study of foreign-born Arab international students.

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## Appendix A

### ADULT RESEARCH SUBJECT - INFORMED CONSENT FORM

#### Relationship between Acculturative Stress and Well-being

**Principal Investigator:** John M. Laux, Professor & Associate Dean, +1(419-530-4705)

**Co-Investigator:** Hussam Aldawsari, doctoral student +1(785-393-3535)

**Purpose:** You are invited to participate in the research project entitled, *The Relationship between Acculturative Stress and Well-being among Foreign-Born Arab International Students in the United States: An Exploratory Study*, which is being conducted at the University of Toledo under the direction of Dr. John Laux, Professor of Counselor Education and Supervision. The purpose of this exploratory research study is to explore the relationship between acculturative stress and well-being among foreign-born Arab international students in the United States. In addition, this research study is not for clinical purposes but solely to look for the relationship between acculturative stress and well-being for academic research purposes.

**Description of Procedures:** This research study will take place via an online questionnaire and should take approximately 20-30 minutes to complete. You will be asked to provide your demographic background information (e.g., age, race, gender, etc.)

After you have completed your participation, the research team will debrief you about the data, theory and research area under study and answer any questions you may have about the research.

**Potential Risks:** There are minimal risks to participation in this study, including loss of confidentiality. In addition, completing the various questionnaires might cause you to feel upset or anxious. If you find yourself feeling this way, you may stop at any time.

**Potential Benefits:** The only direct benefit to you if you participate in this research may be that you will learn about how research studies are run and may learn more about interpersonal violence. Others may benefit by learning about the results of this research.

**Confidentiality:** Given that all of this study's data will be collected online, no consent forms will be used. Individuals wishing to participate will simply click a "continue" button at the bottom of the informed consent page (the first page of the survey to which participants are directed following their clicking on a link embedded in the recruitment email). Data will be stored on the online survey administrators (Survey Monkey) server until the study's conclusion. At that point, we will download all data, save it on a password-protected computer that is housed in a locked office, which is situated in locked

office suite. At that point, the survey data will be deleted from the Survey Monkey account. As a reminder, your agreement to participate in this research is voluntary.

**Voluntary Participation:** Your refusal to participate in this study will involve no penalty or loss of benefits to which you are otherwise entitled and will not affect your relationship with The University of Toledo or any of researchers. In addition, you may discontinue participation at any time without any penalty or loss of benefits.

**Contact Information:** Before you decide to accept this invitation to take part in this study, you may ask any questions that you might have. If you have any questions at any time before, during or after your participation, or experience any physical or psychological distress as a result of this research, you should contact Dr. John Laux at 419-530-4705 or Hussam Aldawsari at +1(785)-393-3535 or HussamKhalifah.Aldawsari@rockets.utoledo.edu.

If you have questions beyond those answered by the research team or your rights as a research subject or research-related injuries, the Chairperson of the SBE Institutional Review Board may be contacted through the Human Research Protection Program on the main campus at (419) 530-6167.

### **CONSENT SECTION – Please read carefully**

You are making a decision whether to participate in this research study. By clicking the next tab at the bottom of this page you are signing and indicating that you have read the information provided above, you have had all your questions answered, and you have decided to take part in this research.

By participating in this research, you confirm that you are at least 18 years old.

## **Appendix B**

### **Demographic Questionnaire**

Please read the following questions and answer to the best of your ability:

1. What is your country of origin?

- Algeria
- Bahrain
- Djibouti
- Comoros Islands
- Egypt
- Iraq
- Jordan
- Kuwait
- Lebanon
- Libya
- Mauritania
- Morocco
- Oman
- Palestine
- Qatar
- Saudi Arabia
- Somalia
- Sudan
- Syria

- Tunisia
  - United Arab Emirates
  - Yemen
2. In which country were you born?
  3. How many months have you been living in the United States?
  4. What is your immigration status?
  5. Is your education being supported by someone other than yourself or your family?
    - Yes
    - No
  6. If your education is being supported by someone other than yourself or your family, please identify who is supporting your education:\_\_\_\_\_
  7. What is your native language?
  8. What is your present level of English fluency?
    - Very Poor
    - Poor
    - Acceptable
    - Good
    - Very Good
  9. How comfortable are you communicating in English?
    - Very uncomfortable
    - Uncomfortable
    - Neither comfortable or uncomfortable

- Comfortable
  - Very comfortable
10. How do you describe your gender identity?
11. What is your age in years?
12. What, if any, is your religious affiliation?
- Muslim
  - Christian
  - Other <sup>[1]</sup><sub>[SEP]</sub>
13. If you answered “other” as your religion affiliation, please specify:\_\_\_\_\_
14. What is your current level of education?
- I am working on undergraduate degree
  - I have an undergraduate degree and I am working on another undergraduate degree.
  - I have an undergraduate degree and I am working on a graduate degree.
  - I have a graduate degree and I am working on another graduate degree.
  - I have a graduate degree and I am working on another graduate degree.
  - Other.
15. If you answered “other” to question 14, please specify the type of degree you are working on:\_\_\_\_\_

## Appendix C

### Five Factor Wellness Inventory

For use by Hussam Aldawsari only. Received from Mind Garden, Inc. on January 23, 2020



To Whom It May Concern,

The above-named person has made a license purchase from Mind Garden, Inc. and has permission to administer the following copyrighted instrument up to that quantity purchased:

#### Five Factor Wellness Inventory

The four sample items only from this instrument as specified below may be included in your thesis or dissertation. Any other use must receive prior written permission from Mind Garden. The entire instrument form may not be included or reproduced at any time in any other published material. Please understand that disclosing more than we have authorized will compromise the integrity and value of the test.

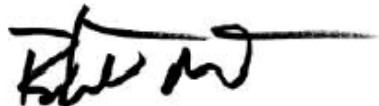
**Citation of the instrument must include the applicable copyright statement listed below.**

#### **Sample Items:**

I engage in a leisure activity in which I lose myself and feel like time stands still.  
I am satisfied with how I cope with stress.  
I eat a healthy amount of vitamins, minerals, and fiber each day.  
I often see humor even when doing a serious task.

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Sincerely,



Robert Most  
Mind Garden, Inc.  
[www.mindgarden.com](http://www.mindgarden.com)

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## Appendix D

### Acculturative Stress Scale for International Students

As foreign-born students have to make a number of personal, social, and environmental changes upon arrival in a strange land, this *cultural changes* experience might cause them acculturative stress. This scale is designed to assess such acculturative stress you personally might have experienced. There are no right or wrong answers. However, for the data to be meaningful, you must answer each statement given below as honestly as possible.

For each of the following statements, please circle the number that BEST describes your response.

1= Strongly disagree, 2= disagree, 3= not sure, 4 = agree, 5 = strongly agree

Because of my different cultural background as a *foreign* student, I feel that:

- |  |           |
|--|-----------|
| 1. Homesickness for my country bothers me.                                       | 1 2 3 4 5 |
| 2. I feel uncomfortable to adjust to new foods<br>and/or to new eating habits.   | 1 2 3 4 5 |
| 3. I am treated differently in social situations.                                | 1 2 3 4 5 |
| 4. I feel rejected when people are sarcastic toward my<br>cultural values.       | 1 2 3 4 5 |
| 5. I feel nervous to communicate in English.                                     | 1 2 3 4 5 |
| 6. I feel sad living in unfamiliar surroundings here.                            | 1 2 3 4 5 |
| 7. I fear for my personal safety because of my different<br>cultural background. | 1 2 3 4 5 |
| 8. I feel intimidated to participate in social activities.                       | 1 2 3 4 5 |
| 9. Others are biased toward me.  | 1 2 3 4 5 |
| 10. I feel guilty to leave my family and friends behind.                         | 1 2 3 4 5 |
| 11. Many opportunities are denied to me.   | 1 2 3 4 5 |

- |   |           |
|---|-----------|
| 12. I feel angry that my people are considered inferior here.   | 1 2 3 4 5 |
| 13. I feel overwhelmed that multiple pressures are placed upon me after my migration to this society. | 1 2 3 4 5 |
| 14. I feel that I receive unequal treatment.  | 1 2 3 4 5 |
| 15. People from some ethnic groups show hatred toward me nonverbally.                                 | 1 2 3 4 5 |
| 16. It hurts when people don't understand my cultural values.   | 1 2 3 4 5 |
| 17. I am denied what I deserve.   | 1 2 3 4 5 |
| 18. I have to frequently relocate for fear of others.   | 1 2 3 4 5 |
| 19. I feel low because of my cultural background.   | 1 2 3 4 5 |
| 20. I feel rejected when others don't appreciate my cultural values.                                  | 1 2 3 4 5 |
| 21. I miss the country and people of my national origin.  | 1 2 3 4 5 |
| 22. I feel uncomfortable to adjust to new cultural values.  | 1 2 3 4 5 |
| 23. I feel that my people are discriminated against.  | 1 2 3 4 5 |
| 24. People from some other ethnic groups show hatred toward me through their actions.                 | 1 2 3 4 5 |
| 25. I feel that my status in this society is low due to my cultural background.                       | 1 2 3 4 5 |
| 26. I am treated differently because of my race.  | 1 2 3 4 5 |
| 27. I feel insecure here.   | 1 2 3 4 5 |
| 28. I don't feel a sense of belonging (community) here.   | 1 2 3 4 5 |

- |  |           |
|--|-----------|
| 29. I am treated differently because of my color.  | 1 2 3 4 5 |
| 30. I feel sad to consider my people's problems.   | 1 2 3 4 5 |
| 31. I generally keep a low profile due to fear from other ethnic groups.                     | 1 2 3 4 5 |
| 32. I feel some people don't associate with me because of my ethnicity.                      | 1 2 3 4 5 |
| 33. People from some other ethnic groups show hatred toward me verbally.                     | 1 2 3 4 5 |
| 34. I feel guilty that I am living a different lifestyle here.                               | 1 2 3 4 5 |
| 35. I feel sad leaving my relatives behind.  | 1 2 3 4 5 |
| 36. I worry about my future for not being able to decide whether to stay here or to go back. | 1 2 3 4 5 |