

2022

Factors That Affect Anxiety and Acculturation in Syrian Emigrants

Thomas H. Anderson
Walden University

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Walden University

College of Psychology and Community Services

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Thomas H. Anderson

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Walden University
2022

Abstract

Factors That Affect Anxiety and Acculturation in Syrian Emigrants

by

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Psychology

Walden University

November 2022

Abstract

Since the Syrian civil war began in 2011, more than 6 million Syrians have registered as refugees. Many displaced Syrians suffer myriad mental health disorders, including anxiety, which become a burden as they attempt to acculturate into a foreign culture. Research to understand the Syrian refugees has been conducted since the conflict began; however, the findings are inconsistent. Existing academic research does not adequately capture the depth of anxiety of Syrian emigrants, nor does it present an accurate picture of the challenges of acculturation. The purpose of this quantitative study was to examine the differences in anxiety and acculturation based on gender and education in 54 adult Syrian emigrants living in the United States. The theoretical foundation used to drive this quantitative research study was the terror management theory, which posits individuals will implement existential buffers to mitigate anxiety brought on by the fear of death. This study implemented a correlational research design to examine the relationship between anxiety and acculturation, based on gender and education. The results of this study revealed no statistically significant findings, possibly due to language barriers or low subject recruitment. This study can influence positive social change as a baseline to understand mental health in the emigrant population and to help identify fundamental flaws in the mental health screening of emigrants. Addressing these will improve educational opportunities, employment, and quality of life for these individuals.

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Chapter 1: Introduction to the Study

The purpose of this quantitative research study was to examine the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. Since 2011, Syria has been involved in a civil war that has displaced more than half the population. While the Ukraine conflict with Russia occurred after this research study began, and likely eclipsed the displacement of Syrians as the largest humanitarian crisis, the Ukrainian crisis is not within the scope of this research study and does not diminish the level of human suffering in the Syrian civil war. According to Abbara et al. (2016), the displacement caused by this conflict was the largest since World War II, with more than 6.6 million Syrians internally displaced and another 6.7 million registered as refugees through the United Nations, which the United Nations High Commissioner for Refugees (UNHCR) High Commissioner Filippo Grandi described as the biggest humanitarian refugee crisis of our time and a continuing cause for suffering (UNHCR, 2020a). Worldwide, there are nearly 26 million refugees registered with the United Nations, and more than 25% are from Syria (UNHCR, 2020b). Historically, the United States has been a global leader in refugee resettlement through the use of a thorough vetting process, which takes approximately 2 years (UNHCR, 2020c). However, admittance through the refugee resettlement program has been reduced with the majority of Syrian emigrants arriving in 2016, with just over 15,000 resettled, and a downward trend in subsequent years (Duffin, 2020).

The majority of Syrian emigrants typically resettle in the neighboring countries of Lebanon, Jordan, Turkey, Iraq, and Egypt, where they reside in urban areas, small tent

settlements, and refugee camps (UNHCR, 2020a). For others, they endure a stressful migration into Europe, and even fewer resettle in the United States, where they are screened by at least eight federal agencies, receive security and biometric checks, undergo medical screening, and take part in an in-person interview conducted by the Department of Homeland Security (UNHCR, 2020d). Due to the stress of migration and the resettlement process, many Syrian emigrants display symptoms of anxiety as they are inserted into a foreign culture. According to Nazzal et al. (2014), emigrants subjected to dangerous migration conditions are at high risk for both mental and somatic disorders and illnesses. Furthermore, upon resettlement in the United States, Syrian emigrants must assimilate into a foreign culture, learn a new language, seek employment and education, and find some semblance of normalcy as they simultaneously adopt elements of American culture, while maintaining elements of their own.

Academic insight into factors that affect symptoms of anxiety and attempts to acculturate based on gender and education can be used to influence policies and procedures for humanitarian agencies to better support resettlement of Syrian emigrants in the United States. In turn, agencies can use quantitative data derived from this study to better direct resources in the mental health screening of Syrian emigrants, thus serving as an enabler for mental health evaluation to better identify those requiring assistance and encourage mental health referrals during screening. Hence, increased knowledge of Syrian emigrant mental health will develop positive social change for Syrian emigrants in the United States by helping create a more streamlined and successful resettlement

process, thus allowing Syrian emigrants the opportunity to thrive and develop a higher quality of life.

In this introductory chapter, I provide a background on the topic of Syrian emigrants resettled into the United States and outline the problem statement, the purpose of the study, the research questions, and hypotheses. I describe anxiety, as well as state the theoretical framework and how it is used to drive this research study. Furthermore, I describe the nature of the study, key definitions, assumptions, scope, and delimitations. I provide the limitations of the study, the framework for the study, and the significance of the study, as well as potential implications for positive social change. Lastly, I conclude with a summary of the introduction and a preview of Chapter 2, the literature review.

Background

Since the Syrian conflict began in 2011, more than 6.7 million refugees have been registered by the UNHCR, with more than 21,000 Syrian emigrants resettled in the United States (Duffin, 2020). The Syrian civil war has brought on one of the worst humanitarian crises since World War II, and Syrian emigrants have struggled to assimilate into foreign cultures and suffer myriad mental health issues, including anxiety. Once an emigrant arrives in the United States and clears protocol for resettlement, they are assigned to humanitarian agencies that serve as an interlocutor to assist the individual and family in navigating through the customs and social mores in the United States. The pre- and postmigration anxiety and stress, coupled with acculturation stress, has compromised the mental health of emigrants (Kartal et al., 2018). While government and humanitarian organizations attempt to assist emigrants in the resettlement process,

significant challenges remain for those arriving, and it is an enduring development process as individuals and families strive for normalcy and to achieve a higher quality of life.

Syrian emigrants face many challenges upon resettlement, and the strain of migration creates undue stress and anxiety; among the many issues emigrants face, mental health is one of the more significant. According to Ibraheem et al. (2017), fear of losing one's cultural identity can be a significant source of stress, which also triggers symptoms of anxiety. Thus, assimilation into a foreign country creates an emotional imbalance for the Syrian emigrant as the individual moves from a predominantly Muslim culture and Arabic country; they must assimilate into the United States while simultaneously maintaining elements from their country of origin. As one begins the process of acculturation, they may fear the loss of their identity, further adding to anxiety during the resettlement process. These mental health challenges, including anxiety, when coupled with challenges of acculturation, often become more acute and complex, and they create an imbalanced atmosphere within their acquired social milieu that inhibits successful assimilation (Greenburg & Fejzic, 2019). According to Regev and Slonim-Nevo (2019), studies on emigrants have consistently demonstrated a high prevalence of mental health disorders, including posttraumatic stress disorder (PTSD), depression, and anxiety. In a recent study of emigrants to Germany, affiliation with German culture was positively associated with mental wellbeing, and higher acculturation promoted positive mental health (Green et al., 2019). Hence, acculturation into a new society has a

significant impact on successful assimilation, and failure to acculturate into one's newfound society can be detrimental to successful resettlement.

According to Bentley et al. (2019) and Roblain et al. (2017), the risk of marginalization in the United States highlights the need for early and sustained psychosocial interventions for emigrant populations that become conflicted as they display a willingness to adopt the host culture but desire to maintain elements of their culture of origin. In addition, emigrants typically place importance on education; however, less than 1% globally have access to higher education (Safak-Ayvazoglu & Kunuroglu, 2019). Gender might affect attitudes toward new cultures for emigrants as gender expectations vary in male and female roles in relation to culture and the ability to acculturate. In a recent study conducted by Hashemi et al. (2018) on migrants to Australia, female participants reported higher levels of perceived social support as a result of ethnic acculturation as opposed to lower levels of social support from male participants. Moreover, females were found to be the cultural keepers in their families and were more oriented in relationships of ethnic communities than male counterparts. However, females also reported stronger effects of discrimination in social support than males, possibly explained by cultural differences in coping with a crisis, thus finding social support and discrimination as factors between female and male mental health (Hashemi et al., 2019). The review of literature reveals a verified gap in literature relative to the two dependent variables, anxiety and acculturation, based on gender and education in adult Syrian emigrants resettled in the United States since 2011. Hence, to thoroughly understand the mental health of adult Syrian emigrants resettled in the United States, this

study is justified in developing an understanding of Syrian emigrants and can be used to help humanitarian agencies create normalized behavior and lead toward better opportunities for higher education, employment, and quality of life.

Problem Statement

The problem this quantitative research study addressed are the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. While the data from research studies vary on the depth of anxiety in Syrian emigrants, one recent study from Yalim and Kim (2018) revealed Syrian emigrants maintain a variety of mental health disorders, and their study identified 54% of Syrian emigrants having symptoms of anxiety. Greenburg and Fejzic (2019) described the migration experience as profoundly traumatic, and emigrants subsequently face both pre- and postmigration struggles that, when paired with issues related to acculturation, account for stressors that make for a uniquely complex experience. Thus, Syrian emigrants suffer myriad mental health issues, which affect their assimilation into the host nation (Miller et al., 2018; Perera et al., 2013). Hence, with high comorbidity of mental health issues related to Syrian emigrants, and a dearth of research related to anxiety and acculturation in Syrian emigrants to the United States in relation to gender and education, this research study used quantitative data to address these gaps in literature.

Purpose of the Study

The purpose of this quantitative research study was to examine the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. I tested the differences of two dependent variables, anxiety and

acculturation, among adult Syrian emigrants living in the United States based on two independent variables, gender and education. According to the Diagnostic and Statistical Manual of Mental Disorders 5th Edition (American Psychiatric Association, 2013), anxiety is a debilitating disorder that can significantly interfere with psychological functioning, and the worries associated are pervasive, pronounced, and distressing. While the majority of Syrian emigrants likely suffer from anxiety, recent studies do not address the relation between anxiety and acculturation, nor the relationship between male and female emigrants based on gender and education. According to Safak-Ayvazoglu and Kunuroglu (2019), acculturation is stressful as emigrants fear a loss of identity, and while most Syrian emigrants report high levels of life satisfaction, most also report a negative psychological state. Due to these challenging conditions, acculturation in the host country is difficult and can reduce successful assimilation.

Gender of Syrian emigrants is a significant factor in successful resettlement. Previously the gender ratio of Syrian emigrants was roughly equal; however, in 2018, just 39% of all Syrian emigrants resettled in the United States were male, and this trend seems likely to continue downward (Duffin, 2020). In addition, in a recent study on Syrian emigrants, gender is relevant for educational opportunities, as the male-female percentage of Syrian emigrant students is 58.3% to 41.7%, with limited resources available, and likelihood of parents fearing for the security of daughters in the host country as one explanation for fewer female students (Safak-Ayvazoglu & Kunuroglu, 2019). Additional issues are presented to the Syrian emigrant pertaining to education as, despite the high rate of literacy in pre-civil war Syria, a recent study by Abdo et al. (2019) with Syrian

emigrants in Jordan reveal they suffer from a low quality of life, poor psychological health, and poor social relationships and environmental domains, despite a low illiteracy rate of just 7%.

Therefore, the evidence suggests Syrian emigrants suffer from high rates of anxiety and have difficulty acculturating into host countries. These variables have not been studied together based on the independent variables of gender and educational status. Examining differences in anxiety and acculturation, based on gender and education, provided information that enhances academic knowledge on the complex relationship the Syrian emigrant experiences with resettlement in the United States, while simultaneously maintaining some values and customs from their country of origin, as well as improve quality of life for Syrian emigrant families.

Research Questions and Hypotheses

The research questions and hypothesis are as follows:

Research Question 1 (RQ1): Is there a difference in anxiety based on gender among adult Syrian emigrants?

H_01 : There is no difference in anxiety based on gender among adult Syrian emigrants.

H_11 : There is a difference in anxiety based on gender among adult Syrian emigrants.

Research Question 2 (RQ2): Is there a difference in anxiety based on education among adult Syrian emigrants?

*H*₀₂: There is no difference in anxiety based on education among adult Syrian emigrants.

*H*₁₂: There is a difference in anxiety based on education among adult Syrian emigrants.

Research Question 3 (RQ3): Is there a difference in anxiety based on gender and education?

*H*₀₃: There is no difference in anxiety based on gender and education among adult Syrian emigrants.

*H*₁₃: There is a difference in anxiety based on gender and education among adult Syrian emigrants.

Research Question (RQ4): Is there a difference in acculturation based on gender among adult Syrian emigrants?

*H*₀₄: There is no difference in acculturation based on gender among adult Syrian emigrants.

*H*₁₄: There is a difference in acculturation based on gender among adult Syrian emigrants.

Research Question 5 (RQ5): Is there a difference in acculturation based on education among adult Syrian emigrants?

*H*₀₅: There is no difference in acculturation based on education among adult Syrian emigrants.

*H*₁₅: There is a difference in acculturation based on education among adult Syrian emigrants.

Research Question 6 (RQ6): Is there a difference in acculturation based on gender and education?

H₀₆: There is no difference in acculturation based on gender and education among adult Syrian emigrants.

H₁₆: There is a difference in acculturation based on gender and education among adult Syrian emigrants.

Theoretical Framework for the Study

Terror management theory (TMT) served as the theoretical framework to drive this quantitative research study. TMT is comprised of four components which mitigate the effect of one's own mortality: mortality salience, cultural worldviews, self-esteem, and personal relationships (Harvell & Nisbett, 2016). According to TMT, when faced with significant threats to one's safety, the individual will activate existential buffers and other coping mechanisms to assuage debilitating anxiety from thoughts of death, thereby protecting the individual from psychological distress (Juhl & Routledge, 2016; Kesebir, 2014). As the individual develops psychological buffers that protect against anxiety brought on by awareness of mortality, they acquire the psychological tools necessary to protect against distress and promote an existential theme of managing the fear of death with an emphasis on one's relationship with various buffers, which can include cultural worldviews such as religion and spirituality (Kesebir, 2014).

Regarding Syrian emigrants, during and after migration, the individual faces numerous stressful events, coupled with the fear of uncertainty, and might use existential buffers such as religious faith or family cohesiveness to mitigate anxiety. In turn, when

these core components of TMT deteriorate, such as in the event of family member deaths and separation, mortality becomes salient, thereby activating higher levels of anxiety (Harvell & Nisbett, 2016; Hui et al., 2012). Hence, when the Syrian emigrant is accepted into a host country, factors that affect anxiety could be tied to the lack of cultural knowledge and education, which may demonstrate a failure to acquire one or more of the core components of TMT and subsequently exacerbate the effects of anxiety.

Furthermore, previous studies have shown that women typically suffer higher rates of anxiety than their male counterparts, as gender roles are acquired through one's culture, which contributes to how anxiety differentiates between male and female refugees (Harvell & Nisbett, 2016). The TMT guided this research study as related to Syrian emigrants and their ability to acculturate in the United States. Portelinha et al. (2012) conducted research concerning the effect of biculturalism during a moment of crisis when faced with a death-type scenario. The study revealed that multicultural individuals embroiled in crisis tend to maintain their culture of origin and identity, thus assimilating into a foreign culture may cause dissonance within the Syrian emigrant, and serve as a reminder of mortality, thereby maintaining faith in one's cultural beliefs (Portelinha et al., 2012).

According to Koc and Kafa (2019), the cultural worldview gives one the impression that the universe is ordered, meaningful, and stable, and thus predictable, and it reduces death anxiety by reinforcing the inner belief that death is not a possibility that can be realized suddenly, and thus there is no reason to worry. Therefore, when that worldview is confused by events such as being forced into migration, and subsequently

becoming displaced from one's country of origin, the process of managing one's anxiety is also disrupted leaving the individual to succumb to mortality salience and enhanced anxiety. As a consequence, the individual can react positively to people or things that support their worldview or react negatively to people or things that might pose a danger to their worldview, resulting in a situation where the individual must defend that worldview and potentially reject other belief systems (Koc & Kafa, 2019).

Nature of the Study

I used a quantitative research design to address the differences in anxiety and acculturation among adult Syrian emigrants who have lived in the United States based on gender and education. To evaluate the relationship between dependent and independent variables, I used a Mann-Whitney U, the Spearman's correlation, a generalized linear model, and a two-factor analysis of variance to examine the relationship between two dependent variables, anxiety and acculturation, among adult Syrian emigrants living in the United States based on two independent variables, gender and education. The IBM Statistical Package for the Social Sciences Version 25 (SPSS-25) was implemented to delineate data and determine the means differences the two dependent variables have based on the two independent variables. Participants were selected with two contacts, described as partners. First, I obtained assistance from a charitable agency that assists Syrian emigrants as they resettle in the United States. Second, an individual who had previously worked with Syrian emigrants also assisted with recruitment. The two partners agreed to assist in this research study by posting the link to the study on their website and making its availability known to Syrian emigrant constituents; participants were required

to meet the criteria of being an adult and having left Syria in 2011 or later. Anxiety was measured through use of the Beck Anxiety Inventory (BAI), which is a 21-question self-report assessment measured on a four-point Likert scale and has a high internal consistency with Cronbach's alphas, ranging from 0.90 to 0.94 (Julian, 2011). The BAI takes only 5 to 10 minutes to complete and has displayed evidence of concurrent, convergent, and discriminant validity (Gillis et al., 1995). Acculturation was scored through the Acculturation Scale for Muslim Americans (ASMA), which is a relatively new measurement scale for acculturation, and has an acceptable reliability, with a Cronbach's alpha of 0.79 (Bagasra & Mackinem, 2019). The BAI and ASMA were acceptable measurement instruments for this study, as the BAI is a commonly used tool to measure anxiety and is easy to administer. The ASMA is culturally sensitive to an Arabic-Muslim population, and it measures the degree to which an individual has integrated into American culture and to what degree an individual espouses Islamic values.

Definitions

Acculturation: The process of assimilation into a foreign culture that occurs in the individual when their values and mores converge with that of the receiving nation. (Schwartz et al., 2010).

Depressive disorders: Depression affects how an individual feels, thinks, and behaves and can interfere with their ability to function and carry on with daily life. Types of depression include a depressed mood, lack of interest in activities normally enjoyed, changes in weight, changes in sleep, fatigue, feelings of worthlessness and guilt,

difficulty concentrating, and thoughts of death and suicide (American Psychiatric Association, 2013).

Emigrant/Emigration: From the perspective of the country of departure, emigration is the act of moving from one's country of nationality or usual residence to another country, so that the country of destination effectively becomes their new country of usual residence (International Organization for Migration [IOM], 2020).

Generalized anxiety disorder (GAD): The essential feature is generalized, persistent anxiety of at least 1 month's duration without specific symptoms that characterize phobic disorders, panic disorders, or obsessive-compulsive disorder (Beck et al., 2005).

Immigrant/Immigration: From the perspective of the country of arrival, immigration is the act of moving into a country other than one's country of nationality or usual residence, so that the country of destination effectively becomes their new country of usual residence (IOM, 2020).

Posttraumatic stress disorder (PTSD): PTSD can develop after the experience of a traumatic event, either a single isolated event or more chronic and recurring traumatic experiences. A variety of emotional disturbances and symptoms are associated with PTSD that cause clinically significant distress or impairment in a person's social interactions, their ability to work, or other important areas of functioning (American Psychiatric Association, 2013).

State anxiety: State anxiety represents an acute response and is described as a transitory emotional state consisting of feelings of apprehension and tension experienced

in a stressful situation. This state varies in intensity and fluctuates over time, being associated with heightened activity of the autonomic nervous system (Weeks et al., 2019).

Trait anxiety: Trait anxiety is a chronic and uninterrupted personality trait, described as an individual's tendency to perceive stressful situations as threatening, which in turn increases the individual's basal level of anxiety and makes a person susceptible to chronic anxiety (Weeks et al., 2019).

Assumptions

The primary assumption in this research study is that all participants understood the questions on the BAI and ASMA measurement scales. The BAI and ASMA were administered via the online platform Qualtrics XM; therefore, instructions for the measurement instruments was posted on a website, and I was not present to provide additional instructions. However, I assumed for the purpose of this study that all participants fully understood all items on both the BAI and ASMA and answered truthfully, accurately, and to the best of the participant's ability. It was assumed the concept of resettlement is similar between humanitarian agencies, and they use similar methods to resettle Syrian emigrants. There are innumerable agencies that assist emigrants from all countries, and though I drew participants from one organization, the possibility exists that there are disparate methods and procedures used to resettle Syrian emigrants in the United States. An additional assumption was the use of machine translation (MT) to translate the BAI and ASMA, the research flyer, and introduction to the study from English to Arabic. The entire sample in this research study had Arabic as

their primary language, and just a few had limited English language skills. Therefore, it is assumed all translations were accurate, understood by participants, and translated anxiety and acculturation instruments, the BAI and ASMA, maintained the same reliability and validity as originally published.

Scope and Delimitations

The focus of this research study was to quantify the differences in anxiety and acculturation in adult Syrian emigrants to the United States based on gender and education of the emigrant. Syrian emigrants have endured a stressful journey away from their country of origin and face significant challenges upon resettlement in the United States. Therefore, only adult Syrian male and female participants were identified as participants within the scope of this research study. Due to severe challenges in attaining participants for this study, the age boundary established for participants was any adult over the age of 21 who emigrated from Syria since 2011, thus safely fitting within a generalized and universal characteristic of what defines an adult. This served as a means to develop a sample drawn from Syrian emigrants who had similar resettlement experiences, and while the sample was not expected to be homogeneous, nor did it remove outliers who had negative resettlement experiences. According to the American Psychological Association, generalizability in research is the extent to which results or findings from a sample are applicable to a broader population (VandenBos, 2015). This research design should present relatively strong generalizability to future research in the United States as the population was specific, adult Syrian emigrants resettled since the Syrian civil war began in 2011. Limitations to generalizability included a small sample

and differing ages due to lack of access to the population. Furthermore, the results may not generalize to displaced persons in other countries or regions as Muslims from the Middle East maintain significant differences in culture, religious faith, and tradition, as well as subtle nuances with the Arabic language. Future research with adult Syrian emigrants could adjust the parameters of the research design to specify age brackets, therefore defining a more homogenous group.

Limitations

The primary limitation in this study was the language barrier. The majority of participants likely have Arabic as a first language and limited English skills. The language barrier was mitigated by providing an Arabic version for each measurement instrument, as well as the introduction to the study and demographic questionnaire; all Arabic translation were conducted through the Yandex Translate site (Yandex, n.d.).

Yandex uses MT, which is a possible limitation. Due to time, availability, and limited financial resources for literal translation due to COVID-19 pandemic, the use of MT was the only feasible option to translate required documents from English to Arabic and back to English for data analysis. According to Ali (2016), today's MT is tremendously smart in providing fascinating ideas in thinking about what language is and how to understand a language; however, there is no comparison to the way human beings translate. The method used for MT in this research study was a word-for-word literal translation, which essentially transfers the meaning of individual words into the target language and matched with equivalent words (Faruquzzaman et al., 2019). While word-for-word literal translation is not ideal, as it does not take structural mismatches such as

differences in word order, modification, or the translation of meaning into consideration, due to my inability to read, write, or speak Arabic, this method was the most reliable option in order to capture a large amount of data and distribute with accurate context to the target population (Faruquzzaman et al., 2019). Thus, while MT is an accepted option, it is acknowledged there are limitations and possible issues with participant comprehension.

A second limitation was the potential for self-report bias and recall bias; self-selection volunteers may be better situated in the United States, already maintaining a higher quality of life, and may have experienced a less stressful resettlement. For example, a Syrian emigrant may be less stigmatized having resettled prior to 2016, whereas the negative rhetoric applied to emigrants was significantly more polarized after the 2016 United States general election. Hence, the timing of resettlement may be a limiting factor in the results.

In addition, the use of a quantitative research design also presented a limitation. According to Queiros et al. (2017), a quantitative research methodology is used to obtain accurate and reliable measurements that allow a statistical analysis, which generally provides results that are objective and considered to be a sufficiently comprehensive view of the entire population. However, when using a survey to collect data, reliability is dependent on the quality of answers and the structure of the survey (Queiros et al., 2017). With language barriers and self-report biases already identified as a limitation, the quantity and quality of the responses must be considered as a limitation to this research study. In essence, respondents might have been afraid or embarrassed to answer sensitive

questions related to anxiety and acculturation, thus the number of responses and quality of responses was low. Separately, through use of an online survey, as the researcher, I was unable to capture negative emotions and concerns respondents may have in answering question, thus was unable to determine if respondents are manipulating their answers (Queiros et al., 2017). This limitation was mitigated through a sensitive welcome to the study introduction page, use of Arabic translations to overcome language barriers, and a verbal discussion with the partner leads so as to assure them there is no threat to their constituents.

A confounding variable is a variable that was not accounted for that can suggest correlation where there is none and can introduce bias in a research design, thus being a limitation of the study as it can have a hidden effect on the outcome of the research (Glen, 2021). The most significant confounding variables in this research design are the date of which a Syrian emigrant was resettled in the United States, and the experiences of migration. The events a Syrian emigrant experienced during migration are unknown and outside the parameters of this research design, thus a limitation to the study, and was an assumption that the experiences during migration are not a factor in the research design and did not influence the results. The date of resettlement is a confounding variable, as discussed in the literature review more fully. Following the 2016 general election, the Trump administration scaled back refugee admission to the United States and placed a ban on immigrants from Muslim dominant countries, thereby inciting an anti-refugee and anti-Muslim sentiment in the United States (Utržan et al., 2018). Therefore, I assumed that Syrian emigrants who were resettled after 2016 may experience more anxiety due to

prejudices against refugees and Muslims than those migrating before 2016, who may have had less anxiety. However, this research design only requested participants arrived after 2011, and the specific date of arrival in the United States was not requested; therefore, it remained an assumption that the specific date of arrival does not influence results.

This research study had a small sample size due to the dynamics of recruiting Syrian emigrants resettled in the United States. While SPSS-25 can be used to determine whether there is a statistically significant difference between the means in the two unrelated groups, a small sample size can have an effect on internal validity and remains a limitation in this research study (LAERD, 2018). To mitigate this limitation, simple random sampling was used to recruit participants. Furthermore, the Qualtrics XM online survey allows for consent to be conducted via a feature built into the site, therefore no names were collected, and all participants remained anonymous. However, to obtain the \$10 gift card, participants needed to email me directly, therefore some names may be obtained as per their email address; in this way, participant anonymity was compromised, but identifiers were only known to me.

Significance

This research advanced academic knowledge on the differences in anxiety and acculturation among adult Syrian emigrants living in the United States based on gender and education. According to Yalim and Kim (2018), a deeper understanding of the unique issues that accompany the Syrian emigrant is required to deliver effective policies and interventions to serve their mental health needs. Yalim and Kim suggested that

research with Syrian emigrants should be based on multidisciplinary perspectives that incorporate various viewpoints about the mental health of the Syrian emigrant. Furthermore, according to M'zah et al. (2018), while the vast majority Syrian emigrants suffer from symptoms of anxiety, only 20% had been evaluated by mental health professionals. In addition, anxiety often results in significant physical and mental health issues, and individuals displaying symptoms of anxiety have an increased risk of substance abuse, insomnia, social isolation, difficulty in school and work, and poor quality of life (Mayo Clinic, 2019). Previous research consistently indicates that women are more likely to suffer symptoms of anxiety and other mental health disorders more often than men, and the onset of symptoms will typically develop early in life (Lewinsohn et al., 1998; Murphy et al., 2019). According to Altemus et al. (2014), research on the differences between gender and anxiety will reveal factors that contribute to resiliency and vulnerability between men and women, which could lead toward developing better treatments. Successful assimilation into a foreign culture is significantly influenced by the ability to reasonably acculturate on the individual's own terms. Identifying factors that enhance the ability to successfully assimilate into the United States is paramount, as Syrian emigrants who do not successfully assimilate are more likely to become a burden on institutions who are organized to assist emigrants, and they are more likely to use limited resources, thereby further straining the immigration system. Positive social change can be found through the results of this research study, as they can be used to identify factors that enhance the Syrian emigrants to successfully assimilate into the United States, which can further be used to assist in creating

normalized behavioral patterns and lead toward better opportunities for higher education, employment, and quality of life.

Summary

Research with Syrian emigrants regarding anxiety and the process of acculturation in the United States is an under-researched topic with a clear gap in knowledge and data. The evidence presented in this chapter displays that the resettlement process is strewn with stressful experiences that create anxiety as well as challenges in acculturation in the United States. I used a quantitative research model designed to address the differences in anxiety and acculturation in Syrian emigrants based on gender and education. TMT was used as the theoretical framework to guide the study, and the dependent variables, anxiety and acculturation, were measured against the independent variables, gender and education, and statistical significance was examined through use of a Mann-Whitney U test, Spearman's correlation, a generalized linear model, and a two-factor analysis of variance. The results of this research study can be used to influence immigration policy and assist humanitarian agencies in identifying and administrating mental health care to Syrian emigrants resettled in the United States.

In Chapter 1, the introduction to the study, I described the background of the study, introduced the dependent and independent variables, and described the nature of the study and the theoretical framework that guided this research study. I have provided key terms and definitions, assumptions, the scope and delimitations, the limitations of the study, and implications for social change. In Chapter 2, the literature review, I will present a detailed description of the theoretical foundation, key variables and concepts,

the population of study, as well as recruitment procedures and the research strategy used to prepare this research study.

Chapter 2: Literature Review

The problem this quantitative research study addressed was the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. The prevalence of mental illness is a substantial health issue that affects one in four people worldwide and is outpacing preventative treatment strategies (Hashemi et al., 2019). According to Hashemi et al. (2019), in stark contrast to declining mortality rates associated with medical disability, mortality associated with mental illness is increasing and annually accounts for 8 million deaths worldwide. Moreover, migrant populations are at higher risk of developing mental illness, to include anxiety, which constitutes a global health burden with profound social and economic consequences (American Psychiatric Association, 2013; Hashemi et al., 2019). According to Safak-Ayvazoglu and Kunuroglu (2019), the effect of a negative acculturation experience for emigrants creates high levels of stress and can also trigger mental health issues such as anxiety. Furthermore, when an emigrant has conflicting acculturation experiences, such as discrimination, the attempt to acculturate can result in a higher likelihood of having an anxiety disorder (Esses et al., 2017). Hence, the mental health challenges Syrian emigrants face do not end upon arrival in the host nation; rather, having experienced forced migration, Syrian emigrants are at a higher risk for mental health issues such as anxiety, and detecting mental health needs during and after the resettlement process may be used to facilitate positive outcomes associated with employment, higher education, quality of life, and successful assimilation into the host nation (Yalim & Kim, 2018).

Syrian emigrants typically arrive at their destination with myriad physical and mental health issues, which further complicates the process of acculturation and successful assimilation into the host nation (Miller et al., 2018). In addition, gender differences, related to both anxiety and acculturation in the Syrian emigrant, is an under-researched and poorly understood topic (Mohwinkel et al., 2018). A recent study by Murphy et al. (2019) on PTSD, which can be comorbid with anxiety and depression, found that differences in symptoms by gender may in part be based on the tendency for females to report depression and anxiety more than males. In turn, while pre-war Syria had a well-funded educational system, and high literacy rates, there is a dearth of academic research related to Syrian emigrant education in relation to anxiety and acculturation (Central Intelligence Agency, 2020; United Nations Educational, Scientific and Cultural Organization [UNESCO], 2020). Currently, more than 6.7 million Syrians' have been registered by the UNHCR, and more than 21,000 Syrians have been resettled in the United States since the civil war began in 2011 (Duffin, 2019; UNHCRa, 2019). Insight into the differences in anxiety and acculturation based on gender and education with adult Syrian emigrants in the United States can be used to facilitate successful assimilation, and can lead to better opportunities for employment, higher education, and improved psychological well-being. Furthermore, a better understanding of Syrian emigrants' psychological well-being during resettlement can assist government agencies and humanitarian organizations in developing more efficient operating procedures and policies as well as a more efficient mental health screening program.

In Chapter 2, the literature review, I present the research strategy used to generate relevant resources for this study concerning Syrian emigrants. Next, I discuss the theoretical foundation and origin of the theoretical framework, TMT, including its core components and principles and the rationale used to drive this research study. I then provide an exhaustive examination of literature covering the key dependent variables of anxiety and acculturation, as well as the independent variables of gender and education. In addition, I identify critical gaps in the literature, provide a summary of the literature review, and present a preview of Chapter 3, which describes the methodology used to conduct this research study.

Literature Review Search Strategy

The primary resources used to conduct the research strategy were peer-reviewed academic journal articles accessed through the Walden University Library. The following databases were relied on heavily for this research study: PsycINFO; Academic Search Complete, Taylor and Francis Online, and APA Psyc Tests. In order to capture all information available and provide an exhaustive search of the literature, my research strategy included reviews of the Public Policy & Administration database. I also reviewed available academic journals via the social work search engine on SocINDEX with Full Text as well as the ERIC search engine. In addition, to ensure I captured an exhaustive list of available resources related to all key variables, I used Google Scholar as well as the United Nations (UN) website and additional humanitarian agency websites to the fullest extent possible. Such sites include the following: The UN, UNHCR, UNESCO, U.S. Committee for Refugees and Immigrants (USCRI), Refugees

International, Amnesty International, and the Migration Policy Institute (MPI) websites. The UN and humanitarian agency websites proved an excellent source of information on migratory statistics, refugee and immigrant relief efforts, refugee resettlement efforts, as well as the health and welfare of migrants. Additional websites used were: The MAYO Clinic, the Economic Research website, the CIA World Factbook, the U.S. Department of Health and Human Services Administration for Children and Families, and the U.S. Office of Refugee Resettlement, a sub-office of the Administration for Children and Families.

Resources found in the beforementioned databases were published within the last 5 years and included the following topics: Syrian civil war, Syrian crisis, Syrian emigrant, Syrian refugees, Syrian migration, Syrian emigrants and migrants in the United States, as well as emigrants from other countries. I used a combination of search terms to ensure an exhaustive search strategy was implemented for both the dependent and independent variables: Syrian refugee and anxiety, Syrian refugee and acculturation, Syrian refugee and anxiety and gender, Syrian refugee and anxiety and education, and Syrian refugee and acculturation and anxiety and education. To assist in identifying research gaps in the literature, additional search terms pertaining to Syrian emigrants were used: Syrian and mental health, Syrian and gender, and Syrian and psychological well-being.

Theoretical Foundation

Terror Management Theory

TMT is the theoretical foundation used to drive this quantitative research study. According to TMT, when faced with significant threats to one's safety, the individual will implement existential buffers and other coping mechanisms to assuage debilitating anxiety from thoughts of death, thereby protecting the individual from psychological distress (Juhl & Routledge, 2016; Kesebir, 2014). The TMT was developed by Thomas Pyszczynski, Sheldon Solomon, and Jeff Greenberg in 1986 and derived from the philosophy of Ernest Becker's book *The Denial of Death* (Pyszczynski et al., 2015). Becker (1973) wrote that each individual believes they have the formula for triumphing over life's limitations and knows with authority what it means to be human. Becker continued with, people try to win converts for their point of view because it is more than just an outlook on life, it is a formula for immortality (Becker, 1973).

Through the foundation of TMT, Pyszczynski et al. (2015) posited that human awareness of the inevitability of death exerts a profound influence on the diverse aspects of human thought, emotion, motivation, and behavior. The individual will manage the potential for anxiety that results from this awareness by maintaining the position of faith in the absolute validity of their cultural worldview and self-esteem by living up to the standards of value that are part of their cultural worldview. According to Pyszczynski et al., TMT originated with the founders seeking to answer three broad questions about human motivation and behavior: Why do people need self-esteem? Why do people need to believe that out of all the possible ways of understanding the world, their perspective is

the one that happens to be correct? Why do people who are different from each other have such a hard time peacefully coexisting? Hence, through their examination of the roots of social motivation and behavior, TMT was comprised of four core components, mortality salience, cultural worldviews, self-esteem, and personal relationships to mitigate the effect of mortality and mitigate the effect of anxiety found within one's own mortality (Harvell & Nisbett, 2016).

Wisman et al. (2015) and Hayes et al. (2010) wrote that TMT provides a systematic analysis of how humans manage the existential terror that develops from the awareness of mortality and that the individual will manage awareness of mortality through two types of defense mechanisms: the conscious threat-focused proximal defense and the unconscious, symbolic distal defense. The proximal defensive mechanism is focused on mortality salience, which creates space for the individual to suppress thoughts of mortality, and essentially allows the individual to create a distraction from thoughts of death, thereby mitigating the relevance of death. In contrast, the distal defense is focused on the unconscious external thought process of the awareness of mortality. This external outlook allows the individual to acquire a symbolic solution to thoughts of mortality by living up to the values of their cultural worldview, thus developing a foundation for protection, which could be based on religious values or faith, by providing a sense of meaning regarding the concept of death (Pyszczynski et al., 2015; Hayes et al., 2010). Hence, as the individual engages the conditions which increase death thought accessibility and raises anxiety, one's sense of self is accessed via their self-esteem. Thus, for the individual, the cultural component of their worldview, and other elements to

include religious faith and spirituality, engage anxiety-buffers and mitigate the effects of mortality salience, thereby reducing one's acquired anxiety (Pyszczynski et al., 2015).

Theoretical Propositions and Applications of TMT

The TMT is well-established and supported by many studies, and it supports the approach that when an event induces mortality salience, bringing forth a heightened awareness of death, the individual can experience compromised psychological well-being that can foment anxiety. Examples of mortality salience can be found in an article by Hui et al. (2012), where they suggested that when a life event that carries an existential threat confronts an individual with the reality of death and a sense of eventual nothingness, and the individual realizes their life may end sooner than expected, they realize a sense of mortality. Therefore, as mortality salience envelops the individual's psyche, the individual will unconsciously activate existential buffers, either the elements of the proximal or distal mechanisms, thereby relieving the anxiety brought forth from the awareness of death and mortality.

According to TMT, the proximal mechanism used to assuage thoughts or awareness of death are believed to occur immediately following an event that induces mortality salience. According to Juhl and Routledge (2016), while distal effects are the most investigated, the proximal effects occur while thoughts of death remain conscious within the individual, and reflect a more direct strategy to deal with death awareness. Through the proximal defense mechanism, the individual attempts to suppress thoughts of mortality by essentially distracting themselves from death awareness or consciously downplaying the relevance of the issue or event (Wiseman et al., 2015). Furthermore,

according to Wiseman et al. (2015), while the individual has the cognitive capacity to reflect on the self, which enables death awareness, the individual will avoid self-focus as a means to distract the self from death awareness. Wiseman et al. reviewed a study in which individuals were placed in a cubicle that contained a mirror, while a second group was examined in the same setting, however they did not have a mirror. The individuals from both groups were tasked to write about their mortality, with the results revealing that participants spent less time writing about mortality in the cubicle with a mirror when compared to those without a mirror. Hence, this study suggests that individuals may avoid self-awareness as a proximal defense against conscious thoughts of death (Wiseman et al., 2015). According to Portelinha et al. (2012), death awareness may lead to in-group disidentification when membership to a group reflects negatively on one's sense of self. Research on cultural incompatibility using TMT identified individuals distancing themselves from their ethnic group when ethnic and national identity was made salient, and the messaging derived was incompatible or posed a threat to their worldview, thus cultural components could possibly induce mortality salience when worldviews and situational factors are inconsistent (Portelinha et al., 2012).

In contrast with proximal defense mechanisms, the distal effect occurs when thoughts of death are more subtle, and death awareness is no longer the center of the conscious mind (Juhl & Routledge, 2016). The proximal defense mechanism does not provide a solution to anxiety brought on by death awareness, only temporary relief, as death-related thoughts remain accessible outside conscious awareness. According to Bergman and Segel-Karpas (2018), death awareness leads to high, and often intolerable,

anxiety and distress, and it severely impacts the ability for normal, everyday functioning. In turn, an individual's reliance on their culture and society, the distal effect, is essential in managing the ability to deal with the difficult knowledge of personal mortality. As discussed by Koc and Kofa (2019), humans differ from other species in the sense that they are conscious of their existence, and thus, they face the reality they are mortal and life is finite. In conjunction, within the concept of TMT, one's culture serves as an anxiety buffer against death awareness by offering either literal or symbolic immortality. In addition, Bergman and Segel-Karpas (2018) and Tjew-A-Sin and Koole (2018), through the construct of TMT, showed that cultural values are employed to provide a sense of meaning and a framework for the correct way to lead one's life, thereby leading individuals to reject cultures other than their own.

A recent study conducted by Tjew-A-Sin and Koole (2018) examined the effects of mortality salience. The authors researched levels of national identity and self-esteem among a sample of the Dutch to test the construct of TMT in a multi-cultural European sample. The results remained consistent with the principles of TMT as mortality salience led to less favorable attitudes toward Muslims among participants with high national identification. The authors showed that mortality salience among those with high national identification, and low self-esteem, increased their support of a traditional Dutch festivity, Sinterklaas, which purportedly has racist elements (Tjew-A-Sin & Koole, 2018). This study highlights the construct that the distal defense mechanism can be used to dismiss multiculturalism within social groups and strengthen the process of relying on one's culture of origin to relieve anxiety brought on by mortality salience. Moreover, the

results identified by Tjew-A-Sin and Koole supported the possibility that self-esteem, used in the proximal defense mechanism, can trigger the distal defense mechanism, which suggests that an individual being displaced from one's culture, such as a Syrian emigrant, may increase stress and anxiety during the acculturation process. The individual's reliance on their culture is demonstrated by Vail et al. (2020) and Vail et al. (2019) as their review of studies on TMT reveal that mortality salience in followers of Christianity increases their faith in the Christian God while strengthening their rejection of Islam's Allah and the Hindu Buddha. In similar fashion, for a follower of Islam, when mortality salience was induced, it increased their faith in Allah, while strengthening their rejection of both the Christian God and the Hindu Buddha. This suggests that individuals are able to function effectively by relying on sociocultural anxiety buffers and managing their awareness of death by maintaining faith in their worldviews through application of the distal defense mechanism, and abiding by their cultural standards, values, and boundaries. Therefore, as the distal defense mechanism is engaged, and the individual perspective that their culture and worldview is correct, they are then able to reduce anxiety brought on by death-awareness and are afforded the stabilizing process to give meaning and purpose to life, thereby establishing standards for their own behavior. However, when a destabilizing event is experienced, which increases death awareness and mortality, there is a reduced capacity to exercise existential buffers and an increase in anxiety brought on by death awareness (Koc & Kofa, 2019).

According to Koc and Kafa (2019), the cultural worldview gives one the impression that the universe is ordered, meaningful, and stable, and thus predictable, and

it reduces death anxiety by reinforcing the inner belief that death is not a possibility that can realize suddenly, and thus there is no reason to worry. Therefore, when that worldview is confused by events such as being forced into migration, and subsequently becoming displaced from your country of origin, the process of managing one's anxiety is also disrupted leaving the individual to succumb to mortality salience, and enhanced anxiety. As a consequence, the individual can react positively to people or things that support their worldview or react negatively to people or things that might pose a danger to one's worldview, resulting in a situation where the individual must defend that worldview, thereby rejecting other belief systems, radically if necessary (Koc & Kafa, 2019). Thus, with TMT guiding this research study, we should be introduced to statistically significant differences between male and female Syrian emigrants resettled into the United States, as cultural differences, specifically related to gender in an Arabic nation such as Syria, should display how male and female respondents mitigate the fear of death and uncertainty upon resettlement, and as they begin the acculturation process and assimilate into a foreign culture. The previously cited research questions build on the existing TMT model by helping to explain the constructs of anxiety and acculturation based on gender and education in relation to Syrian emigrants during their migration away from the civil war. Individuals suffered extreme stress, uncertainty, fear of death, and a loss of their sense of self, thus the TMT helps navigate through their duress by helping to predict how one might mitigate the thoughts of mortality, when faced with extreme duress and mortality salience.

Literature Review Related to Key Concepts and Variables

Dependent Variable Anxiety Disorders

Anxiety disorders are the most common mental-health illness worldwide affecting more than 280 million people annually and more than 40 million people in the United States (Dattani et al., 2018; Mayo Clinic, 2020). An anxiety disorder is described as when an individual displays characteristics and behaviors of excessive fear, anxiety, and related behavioral disturbances that differentiate from normative fear and relative anxiety by being excessive and persistent beyond appropriate periods of time (American Psychiatric Association, 2013; Anxiety and Depression Association of America, 2020). In addition, anxiety disorder can be viewed as a composite category containing two components: state anxiety and trait anxiety (Weeks et al., 2019). State anxiety represents an acute response and is considered a transitory emotional state consisting of feelings of apprehension and tension that the individual experiences during moments of stress. The counterpart to state anxiety is trait anxiety, which moves beyond an isolated moment in time and evolves in the individual when they repeatedly perceive events throughout life as a significant threat, thus developing into a chronic personality characteristic (Horváth et al., 2016; Weeks et al., 2019). As discussed by Robinson et al. (2013), anxiety disorders have a negative impact on cognitive functions and can lead to a crippling focus on negative life-events. Moreover, anxiety disorders can make concentration difficult and become comorbid with the individual developing two or more mental-health conditions (Bystritsky et al., 2013; Robinson et al., 2013).

According to Fajkowska et al. (2018), an anxiety disorder can be viewed as developing on three levels. The first level is the relevant processes and mechanisms, that contribute to inherent structures of anxiety types, the second level, and associate them with appropriate behavioral markers, the third level. From the interaction among the individual's cognitive mechanisms, such as attention and concentration, mental and memory faculties, and working memory systems, while also displaying somatic symptoms, emerge elements that compose the fundamental constructs of anxiety, that of somatic-arousal and cognitive-related apprehension (Fajkowska et al., 2018). In addition, according to Bystritsky et al. (2013), developing an understanding of anxiety and how the emotional reactivity, core beliefs, and coping strategies can assist in a more precise diagnosis and management of anxiety disorders and identified as an interaction in space and time of alarms, beliefs, and coping strategies. The alarm acts as an emotional sensation or physiological reaction to a trigger type situation, sensation, or thought as the brain rapidly processes information about the event. Next, the decision to act on the situation is made on the basis of one's individual beliefs and rely heavily on previous experiences, personal and cultural background. From one's belief system, the individual then turns to coping strategies, a specific set of behavior or mental activity aimed at reducing anxiety and avoiding the perceived danger. However, accurately assessing the information is difficult as the individual must process an inordinate amount of data, and can lead to catastrophic decision-making, or incapacitation due to indecision. Hence, the individual turns to learned coping strategies that have evolved over time, with behavior

and mental activities designed to reduce anxiety and avoid the perceived danger (Bystritsky et al., 2013).

Diagnosing and treating anxiety disorders has been shown to be severely inadequate worldwide. Alonso et al. (2018) conducted an exhaustive review of data collected from 23 community surveys in 21 countries with more than 50,000 respondents who identified as having chronic anxiety for more than 12 months. Of the respondents, only 27.6% had received treatment, and less than 10% of the treatment was deemed adequate, as treatment for mental health in developing countries is severely lacking in quality (Alonso et al., 2018). Furthermore, anxiety disorders affect women more than men, as females account for about 63% of those diagnosed (Dattani et al., 2018). While there are several methods to treat anxiety disorders, no single method has been identified as most effective. According to Mangolini et al. (2019), cognitive behavioral therapy (CBT) yields better results than most approaches; however, short-term psychodynamic psychotherapies also show consistent results. Zayfert and Becker (2020) stated that the practice of CBT is a structured form of psychotherapy resulting from the coupling of behavior modification strategies and cognitive therapy. The primary focus of CBT is that emotional problems and mental-health disorders result from learned responses and can be altered by new learning; thus, the individual and therapist focus on negative thoughts, thereby responding to negative thoughts more effectively (Zayfert & Becker, 2020). While less effective than CBT, alternative approaches for treating anxiety, such as regular exercise and mindfulness practice, have also been proven to yield positive results (Mangolini et al., 2019).

Anxiety and Syrian Emigrants

The Syrian civil war created an environment of mass migration away from the country as millions fled the fighting, initially seeking safe havens in the neighboring countries of Turkey, Jordan, and Iraq, while many more remain internally displaced within Syria. In addition, many Syrians continued their migration to European countries, Canada, and the United States. According to Rizkalla and Segal (2018), the overwhelming majority of Syrians experienced traumatic events, and the vast majority of Syrians fleeing the country were exposed to atrocities, as 92.7% of Syrian civilians surveyed in Jordan experienced one or more traumatic events, and more than half of the Syrian sample, 57.6%, screened positive for mental illness. Furthermore, Syrians living in refugee camps located in Jordan reported severe psychological distress, which is exacerbated by environment factors, such as poor financial situations, inadequate housing, and lack of employment, as well as psychosocial factors, such as loss of social and employment status prior to the war, lack of social support, and inactivity (Wells et al., 2016). According to Ghumman et al. (2016), in one Jordanian refugee camp (the Zaatari camp), Syrian refugees were found to be susceptible to PTSD, especially women and children, and of the 46% of surveyed participants who believed they required psychological therapy, only 14.5% had received treatment. Furthermore, Syrian refugees are at high risk for developing mental-health disorders, such as anxiety; however, no systemic review has been conducted, so accurate and reliable data regarding the prevalence of anxiety and related mental health issues are unavailable (Peconga & Thøgersen, 2019). Despite the necessity of mental-health services for Syrian refugees,

there is a vast shortage of mental-health care professionals, language barriers prevent proper screening, and there is a general lack of education regarding mental healthcare (Ghumman et al., 2016; Peconga & Thøgersen, 2019).

The data related to Syrian emigrants and anxiety are mixed and provide unreliable results to provide accurate statistics on their mental-health status. According to Yalim and Kim (2018), recent studies with Syrian emigrants suggest they deal with a variety of mental health disorders, with 54% of Syrian refugees displaying symptoms of anxiety; however, Yalim and Kim provide a disclaimer that there are barriers with Syrian refugees that hinder the ability to conduct proper academic research. Mental health and psychosocial services barely exist for Syrian refugees residing outside of the camps in neighboring host countries as they typically reside in cities, towns, and rural areas, often in dire circumstances, and often are not easily reached by humanitarian aid organizations. Hence, since 2011, only a few studies have been published examining the mental-health and psychosocial needs of Syrian refugees, and these barriers make it challenging for academic researchers to carry out studies beyond basic needs assessments on Syrian refugees' mental health status (Yalim & Kim, 2018). Further describing the gap and conflicting data concerning the mental-health status of Syrian emigrants, a recent study conducted by Peconga and Thøgersen (2019) on Syrian emigrants resettled in 10 countries revealed that 26.6% display anxiety, while a separate study conducted by Dietrich et al. (2019) on Syrian emigrants in Greece revealed anxiety rates of 75%. Moreover, M'Zah et al. (2018) surveyed a sample of Syrian emigrants resettled in Atlanta which revealed rates of anxiety disorders at 60%, while only 20% of the sample had been

seen by a mental health professional. In addition, Javanbakht et al. (2018) wrote that 40.3% of Syrian emigrants in the United States suffered from anxiety disorders, and women displayed higher rates than men. Thus, while the data are somewhat distorted and often contradictory, it can be assumed that a high percentage of Syrian emigrants, regardless of which host nation received them, most likely suffer from various degrees of anxiety-related mental-health disorders.

While the migratory journey of the Syrian emigrant is typically a long, stressful, and arduous process, there is evidence to suggest the resettlement experience can also be stressful which influences their mental health and creates psychological distress (Chan et al., 2016). According to, Esala et al. (2018), while research with resettled refugees typically emphasizes symptoms of PTSD, mental-health disorders, such as anxiety, tend to be more prevalent. Research conducted with Syrian emigrants related to mental-health disorders reveals that assimilation in the host nation can contribute to the development of symptoms of anxiety as, intuitively, one could believe the longer one has to assimilate, the lower one's likelihood of mental-health issues and a more cohesive acculturation. However, according to Çelebi et al. (2017) and Guajardo et al. (2016) emigrants from Iraq who had been resettled longer experienced higher levels of psychological distress than recent arrivals, and for Syrian emigrants, those who held a higher identity to their own culture were associated with lower levels of mental-health distress, to include anxiety and depression. Furthermore, ethnic discrimination targeting Syrian emigrants increases the likelihood of developing symptoms of anxiety and also plays a role in the development of anxiety disorders during the acculturation process (Çelebi et al., 2017).

Additional research on Syrian emigrants and anxiety is discussed by Chung et al. (2017), with a study examining the inter-relationship between trauma centrality, self-efficacy, PTSD, and psychiatric comorbidity among Syrian emigrants in Turkey. This was a large study with 792 participants, and while the specific percentage displaying symptoms of anxiety was not provided, 52% of participants did display symptoms of PTSD suggesting high rates of anxiety as well. Chung et al. revealed an important connection between Syrian emigrants and the maintenance of their cultural identity, as individual differences were not mediated by gender; rather, group identity and altruistic action became salient in facilitating situational consistency and developing flexibility in managing distress. Therefore, maintaining one's cultural identity can be viewed as a significant factor in mental health among emigrants, as well as a mitigating factor in developing symptoms of anxiety, as the individuals become close to those with shared experiences, thus strengthening their cultural worldview to create a buffer from symptoms of anxiety. According to Dietrich et al. (2019) and Miller et al. (2018), anxiety and other mental health disorders in Syrian emigrants may be lower upon arrival to the host nation, as the adaptation process may reduce post-migration psychopathology, with memories of traumatic events returning in the future. In turn, once the emigrant has arrived and in a somewhat stable environment, they may return to issues of family separation, cultural disruption, and feelings of helplessness as they begin the acculturation process, which foments mental-health issues such as anxiety and damages one's psychological well-being.

The situation for Syrian emigrants remains critical, and while millions have resettled outside of Syria, their status in most regions remains unstable, which leads to increased mental and physical health issues. Furthermore, political instability, anti-immigrant rhetoric, and underfunded and understaffed agencies create an inhospitable social milieu, which further creates stress and anxiety. As discussed by Abbara et al. (2016), very few humanitarian interventions and policies have been properly evaluated for effectiveness, which has implications for assessing the cost-effectiveness of their response. In addition, Ibraheem et al. (2017), described the Syrian refugee situation as alarming and the effects of the conflict on their mental and physical health as grave; they further state there is an urgent need to ease the suffering, as most have had their collective and personal identities threatened, and immediate interventions that address the loss of identity needs to be addressed and developed.

Anxiety and Syrian Emigrants Resettled in the United States

Since 2011, more than 21,000 Syrian emigrants have arrived in the United States, with the vast majority, 15,479, arriving in 2016 (Duffin, 2020). According to Hasan et al. (2018), more than 95% of Syrian emigrants resettled in the United States are Muslim, and the potential loss of their religious identity is a significant source of stress, as Syrian emigrant parents fear their children will devalue the Islamic faith as they acculturate into American society. Thus, maintaining ties to their ethnic community following resettlement is an essential component to successful acculturation, serves as a source of strength and comfort for the Syrian emigrant, and plays a significant role in their mental health (Hasan et al., 2018; Regev & Slonim-Nevo, 2019). Recent studies by Calderon and

Rominger (2019) and M'Zah et al. (2018) revealed a lack of academic knowledge of the general mental and physical health of Syrian emigrants who have been resettled in the United States. Moreover, Javanbakht et al. (2018) wrote that while little is known about psychiatric disorders among Syrian refugees resettled in the United States, understanding the prevalence of common mental disorders is critical for planning, as interventions can promote successful resettlement. Hence, while the mental health status of Syrian emigrants to the United States is poorly understood, and there is a dearth of available resources on the subject, each respective study displays the poor mental and physical health of the Syrian emigrant upon resettlement, the significant challenges they face as they assimilate into a new culture, and a general lack of available resources to assist in both physical and mental health screening, assistance, and treatment.

Studies consistently display the difficulty emigrants face when resettled into a host nation, and resettling in the United States presents its own unique challenges. According to Utržan et al. (2018) the United States, once perceived as a desired immigrant destination and safe-haven, presents issues with resettlement due to political instability, an anti-refugee sentiment, and a complex refugee resettlement program. The United States Refugee Resettlement Program (USRP) has been criticized for being underfunded, being overstretched, and failing to meet the basic needs of those being resettled. The USRP involves several government agencies and nonprofit organizations, and as a result, it has become a cumbersome bureaucracy, invokes a divisive authority between agencies, is not adequately funded, and has become politically polarized since the September 11, 2001 terrorist attacks in the United States. Furthermore, during the

Trump administration, a series of executive orders scaled back refugee admissions to historical low points, with a 98% decrease in Syrian emigrants in the second quarter of 2018, as well as a ban on immigrants from several Middle East countries, to include Syria, which is believed to have further incited an anti-refugee sentiment within the United States (Utržan et al., 2018). The effects of this anti-immigrant social environment are cited as having a negative impact on emigrant mental health. This is in addition to a decrease in funding and limited resources; only 25 states conduct mental health screening upon arrival, and 17 states use informal conversation rather than standardized instruments to determine the mental health of emigrants resettled in the United States (Utržan et al., 2018).

Recent research conducted by Pampati et al. (2018) on three separate Arab groups in the United States (Arab Americans, Arab immigrants, and Arab refugees) was designed to determine if anxiety and depression differs between groups. The authors posit that while very little is known regarding the mental health of Arab Americans, immigrants, and refugees, all three demographic groups exhibit high levels of anxiety and depression, with refugees from the sample reporting higher levels of anxiety and depression than both Arab Americans and Arab immigrants. Moreover, the authors hypothesize that all three groups may be exposed to political, economic, social, and other environmental stressors that affect their mental health leaving individuals from all three Arab groups with high levels of stress and anxiety. Syrian emigrants face significant challenges during migration to the United States, as well as upon resettlement. The typical Syrian emigrant, already subjected to psychological burdens during the migration

process, also face discrimination and anti-immigrant rhetoric resettling into the United States. They are subjected to an environment where mental health issues flourish unabated, access to mental-health treatment is limited, and agencies are understaffed and under-resourced, thus leaving successful assimilation a significant challenge as they navigate through American culture and mores (Bentley et al., 2019).

Dependent Variable Acculturation

According to Schwartz et al. (2010), acculturation is a process of assimilation into a foreign culture that occurs in the individual when their values and mores converge with that of the receiving nation. Acculturation takes place as a result of contact with culturally dissimilar people, groups, and social influences, and is a gradual process of adjustment that includes psychological and sociocultural outcomes (Gürsoy & Ertaşoğlu, 2018; Schwartz et. al., 2010). The acculturation process is a source of stress among emigrants, and issues adapting to a new culture can be attributed to the conditions of the host culture, the background of the individual in their country of origin, and the experience of voluntary migration versus forced migration. Furthermore, achievement in education is a predictor of stress for emigrants, and those from lower socioeconomic backgrounds with less education often suffer from higher levels of stress and anxiety as they acculturate into the host nation (Matsumoto, 2001). Many emigrants suffer from inordinate levels of stress and anxiety prior to arrival at their destination, and the psychological wellbeing of emigrants might be attributed to the successful assimilation and maintenance of one's cultural identification once the resettlement process begins. According to Hashemi et al. (2019), while studies examining the relationship between

acculturation and mental health yield inconsistent findings, studies on first- and second-generation migrants to the United States reinforce the concept that successful acculturation reduces symptoms of anxiety and is thought to increase self-esteem.

Successful acculturation can be viewed as when the emigrant maintains a harmonious balance within the host culture, adopting practical values of one culture, while maintaining practical elements of their culture of origin. Often, when resettled within the host nation, the procedural processes deem the emigrant who faced a forced migration simply as an immigrant, one seeking permanent residence, thus not accepting the nuanced and often more traumatic experiences seen in emigrants who were forced to flee a hostile environment (Gürsoy & Ertaşoğlu, 2018). Hence, forced migration is exemplified by an individual who is forced to leave their country of origin due to natural or manmade disasters, such as war or climate change. According to Shultz et al. (2018), the experience of forced migration is replete with individual and collective exposures to trauma and loss, and in situations of armed conflict, the current predominant form of forced displacement worldwide, acts of aggression, warfare, invasions, assassinations, massacres, kidnappings, and other forms of violence are common and instrumental in triggering displacement. The exposure to trauma within a displaced population forced to migrate away from their country of origin are known to produce great amounts of stress, psychological distress, and progression to diagnosable common mental disorders, including PTSD, major depressive disorder, and generalized anxiety disorder, for those who have the most intense exposures (Shultz et al., 2018).

According to Nakash et al. (2015), while research documents the role acculturation plays in the process of adjustment to a new culture, very little is known regarding the acculturation process within the context of forced migration. Nakash et al. conducted research using a convenience sample of Eritrean and Sudanese asylum seekers, and their findings revealed the paradox of assimilation and the mental-health risks it posed among those wishing to integrate into the new culture at the expense of the culture from their country of origin, concluding that asylum-seeking individuals may be particularly vulnerable to the risk of assimilating in countries with restrictive migrant policies. Furthermore, according to Kartal et al. (2018), while exposure to trauma is associated with the mental health of refugees, mental health is rarely included in investigations of the acculturative process, even though acculturative stress has been identified as a significant factor influencing host cultural orientation and mediating the effect of traumatic exposure on mental health outcomes. Kartal et al. continued that the contributing effect of acculturative stress and cultural and social stressors that are related to acculturation need to be considered as well, especially since they are significant impediments to constructive engagement with mental health services, and assist in the understanding of how those who were forced into migration acculturate into a new society and how successful they are with integration into a host nation, which is an under-researched topic. As discussed by Esses et al., (2017), finding durable solutions for refugee resettlement is a global challenge, and for solutions to be developed, host nations must present an accepting and favorable environment, thus displaying the symbiotic

relationship between the emigrant and the host-nation population in achieving success in the acculturation and assimilation processes.

Recent studies reveal that the ability to successfully acculturate in the host nation has a significant effect on one's psychological well-being. Maintaining ties to one's culture can be a cause for concern for the emigrant as one might face real or perceived discrimination from the host nation populace. Hashemi et al. (2019) examined a sample of Middle East migrants to Australia and found that the acculturation process had the most significant effect on mental health and was facilitated by both the direct and indirect effects of perceived social support, as well as discrimination. Moreover, developing ethnic community associations and resources could be an effective option to provide social support to Middle East emigrants and to improve their mental health. Arab Americans typically display higher rates of mental-health issues when compared to other minority groups, and the nature and scope of challenges those from Arab countries in the Middle East face have had influential roles in their migration and put them at a higher risk of developing health problems (Dallo et al., 2018; Hashemi et al., 2019).

Acculturation and Syrian Emigrants

The effects of the acculturation process on Syrian emigrants in the United States is esoteric as limited academic resources are available. However, as displayed in research on the acculturation process with emigrants from regions other than Syria, the mental health outcome of emigrants relies heavily on successful acculturation as they assimilate into the host nation. According to Roblain et al. (2017), despite the fact the Syrian crisis has been ongoing since 2011, very little is known about the acculturation processes

undergone by Syrian emigrants. Roblain et al. conducted a study to investigate acculturation preferences of Syrian emigrants which revealed a high willingness to adopt the host country culture; however, they maintain a desire to retain components of their culture of origin while expectations of the host nation populace became an additional factor in the Syrian emigrant acculturation preference. In turn, relying on host-nation expectations creates confusion for the emigrant during the acculturation process, as typically, those seeking asylum are received by the host-nation populace negatively; they are often perceived as a potential security threat and are believed to be a burden on the host nation's economy (Koc & Anderson, 2018; Shultz et al., 2018). Koc and Anderson (2018) found that the host-nation population were predictors of prejudices toward Syrian emigrants and were based on the demographic factors of age, gender, educational level, political affiliation, and national identification. Those who tended to distance themselves from Syrian emigrants, which complicates and extends the duration of the acculturation process, were identified as older politically conservative men who had higher levels of national identification with religion, Christianity versus Islam, serving as a factor. Therefore, as the Syrian emigrant begins the acculturation process, they can be disrupted by a hostile and discriminatory populace who maintain intergroup anxiety toward the emigrant and develop a sense of dehumanization, which can be internalized by Syrian emigrants resettled in the United States (Koc & Anderson, 2018; Scott & Safdar, 2017).

Recent studies on the experiences of Syrian emigrants during the acculturation process, which may loosely be applied to those resettled in the United States, explored the context of the acculturation process with Syrian university-aged students resettled in

Turkey. According to Safak-Ayvazoglu and Kunuroglu (2019), Syrian students chose a strategy of integration in the public domain; however, they maintained a separation strategy in the private domain. Hence, participants assumed the host-nation culture publicly but maintained their Syrian culture when inside their dwelling. The results of the research revealed that participants reported high levels of life satisfaction in Turkey; however, they also reported feelings of depression and reexperienced traumatic events through distressing thoughts about their past and their poor social well-being was due to a lack of inclusion in the host nation's society. The Safak-Ayvazoglu and Kunuroglu (2019) study might reveal a false and imbalanced sense of successful acculturation, as Syrian students resettled in Turkey do not truly seem to have acquired a developed sense of harmony between cultures, thus possibly creating a false sense of security and assimilation. In addition, a study by Green et al. (2019) on Syrian emigrants to Germany revealed a stronger identity with German culture during the acculturation process, suggesting positive psychological well-being. However, the study also revealed that while more acculturation to German culture may promote positive mental health, higher levels of social support were also associated with lower levels of psychological wellbeing and higher levels of depressive symptoms; the authors noted that this phenomenon could reflect reverse causality or a stronger connectivity to their culture of origin in Syria.

A recent study conducted by Khoury (2018) with 214 participants investigated the impact of age, gender, language and acculturation on the sociocultural adjustment and well-being of Syrian refugees in Stuttgart, Germany. The results revealed that the level of German language acquisition significantly correlated with sociocultural adjustment;

however, no significant correlation was found between age and levels of depression, and no significant differences in depression scores were identified as a function of gender. Recent research from Sheikh and Anderson (2018) and Alhasanat-Khalil et al. (2018) contended the majority of existing research provides evidence that successful acculturation is linked to one's level of education, adapting to host nation education programs, academic achievement, and social support. This suggests educational attainment plays a crucial role in the acculturation process, as those with lower levels of education and poor academic achievement display more acculturation anxiety and stress, as well as less identification with the host nation. Throughout the acculturation process, the Syrian emigrant is continually challenged to find harmony as they move from daily life to family life. While these challenges are daunting, the emigrant has little choice but to face these challenges, all of which further complicate the acculturation process, bring forth additional stress, and damages their psychological well-being as they attempt to assimilate into the host-nation.

Gender as a Factor in Anxiety and Acculturation

Gender is typically understood as a factor in the development of anxiety and is likely a factor in the acculturation process for Syrian emigrants. Previous research consistently indicates that women are more likely to suffer symptoms of anxiety and other internalizing mental health disorders more often than men, and the onset of symptoms will typically develop early in life (Lewinsohn et al., 1998; Murphy et al., 2019). Furthermore, in a recent study by Mohwinkel et al. (2018), conducted using participants drawn from unaccompanied refugee minors, and Murphy et al. (2019), who

examined differences between genders with participants who had experienced traumatic events, female participants displayed a higher vulnerability for mental-health disorders, with evidence suggesting there are differences between genders in the development of mental-health disorders. However, both studies revealed a gap in the literature regarding the sample and reliability, as there was a failure within the research methodology to assess whether the results were due to measurement invariance and the findings did not provide nonequivalence across gender; thus, further research was recommended to clarify the role gender plays in mental health.

According to Lijster et al. (2016), while it is generally accepted that females are more prone to be diagnosed with an anxiety disorder, there are no differences based on gender in the age of onset (AOO) of which an individual displays symptom of anxiety. The authors examined a large database to determine the AOO by gender, which revealed that symptoms of GAD typically afflicted those around age 35, while social anxiety disorder developed in persons under the age of 18. Moreover, according to Vanderminden and Esala (2018), while females are more likely to experience an anxiety disorder compared to men, disadvantaged groups based on race and gender are also more likely to experience anxiety; however, those in disadvantaged and minority groups are less likely to be seen by mental health professionals and less likely to receive a diagnosis and treatment. In turn, female emigrants resettling into the United States can theoretically be identified as more likely to display symptoms of anxiety as opposed to their male counterparts, and men and women typically display symptoms of anxiety differently as well, with females more likely to display comorbid internalizing of anxiety symptoms,

compared to males who are more likely to experience comorbid externalizing of anxiety symptoms (Asher & Aderka, 2018). According to Asher and Aderka (2018), women and men respond differently when experiencing anxiety symptoms with females likely to display more fear of professional and social situations such as sitting for an interview, speaking to figures of authority, and other social situations such as eating or drinking in public. According to Hankin et al. (2016) in a theoretical review to address the ubiquity of comorbidity among internalizing disorders such as anxiety, 15-75% of depressed youth carry a comorbid anxiety diagnosis, and 10-15% of youths diagnosed with anxiety received a comorbid depressive disorder diagnosis over their lifespan.

Seeley et al. (2011) examined samples of several mental health disorders, to include anxiety, from 14 countries and found comorbid symptoms consisting of subordinate internalizing factors such as depression, somatization, hypochondriasis, neurasthenia, anxious worry, and anxious arousal, with externalizing factors such as hazardous use of alcohol, conduct disorder, and drug abuse. Therefore, as a resettlement agency receives emigrants traumatized by forced migration and their arduous journey, comorbid symptoms through internalizing and externalizing factors are rooted within the individual and are possibly exacerbated upon resettlement. Females who exhibit symptoms of anxiety have greater problems in acculturation due to innate fear of social and professional experiences. These experiences are extremely important in assimilation. In contrast to their male counterparts, those who externalized comorbid symptoms of anxiety through the increased likelihood of drug use, possibly abuse of alcohol, and conduct disorder, decreased their ability to become gainfully employed, created difficulty

in concentration, and limits their ability to further educate themselves once resettled. In addition, these factors can influence anxiety symptoms in emigrant children, thus degrading their ability to successfully acculturate as well. According to Anyan and Hjemdal (2017), gender roles in the home and anxiety symptoms in adolescent children found family cohesion as a mediator, with exposure to stress at home that was perceived to result from sociocultural prescriptions of gender role norms largely accounted for anxiety and depressive symptoms among girls, whereas this relation was nonsignificant among boys. Hence, emigrants arriving at their destination, already susceptible to anxiety, are likely to display debilitating comorbid anxiety symptoms, and they are likely to end up in an environment that severely degrades their children's ability to acculturate upon resettlement.

According to Doğan (2016), religious beliefs and practices found in the Muslim majority nations of the Middle East and North Africa (MENA) are a factor in gender inequality and can be found in the well-developed patriarchal Islamic social and political systems. Women, born and raised in a social and political system with gender inequality built into its foundation, may result in lower self-esteem, as well as gender discrimination, leading to negative mental-health effects (Kira et al. 2015). Hence, when a Syrian emigrant migrates away from their war-torn Islamic culture, the cumulative effects of gender inequality coupled with internalized gender discrimination may create structural differences in processes between genders from which anxiety develops, and further complicates the acculturation process when resettled into the host nation. The differences in the effects of traumatic events between genders are found from the early

stages of development through adulthood and it is believed that gender may influence how one reacts to and copes with stressful and traumatic events. However, in one recent study by Khamis (2015), no statistically significant differences in mental-health symptoms between boys and girls studied in the Gaza Strip were identified, suggesting this to be a controversial and under-researched topic that requires further study.

Furthermore, gender inequality found in MENA nations suggests that those migrating away from the region possibly face gender differences in knowledge of mental and physical health, as Read and Reynolds (2012) identified disparities between men and women regarding health status. Men from the Middle East typically report better health than their female counterparts, suggesting women possibly have less interaction with health care systems, and the differences in mental and physical health remains largely unknown and ambiguous. Additional research with migrants from Somalia also indicates discrimination as a factor in mental health disparities based on gender, as Ellis et al. (2010) examined the role of acculturation and gender with results revealing that females displayed higher levels of positive mental health when they identified with the Somali acculturation, as opposed to males who displayed higher levels of positive mental health when they had stronger American acculturation. Both groups identified as having an association with poor mental health when faced with discrimination, thus leaving the real and perceived nature of discrimination, mental health disparities, and differences between genders unresolved in emigrants.

In recent years, the politics of immigration have become increasingly hostile in western nations, to include the United States. What was once a safe haven for migrants

has led to fear, instability, and hostility toward those seeking asylum. Today, immigrants in many western nations face confinement, family separation, restricted access to employment, lack of access to education, as well as issues pertaining to adequate housing and basic health care (Filges et al., 2016). Moreover, while female migrants have been identified as having more mental health issues than males, the disparity might be partially explained by the differences in traumatic events experienced by men and women throughout their migration period. During migration, women are more likely to experience events such as sexual assault, which is a predictor of mental-health issues; however, the types of traumas experienced cannot fully explain the prevalence of mental health disparities between men and women, thus leaving a gap in academic knowledge and literature (Filges et al., 2016). While mental-health disparities based on gender are unresolved, females are generally understood to be more susceptible to other internalizing mental-health disorders; however, the reasoning why they are more susceptible is the construct which remains under debate and unresolved. While level of exposure to a traumatic event is generally ruled out as a factor contributing to differences between gender regarding the vulnerability to mental-health issues, females are thought to acquire symptoms of anxiety and depression more often than men. As discussed by Solomon et al. (2005), who examined gender differences following a terrorist attack, women typically experienced PTSD and depressive symptoms more than men, and subsequently they endured symptoms of stress at a rate six times higher than men. Furthermore, females displayed a sense of safety and self-efficacy that was identified as lower than their male counterparts, even though female participants were exposed to fewer terror events than

their male counterparts. Solomon et al. concluded that women will likely be more vulnerable to mental-health issues related to violence, as well as gender differences in coping mechanisms related to traumatic events.

Very few academic resources are available that examine the differences between gender relative to anxiety and acculturation. However, academic resources generally accept that women face significantly more discrimination upon resettlement and face more challenges in adjustment during the acculturation process. One such study by Knappert et al. (2018) examined Syrian refugees in Turkey and found that the roles of gender were significant regarding inclusion and exclusion; and females were at a disadvantage when gendered roles prevailed in their home and host societies. Moreover, females are associated with higher vulnerability toward mental-health issues among unaccompanied refugee minors, according to recent research conducted in Europe (Mohwinkel et al., 2018). According to Schweitzer et al. (2018), while emigrant females are understood to be more susceptible to mental-health issues, there currently remains no empirical research into the psychiatric health of refugee women at risk, those who are single and unaccompanied, or those who are the head of the household. Schweitzer et al. conducted a study on female refugees from Sudan and Burma to determine levels of psychiatric symptomatology. The results revealed that women identified as at-risk reported significantly higher psychiatric distress, with 41% showing symptoms of PTSD, 20% anxiety, and 41% depression. The results were surprising as higher levels of traumatic events and post-migration living difficulties predicted higher levels of depression and trauma symptoms but did not reveal higher levels of anxiety. In turn,

having children and greater levels of English fluency predicted higher levels of anxiety symptoms in at-risk female participants. The authors concluded that there is a requirement for a comprehensive psychiatric assessment to identify women in need of treatment very early in the resettlement process, with implications for medical practice, service delivery, and policy programs (Schweitzer et al., 2018).

Education as a Factor in Anxiety and Acculturation

Globally, immigrant students have become one of the fastest-growing demographic groups, and obstacles when resettled, such as language barriers, financial burden, discrimination, and a general lack of access to education, have been identified as predictors of stress and anxiety (Lou & Noels, 2020; Matsumoto, 2001). Immigrants from all regions struggle with education when resettled into a host nation, and while the typical immigrant deems education of high importance, less than 1% globally have access to higher education (Safak-Ayvazoglu & Kunuroglu, 2019). In addition, the construct of education relative to emigrants and resettlement is twofold, as those who were well-educated prior to migration may find the resettlement process easier to navigate, but they face more stress and anxiety as they acculturate due to higher expectations, as immigrants are typically underemployed and face significantly lower levels of social status as attained prior to migration (Ellis, 2020). As with Syria, the general population prior to the conflict may have assumed they were on the path to secondary and postsecondary education, but conflict, instability, and mass migration delayed educational plans and likely contributes to significant stress, anxiety, and poor psychological well-being (Ellis, 2020).

Posselt et al. (2018) conducted a systematic review designed to synthesize quantitative and qualitative evidence regarding enablers of psychological well-being in refugees and asylum seekers. Posselt et al. identified eight enablers of psychological well-being: one is education and training opportunities, and three others, cognitive strategies, employment and economic activities, and behavioral strategies, are indirectly related to education. Within this study, we can identify education as a critical component to successful acculturation into the host nation, and further link education directly to symptoms of anxiety and one's psychological well-being. According to Sheikh et al. (2019), a diverse set of outcomes is linked to emigrants having educational opportunities, all of which facilitate resettlement and acculturation processes. Education has been viewed as a factor that contributes to increasing one's health and well-being, as well as increasing the likelihood that those in the host nation will view the emigrant as being more trustworthy and will view them in a positive manner. In addition, Sheikh et al. stated that there is evidence suggesting education facilitates acculturation, as it functions to acclimate the emigrant into the customs and mores of the host nation and bring the emigrant into the mainstream elements found within the culture of the host nation.

Emigrants forced to flee their nation face significantly more challenges than immigrants, as they often struggle with language barriers, stress, anxiety, family separation, lack of affordable and acceptable housing, and instability with residency status, all of which present formidable barriers to accessing educational opportunities. Furthermore, Sheikh et al. (2019) described gaps in academic literature pertaining to emigrants and higher education as there is a limited amount of research within the

domain of educational opportunities and experiences of the emigrant. While there is a large body of research on refugee school children, the body of literature on the experiences of tertiary education for adult refugees is limited. Moreover, Björkenstam (2020) stated that refugees resettled in Nordic countries suffered from poor psychological well-being due the lack of treatment for depression, and educational status is directly related to common mental-health disorders, such as anxiety. According to Choi et al. (2020), gender also serves as a moderator for emigrants on the effect of education and acculturation. Choi et al. conducted a study on older Korean immigrants to examine the role of gender variations between acculturation and cognitive functions. The results revealed that gender was significant in the relationship between education and acculturation relative to cognitive function and held a positive association between education with acculturation identified as being much higher among female participants with higher cognitive health returns, even though females were severely disadvantaged in educational resources and opportunities when compared to their male counterparts (Choi et al., 2020).

The migration process emigrants experience in their journey to North America is an arduous ordeal, strewn with stressful events and unique challenges. The federal governments of both Canada and the United States typically support a refugee family for one year; hence, many emigrants acquire jobs designed for simple survival, which often derails efforts to seek out educational opportunities and hinders their opportunity to successfully acculturate (Loo, 2017). Therefore, as the emigrant has endured the negative experience of migration, traveled many miles, and finally arrived at their destination, the

anxiety and stress are magnified as foreign nations have institutional barriers that impede successful assimilation during the resettlement process. Sheikh and Anderson (2018) wrote that the relationship between education and acculturation is bi-directional and cyclical, as acculturation may facilitate education; however, education may also facilitate acculturation. As discussed by Sheikh and Anderson in their recent study with refugees from Cambodia, females under the age of 31 were more likely to acculturate through participation in education, while women who were integrated were more likely to have more opportunities in education and participants with lower levels of educational attainment prior to migration found it more difficult to find employment and reported lower levels of self-esteem. From this perspective, Sheikh and Anderson further identified that through the process of acculturation, students who were better integrated into the host nation reported more confidence in academic achievement, thus suggesting that education is associated with increases in identification with the host nation, regardless of their continued identification with their country of origin. Furthermore, Sheikh and Anderson identified differences in the relationship between education and acculturation as a function of demographic variables, particularly age, gender, and socioeconomic status, and showed that education served as a catalyst for the acculturation process. Older emigrants held higher levels of acculturative anxiety and stress, thus creating a barrier for higher educational opportunities, while younger emigrants were more likely to successfully acculturate with education acting as a catalyst (Sheikh & Anderson, 2018).

Education and Syrian Emigrants

Steinhilber (2019) conducted a representative study on the mental health and psychosocial needs of adult Syrian refugees and disadvantaged Jordanians to evaluate their mental health in relation to higher education and the effects of psychosocial support programs. The study revealed that more than a third of the participants reported significant emotional distress, which is negatively associated with education levels, as well as reduced functioning in daily activities, with female participants reporting higher levels of reduced functioning in daily activities than their male counterparts. Furthermore, through implementation of the BAI, Steinhilber identified 35% of all participants as having moderate anxiety and 9% reporting severe levels of anxiety. Thus, Syrian emigrant education may be a contributing factor in the development of anxiety and may impact the acculturation process; however, further academic research related to anxiety and acculturation is limited and identified as a gap in the literature.

Prior to the civil war, Syria placed an emphasis on their educational system, and literacy of the population was considered high by Middle East standards with a 92.45% overall literacy rate (94.61% for males and 90.22% for females). Since the start of the conflict in 2011, literacy rates have dropped significantly with an estimated overall literacy rate of 86.4% (91.7% for males, and 81% for females; CIA, 2020; UNESCO, 2020). According to Immerstein and Al-Shaikhly (2016), pre-war education in Syria was designed somewhat similar to western nations, as Syria followed a 12-year system of basic and secondary education, consisting of nine years of basic education and three years of secondary education, with grades 1-9 compulsory, and secondary education, grades

10-12, offered in 3-year general secondary schools or in a three-year technical or vocational school. Despite the decade-long Syrian conflict, and mass migration, very little research has been conducted on Syrian emigrants regarding the construct of education in relation to anxiety and acculturation. However, as stated by Sheikh and Anderson (2018), education is critical for successful acculturation, and the lack of acculturation into a host nation amplifies the likelihood of developing common mental health disorders such as anxiety. Haumeder et al. (2019) wrote that there is a growing refugee population worldwide and an urgent need to better understand potential risk and protective factors associated with psychological adaptation into host nations.

In 2017, UNESCO conducted a comprehensive case study on the higher education of Syrian refugee students resettled in Turkey, as well as a twin study on Syrian refugee students in Jordan (El-Ghali & Al-Hawamdeh, 2017; Yavcan & El-Ghali, 2017). According to Yavcan and El-Ghali (2017), while many of the Syrians resettled in Turkey desire to pursue higher education, they face barriers to further their education, with language barriers being a primary concern, as Syria is an Arabic-speaking nation, and most do not speak Turkish; difficulty filling out applications for school and academic programs was identified as a hinderance in academic achievement. Moreover, the Yavcan and El-Ghali (2017) identified the Turkish educational infrastructure as an issue and one that can only accommodate about half of the 2 million Syrian applicants for higher education. According to El-Ghali and Al-Hawamdeh (2017), Syrian refugees resettled in Jordan faced a similar experience, as those resettled in the country faced barriers to higher education in the form of financial burden, high cost of living, lack of English

language requirements, as well as a lack of legal documentation required to enroll; many Syrian emigrants fled the country without proper documentation. Both studies from Jordan and Turkey reported a similar conclusion: in the future, an uneducated lost generation from Syria will not be equipped to rebuild the economic, political, educational, and civilian infrastructure in a post-war Syria (El-Ghali & Al-Hawamdeh, 2017; Yavcan & El-Ghali, 2017).

According to Demakakos et al. (2008), subjective socioeconomic status mediated fully the associations of education and occupational class with long-standing illness or disability, diabetes, depression (only in men), and hypertension (except its association with education in women) and partially mediated associations with remaining health outcomes. These findings constitute evidence that one's socioeconomic status is a means through which education and occupational class influence health, and education is considered a mechanism that is transformed into personal experience and self-perceptions about social standing, which further translates into physical and mental health. Furthermore, research on socioeconomic status reveal that those from a lower socioeconomic bracket will typically display more physical and mental-health issues, particularly anxiety and depression, than those who come from a more affluent background (Hoebel et al., 2017). Bauer et al. (2020) conducted a study on the relationship between pre-migration socioeconomic status and self-reported health indicators following migration in Syrian refugees. The study was designed to determine how the effect on post-migration socioeconomic status influenced the change in health satisfaction from a life-course perspective. The authors posit that migration is a

fundamental life-course transition that is accompanied by a massive change in social and physical exposures. Thus, there is evidence that some migrants with high educational degrees only find low occupational positions because their qualifications are not recognized in the host country, and shortly upon resettlement in their host nation, refugees from diverse socioeconomic backgrounds may find themselves in the same position regarding their housing situation in large refugee communities and their legal status, which does not always allow them to seek employment, and diminishes their overall status to that of a significantly lower standard (Bauer et al., 2020).

Bauer et al. (2020) stated that a higher pre-migration socioeconomic status is significantly attenuated in the first years for Syrian emigrants upon resettlement. While the Syrian emigrant might maintain high expectations based on pre-migration acquired education, these expectations might not be met as the emigrant seeks employment, thereby exacerbating symptoms of anxiety. Bauer et al. sampled 2,209 Syrians who resettled in Germany from 2013 to 2016, with 1,399 adult males and 810 adult females. The educational status in this study between genders was remarkably similar, as 39.3% of females had advanced beyond middle school, compared to 40.8% of male participants. The results of the study revealed that pre-migration high socioeconomic status in Syria held some health benefits, as differences in health satisfaction across socioeconomic status while in Syria were reduced after migration, and health satisfaction improved among those with the lowest economic rank but became worse among those with average or higher economic rank. Bauer et al. showed that when separate analyses for men and women were displayed, male participants from lower socioeconomic backgrounds

identified with the lowest health satisfaction before migration, which the authors noted is similar among immigrants from other nations, as observed in migrant workers, where women showed a higher health satisfaction increase post-migration than men (Bauer et al., 2020). Therefore, from this study, we can postulate that even with similar samples based on gender, there will be differences in their ability to successfully acculturate, as well as differences between genders in the manifestation of anxiety and other mental-health disorders.

Haumeder et al. (2019) conducted a study with Syrian emigrants who migrated to Germany which revealed that coping, self-efficacy, resilience, and environmental factors are predictors of psychological adaptation and PTSD. This study suggests that having a higher perceived ability to deal with the consequences of potentially traumatic events, as well as access to certain environmental factors, were associated with better perceived psychological adaptation to German society and better mental health. The Haumeder et al. study resonates with studies by Sheikh et al. (2019) and Björkenstam (2020), which suggested that lack of educational opportunities for an emigrant creates an environment that foments poor psychological well-being, creates higher levels of stress, lowers self-esteem, and increases the likelihood of developing symptoms of anxiety. According to Jabbar (2016), vocational training programs in the Zaatari refugee camp in Jordan were positively associated with enhanced confidence and self-esteem in female Syrian refugees, assisted in improving their occupational and entrepreneurial skills, generated income for their families, and provided an observable sense of hope. These observations suggest that some cultural components related to gender-based biases in an Arabic

country such as Syria may be somewhat neutralized under these conditions, thus providing women the opportunity for more gender equality and opportunities for education. Regardless of gender, poor conditions, lack of resources, and other barriers, such as language skills, and financial burdens, the Syrian emigrant still faces numerous obstacles in achieving academic advances. A recent study conducted by Aydin (2019) revealed that while efforts to include Syrian emigrant students into Turkish school systems were sincere, the poor conditions of the schools, limited capacity and training of teachers, and lack of resources and inappropriate curriculum impeded access to a quality education. While teachers in neighboring countries acknowledge the necessity for improved language skills, such as English as a foreign language, limited resources and a lack of training prevent progress and prove to be formidable obstacles in academic progress, the Syrian emigrant remains hopelessly reliant on the host nation, and lives with anxiety, depression, under extreme duress, and faced with numerous obstacles and challenges as they attempt to attain educational opportunities, academic advancement, and acculturate into a new and unforgiving culture (Karam et al., 2017).

Summary

This literature review demonstrates that the typical the Syrian emigrant resettled in the United States is under duress, likely suffers from high levels of anxiety, and faces significant challenges during the acculturation process. In this chapter, I displayed an exhaustive examination of current literature regarding Syrian emigrants living in the United States, and myriad psychological issues they suffer, as well as the struggles they face as a collective whole. I provided the research strategy and search terms used to

explore all concepts and constructs of the Syrian emigrant experience during migration and upon resettlement.

The TMT is the theoretical framework used to drive this quantitative research study. The foundation of the TMT is that when an individual is faced with one's mortality, they will implement existential buffers designed to mitigate anxiety brought on by mortality, thereby assisting the individual in managing thoughts of death and mortality. In turn, the literature reveals that these existential buffers used to mitigate anxiety in death awareness are often developed from one's cultural background, which includes religious faith and spirituality (Juhl & Routledge, 2016; Kesebir, 2014). However, when these coping mechanisms are broken and unable to be retrieved, the individual fails to manage death awareness, thereby allowing the symptoms of anxiety to flourish (Kesebir, 2014).

This literature review provided an exhaustive review of the dependent variables anxiety and acculturation. I provided a thorough definition of anxiety, how anxiety develops in an individual, as well as how anxiety affects one's cognitive faculties. Furthermore, the literature showed that Syrian emigrants are highly likely to suffer from symptoms of anxiety and myriad mental health issues, all of which present significant challenges for the individual during the acculturation process. I provided a review of acculturation, which is defined as an individual accepting practical cultural components of the host nation, while maintaining practical components of their country of origin, thereby developing a harmonious balance between cultures and successfully acculturating into the host nation (Gürsoy & Ertaşoğlu, 2018). The literature indicated that the typical

Syrian emigrant likely struggles with acculturation once resettled into the United States, with both independent variables, gender and education, likely a contributing factor to successful assimilation.

I provided a thorough and exhaustive examination of the independent variables. Gender is identified as a likely factor influencing both anxiety and acculturation. I identified that the vast majority of Syrian emigrants are Muslim, thus we find the cultural component applied to gender as a contributing factor in developing anxiety as well as issues related to acculturation. Furthermore, we found discrimination and institutional biases during the immigration process as additional factors influencing anxiety and acculturation, both prohibiting successful assimilation. I also identified the lack of access to continuing education as a factor influencing Syrian emigrants to the United States, and a continuing cause of stress and anxiety. Prior to the civil war, Syria was a highly educated society with an overall literacy rate of 92.45% (CIA, 2020; UNESCO, 2020). From the literature, I found that the construct of education presents a paradox, as education both assists in navigation through the resettlement process but also creates anxiety, as those who are educated may have higher expectations, only to find themselves unemployed or underemployed (Ellis, 2020).

Throughout this literature review, I found that levels of anxiety in Syrian emigrants resettled in the United States is an under-researched topic. However, it can be assumed the majority of Syrian emigrants forced to flee since the civil war began face myriad mental health issues, to include anxiety. Moreover, there are significant gaps in literature regarding the dependent variables, anxiety and acculturation, in relation to both

independent variables, gender and education, with a significant dearth in academic literature. Furthermore, there are significant gaps in literature related to all constructs of this quantitative research study regarding Syrian emigrants resettled in the United States. The expectations of this quantitative research study are to fill a void in literature related to a specific Syrian population resettled in the United States, with further expectations that this study will identify differences in anxiety and acculturation based on gender and education, thus developing creative ideas for further study. In addition, academic insight into factors that affect anxiety and acculturation in adult Syrian emigrants to the United States can be used to develop better policies to support resettlement for emigrants from Syria, as well as other nations.

In the next chapter, the research methodology, I will provide a review of the quantitative research methods used to collect data, analyze data, and the method used to measure the data. I will provide the research design and rationale, as well as the population of study, how the population was recruited, and the measurement scales implemented to score anxiety, acculturation, gender, and education. In addition, I will provide a narrative of my role as the researcher, the data analysis plan, and threats to validity and reliability along with ethical concerns and the strategy to mitigate ethical concerns.

Chapter 3: Research Methodology

The purpose of this quantitative research study was to examine the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. In this chapter, I provide a detailed narrative of the chosen research design and rationale for the study, the population, and the sampling procedures. Furthermore, I discuss the key dependent variables, anxiety and acculturation, and independent variables, gender and education, and the procedures and measurement instruments utilized for data collection. I discuss the data analysis strategy in detail, as well as the method for analyzing collected data, along with the strengths and weaknesses of the research design. The chapter concludes with an analysis of ethical procedures and policies that were implemented to safeguard collected data and ethical guidelines followed to ensure the safety of participants, in accordance with the Walden University Institutional Review Board and the Belmont Report.

Research Design and Rationale

This quantitative research study implemented a correlational research design to examine the relationship between anxiety and acculturation among adult Syrian refugees living in the United States based on gender and education. A correlational research design is implemented to determine if there is a relationship between two or more variables but does not imply cause and effect (Lumen Learning, n.d.). In addition, a correlational research design is recommended when the statistical relationship of interest is thought to be causal with no manipulation of the independent variables (Chiang et al., 2015; Lumen Learning, n.d.). In this research study, the independent variables were not manipulated as

both independent variables, gender and education, were provided through a self-report questionnaire, and the collected data were scored in accordance with the provided scoring keys associated with the measurement instrument, thus response scores remained as reported.

The independent variable gender is a categorical variable, and there is no specific ranking; gender in my study equals male or female. The independent variable education is a categorical variable, and participant education levels were scored in ascending order of education attained in their Syrian educational system; there were five education levels, less than 7th grade, less than 9th grade, 9th grade, high school, and professional or doctorate. Both the BAI and ASMA were offered in English and Arabic on the Qualtrics XM website (Appendix A: BAI Permissions, Appendix B: ASMA Permissions).

Administration of the BAI and ASMA was implemented through the use of the online platform Qualtrics XM, which was designed to post multiple choice survey questionnaires and was made available to participants. At the time of this study, there was both a real and perceived concern of discrimination against the Muslim population in the United States. Islamophobia, prejudices against followers of Islam, permeates American society, and presents an undue threat against the population, and it would have been unethical to create an environment where the population endured more stress or might have been physically threatened, which further supported the use of an online platform for data collection. The independent variables of gender and education were acquired from a standard demographic questionnaire, which was administered along with the BAI, ASMA, and informed consent form. Both the demographic questionnaire and informed

consent form were available in Arabic on the Qualtrics XM which was translated through use of Yandex Translation. Yandex Translate is free to the user, rated for business use, and comparable to Google Translate (Gunn, 2022; Yandex, n.d.).

A correlational research design was utilized to examine the relationship between anxiety and acculturation among adult Syrian refugees living in the United States based on gender and education. For Hypotheses 1 and 4, a Mann-Whitney U test was used to determine the p -value (probability value) to determine whether there was evidence to reject the null hypothesis. The results with p -value of less than 5% ($p \leq 0.05$) determined statistical significance and provided evidence for rejecting the null hypothesis. For Hypotheses 2 and 5, a Spearman's correlation test was performed, results with p -value of less than 5% ($p \leq 0.05$) determined statistical significance and provided evidence for rejecting the null hypothesis. For Hypotheses 3, the data returned for the anxiety variable was not normally distributed, therefore a generalized linear model test was performed. For Hypothesis 6, the data returned for the acculturation scale was normally distributed, therefore a two-factor analysis of variance test was performed. The results with p -value of less than 5% ($p \leq 0.05$) determined statistical significance and provided evidence for rejecting the null hypothesis. For Hypotheses 4, 5, and 6, the ASMA was evaluated and scored as a whole; the ASMA has two subscales, the American Social Norms subscale, and the Islamic Identity subscale, which can be used as supplementary data (Bagasra & Mackinem, 2019).

The use of the BAI and the online survey platform Qualtrics XM both required a fee. Permissions for use of the BAI was granted by Pearson, Inc. (Appendix A) and

expired December 31st, 2021. The ASMA was free and permissions granted (Appendix B). The Qualtrics XM survey platform allowed for 133 survey participants and remained active for 1 year, expiring in March, 2022.

Role of the Researcher

My primary role as the researcher in this quantitative correlational research study was to coordinate with the humanitarian agency and partnered contacts who distributed the research study flyer, in both an English and Arabic version to inform Syrian emigrants of the opportunity to participate. Described as somewhat passive, my role as the researcher was to provide administrative control over the online platform, establish a coherent webpage with a welcome to the study and instruction page available in both English and Arabic, an informed consent form, a demographic questionnaire, and the BAI and ASMA measurement scales. The informed consent form, demographic questionnaire, BAI, and ASMA were provided in Arabic to ensure participants can comprehend the documents with as little confusion as possible, and it was framed so completion of the required documents can be conducted in a timely manner and required as little external assistance as possible. The primary concern as the researcher was having incomplete data returns on the BAI and ASMA, as well as the demographic questionnaire and informed consent form. The opportunity to contact participants after they conducted the survey was limited, and with a very small sample, it was crucial that all information be filled out correctly during the first submission.

There was no conflict of interest between the researcher, participants, or the agency contacts, as I had no previous relationships to report. The agency and partnered

contacts were used to assist in distribution of the research flyer through their contacts and they were instructed to ensure all participants fully understood this study is voluntary. Because I had no direct contact with participants, the power dynamic was of little concern in the researcher-participant relationship. However, the humanitarian agency contacts are an authority figure to these Syrian communities and can be perceived as having a supervisory position or possibly a position of power, which can be construed as a threat to the participants and an ethical concern. I managed this power dynamic by thoroughly explaining the details of this research to the agency contacts via verbal communication, providing ample opportunity to answer questions, and navigating through each document that was posted for participants. I did not proceed with the study until all concerns were resolved and the contacts understood that this research study is to advance academic knowledge, and that each participant fully understood participation was voluntary.

Methodology

Population and Sampling Procedures

The process of attaining an agency to agree to allow future access to a population consisting of adult Syrian emigrants in the United States was extremely challenging and time-consuming. The humanitarian agency and partner who agreed to assist in distribution of the research study flyer have hosted Syrian emigrants resettled in the United States and recommended an award system in the form of a \$10 gift card for participation. In addition, both partners supporting this research project were compensated for their personal time allocated toward distribution of the research study

flyer. Introducing an award system presents ethical considerations as payment for participation could be considered as undue influence. According to Resnik (2015), the use of a monetary award in research can encourage the individual to participate against their own better interest by offering a financial reward. Individuals, especially from lower socioeconomic backgrounds, may be willing to take ill-considered risks for the sake of money, however empirical research indicates that research subjects are probably not unduly influenced by modest financial incentives for participation (Resnik, 2015). Therefore, a modest award of \$10 did not appear to present a significant ethical concern as it was enough to ensure an adequate participation, and displayed appreciation for their time, however it did not present undue influence or appear as coercion. The compensation provided to the partnered supporters also did not present undue influence or appear as coercion as both are gainfully employed, and their time in support of this research was conducted on their personal time, therefore compensation was a logical and fair approach for their efforts. The researcher and partnered supporters agreed to attempt to distribute the research study flyer to acquire a maximum of 100 adult Syrian emigrants as participants ($N = 50$ female; $N = 50$ male) with a minimum of 88 participants ($N = 44$ female; $N = 44$ male).

The sampling method was probability sampling, as all constituents who met the criteria of being an adult Syrian who departed the country after the beginning of the civil war in 2011 and resettled in the United States had the opportunity to participate. The online platform Qualtrics XM, which is a secure online survey administration software, and was designed specifically for this research study with a user-friendly website to

administer the required documents and measurement scales. The welcome to the study and instruction sheet, informed consent form, demographic questionnaire, and the BAI and ASMA and corresponding Arabic versions, were administered through Qualtrics XM, which provides an option for an Arabic version for participants with poor English skills.

Recruitment and Selection of Participants

The population for this research study was adult Syrian emigrants resettled in the United States since 2011. The Syrian civil war began in earnest in the spring of 2011; therefore, any Syrian emigrants arriving prior to 2011 would not have been forced to flee the country due to the civil war. The age parameter was for adults over the age of 21 years with no maximum age limit. Participants were deemed to meet the eligibility criteria by the humanitarian agency and partnered contacts, who have maintained a professional relationship with the individuals and families. The initial goal was to collect responses from a maximum of 100 participants (N=50 male; N=50 female). G*Power was used to estimate the number of participants required for this study, assuming a one-tailed test and an effect size of .54, an alpha of .05 and a power of .8. This resulted in an estimate of 88 total participants (N=44 male; N=44 female) to detect a difference between the groups.

Participants were recruited through the method of convenience sampling through distribution of the research flyer by the two partners via verbal communication and email. Participants were directed to the Qualtrics XM website where they viewed the introductory and welcome page, both in English and Arabic, as well as the informed

consent form, demographic questionnaire, and the two measurement instruments, the BAI and ASMA. Participants clearly understood this research study is voluntary and had the option to proceed with the study or decline and exit the study. The Qualtrics XM online platform was made available for 6-weeks to allow for maximum participation. Upon completion of required documents, participants viewed a thank you, a notice they have completed the survey, and were directed to exit the Qualtrics XM website; in addition, they were directed to contact me via my Walden University email to receive the \$10 gift card.

Data Collection Measurement Instruments

The problem this quantitative research study addressed are the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. This quantitative correlational research study used the BAI to measure anxiety in adult Syrians living in the United States and the ASMA used to measure acculturation in adult Syrians living in the United States.

The BAI consists of 21 items measured on a Likert scale of 0-3 with raw scores ranging from 0-63 (Beck, Emery, & Greenberg, 2005; Beck, Epstein, Brown, & Steer, 1988). The levels of anxiety range from minimal anxiety (0-7) to mild anxiety (8-15), moderate anxiety (16-25), and severe anxiety (26-63) (Beck et al., 1988). The BAI measurement instrument was acquired at a cost to the researcher from Pearson Assessments, which provides educational research tools and permissions for use in research (Appendix A; Pearson, n.d.). The BAI provides reliable data for participants aged 17 through 80 and has been proven as a reliable instrument for measuring anxiety.

The BAI was an appropriate measurement instrument for this study, as it is very easy to administer, requiring just 5-10 minutes to complete. For the original English-language BAI, the construct validity has been shown to have good convergence with other measures of anxiety including the revised Hamilton Anxiety Rating Scale ($r = 0.51$) and the STAI ($r = 0.47-0.58$) (Heale & Twycross, 2015; Julian, 2011). In addition, the BAI has been identified as maintaining relatively high reliability with an internal consistency Cronbach's alpha of .92, which achieves a rating of good to excellent for reliability. In turn, the test-retest reliability (1-week) is .75, which is acceptable on the reliability scale, and served the purposes of this research as the ease of administering and understanding the BAI by participants allows for a lower test-retest rating due to expected complications and confusion with a population that likely speaks Arabic as a first language. Permissions for use of the BAI was provided by NCS Pearson Inc. (Appendix A). For use in this Syrian emigrant population, the BAI was translated into Arabic using Yandex Translate.

The ASMA is a 16-question inventory, with each question having five multiple-choice answers. Scores are calculated as 1 = *Not true of me*; 2 = *Slightly true of me*, 3 = *Moderately true of me*, 4 = *Very true of me*, and 5 = *Extremely true of me* (Bagasra & Mackinem, 2019). The raw scores are tallied as 1 through 5 with all 16 ASMA questions evaluated to determine the value. While some researchers do divide the questions in the ASMA into subscales, for this study the total raw score (range 16 – 80) was used for the analysis. Higher scores indicate higher conformity to an American identity. The ASMA

was developed by Anisah Bagasra, PhD, who provided permissions for use in this research study via email (Appendix B).

According to Anisah Bagasra and Mackinem (2019) the recently developed ASMA was designed to measure the degree to which an individual is integrated into American culture (through conformity to American social norms) and to what degree an individual espouses Islamic values. Bagasra and Mackinem (2019) found that many existing instruments to measure acculturation include culture specific constructs that correspond to identity, values, and behavior, and these measures have struggled to incorporate value and attitude indicators, which necessitated the need for further development and testing. The ASMA is easy to administer, takes 5-10 minutes to complete, and is easy for participants to understand. According to Bagasra and Mackinem (2019) the ASMA yields a Cronbach's alpha of .79, which is somewhat low, however it is still rated as acceptable, and provided the advantage of being easy to administer, easy for participants to understand, and addresses the current cultural sensitivities related to the social attitudes and the environment in the United States toward the followers of Islam regarding prejudices, biases, and discrimination. Therefore, the ASMA was deemed an appropriate measurement instrument in this quantitative research study.

Data Analysis Plan

This study was designed to examine the differences in anxiety and acculturation based on gender and education in adult Syrian emigrants resettled in the United States. As previously stated, the research questions were: (a) Is there a difference in anxiety based on gender among adult Syrian emigrants? (b) Is there a difference in anxiety based

on education among adult Syrian emigrants? (c) Is there a difference in anxiety based on gender and education? (d) Is there a difference in acculturation based on gender among adult Syrian emigrants? (e) Is there a difference in acculturation based on education among adult Syrian emigrants? (f) Is there a difference in acculturation based on gender and education? Collected data were processed through the IBM Statistical Package for the Social Sciences Version 25 (SPSS-25), and descriptive statistics using a Mann-Whitney U, the Spearman's correlation, a generalized regression test, and a two-factor analysis of variance to answer the research questions and provide associations between the dependent variables, anxiety and acculturation, based on the independent variables, gender and education; the collected data were presented in appropriate tables within the body of the research study. Data cleansing and screening were handled via a thorough examination of all returned responses. A frequency test was analyzed with SPSS-25 through descriptive statistics, which displayed the number of occurrences, as well as the mean, median, and mode. Coding errors, missing data, and outliers were identified through examination of the responses and through the SPSS-25 program. Access to participants for follow-up questions was not available, therefore coding errors, missing data, and outliers were promptly removed from the study when identified.

The BAI was administered to measure anxiety and scoring was conducted in accordance with the BAI scoring instructions. The ASMA was implemented to measure acculturation, and scoring was also conducted in accordance with provided ASMA scoring instructions. The independent variables were collected from a demographic questionnaire designed specifically to collect data for this research study. The

demographic questionnaire consisted of age, gender, education level attained in Syria, and date of departure from Syria. Due to the difficulty of acquiring access to a population for this study, I attempted to retain as much data as possible from the online study; however, discrepant returns were analyzed to determine viability for the study, and when it is determined such outliers will reflect poorly on reliability and validity, they were removed.

For hypotheses 1 and 4, a Mann-Whitney U test was used to determine the p -value (probability value) and to determine whether there was evidence to reject the null hypothesis. The results with a p -value of less than 5% ($p \leq 0.05$) was determined to be statistically significant and provided evidence for rejecting the null hypothesis. For hypotheses 2 and 5, a Spearman's correlation test was performed, results with p -value of less than 5% ($p \leq 0.05$) determined statistical significance and provided evidence for rejecting the null hypothesis. For hypothesis 3, a generalized linear model test was performed to account for data not being normally distributed, and hypothesis 6, a two-factor analysis of variance test was performed, as the data were approximately normally distributed, which was used to examine the interaction effects between the two independent variables on the dependent variables.

The research question and hypothesis are as follows:

Research Question 1 (RQ1): Is there a difference in anxiety based on gender among adult Syrian emigrants?

H_{01} : There is no difference in anxiety based on gender among adult Syrian emigrants.

*H*₁₁: There is a difference in anxiety based on gender among adult Syrian emigrants.

Research Question 2 (RQ2): Is there a difference in anxiety based on education among adult Syrian emigrants?

*H*₀₂: There is no difference in anxiety based on education among adult Syrian emigrants.

*H*₁₂: There is a difference in anxiety based on education among adult Syrian emigrants.

Research Question 3 (RQ3): Is there a difference in anxiety based on gender and education?

*H*₀₃: There is no difference in anxiety based on gender and education among adult Syrian emigrants.

*H*₁₃: There is a difference in anxiety based on gender and education among adult Syrian emigrants.

Research Question (RQ4): Is there a difference in acculturation based on gender among adult Syrian emigrants?

*H*₀₄: There is no difference in acculturation based on gender among adult Syrian emigrants.

*H*₁₄: There is a difference in acculturation based on gender among adult Syrian emigrants.

Research Question 5 (RQ5): Is there a difference in acculturation based on education among adult Syrian emigrants?

*H*₀₅: There is no difference in acculturation based on education among adult Syrian emigrants.

*H*₁₅: There is a difference in acculturation based on education among adult Syrian emigrants.

Research Question 6 (RQ6): Is there a difference in acculturation based on gender and education?

*H*₀₆: There is no difference in acculturation based on gender and education among adult Syrian emigrants.

*H*₁₆: There is a difference in acculturation based on gender and education among adult Syrian emigrants.

Issues of Trustworthiness

Threats to Internal Validity

According to Trochim (2020), internal validity determines the approximate truth regarding inferences for cause-effect or causal relationships. In addition, a correlational study tends to have low internal validity because variables will not be manipulated, and are more likely to reflect relationships that exist in the real world (Chiang et al., 2015). In contrast, as internal validity may be low, this serves as a strength for external validity which tends to be higher in a correlational research design. However, according to Trochim (2020), threats to validity can be divided into three categories: single group threats, multiple group threats, and social threats to internal validity. For the purposes of this research design, the most significant threat to internal validity was derived from the single group category and is focused on sample mortality, participants declining or opting

out of the study. As this study was focused on an esoteric group, Syrian emigrants to the United States, that face significant external pressures such as discrimination, prejudices, and religious bias, there was a high likelihood that many participants would decline to accept an invitation to join this study or would opt out of the study before completion. There were few control mechanisms available to mitigate sample mortality, as this research study was posted online, and participants were unavailable to meet in person, therefore threat to internal validity remains high.

The technique used to reduce sample mortality, and increase internal validity was to emphasize that this study posed no threat to participants through the use of an informed consent form and clear instructions for participants in both English and Arabic. In addition, I also emphasized that all data collected would only be used for the purposes of the study, and participation is anonymous. Moreover, to further enhance participant completion of the study, my efforts to assuage any concerns with the partners, thereby instilling confidence in the ethical standards of the study and increasing the likelihood of participation. While this method did not ensure success, and these efforts may have created a reduction in participation, the partnered contacts were trusted agents, and having had confidence in the study, this may have developed more confidence for participants, thereby possibly increasing internal validity.

Simple random sampling was used to collect data, which reduced sampling bias, as all participants had an equal opportunity to participate. However, selection bias may have been a factor that influenced results, which in turn, may have threatened validity. Selection bias is described as participants who are less likely to enter a study will be

under-represented, and those more likely to enter the study will be over-represented, thus the general population is not equally represented (Šimundić, 2013). The Syrian emigrant population in the United States is sensitive, and quite possibly factors such as negative or positive resettlement experiences influenced willingness to participate, which remains outside the parameters of this study. Therefore, selection bias was an unknown factor and represented in the limitations of this study.

A confounding variable is a variable that was not accounted for that can suggest correlation where there is none, and can introduce bias in a research design, thus having hidden effects on the outcome of the research (Glen, 2021). The most significant confounding variables in this research design were the date of which a Syrian emigrant was resettled in the United States, and the experiences of migration. The events a Syrian emigrant experienced during migration is an unknown and are outside the parameters of this research design, thus a limitation to the study, and it is an assumption that the experiences during migration did not influence the results. The date of resettlement is a confounding variable, following the 2016 general election, the Trump administration scaled back refugee admission to the United States, and placed a ban on immigrants from Muslim countries, thereby inciting anti-refugee and anti-Muslim sentiment in the United States (Utržan et al., 2018). Thus, it is an assumption that Syrian emigrants who were resettled after 2016 may experience more anxiety due to prejudices against Muslim emigrants, and outside the parameters of this study.

Threats to External Validity

According to Trochim (2020) external validity is related to generalizing of the intended research population, referring to the approximate truth of propositions, inferences, or conclusions. As a correlational study typically has low internal validity, conversely it typically has higher external validity, and as no controls were applied to the variables, this research study should have higher external validity; thus, the results should be able to be generalized to other Syrian groups in other regions of the United States and possibly other countries. However, the three major threats to external validity are described as people, places, and time, all of which pose a hazard to generalizing the results of the research (Trochim, 2020). Developing a research design with Syrian emigrants leaves vacant the opportunity to design the study with a homogenous sample. Participants in this study may have emigrated from Syria under vastly different circumstances, such as using accrued wealth or contacts external from the country. In contrast, other participants may have been forced to flee under extreme duress and with few personal effects, thereby leaving the threat to external validity unspecified and a limitation to the study. I have no methods to mitigate this threat to external validity; the backgrounds of each participant will remain largely unknown, and examination of participant backgrounds was beyond the scope of this research study.

Threats to Construct Validity

According to Trochim (2020), construct validity refers to the degree to which inferences can legitimately be made from the operationalizations in the research study to the theoretical constructs on which those operationalizations were based. Similar to

external validity, construct validity is related to generalizing; however, where external validity involves generalizing in the context of people, places, or times, construct validity involves generalizing related to the concept this research study intended to measure, and was deemed relatively high. The measurement scales implemented in this study, the BAI and ASMA, both register acceptable levels of construct validity as related to the research design; therefore, they raise the level of construct validity within the research study. I found no evidence that construct validity posed a threat to this research study, and no efforts to determine a method to mitigate construct validity threats were applied. However, use of the ASMA should be applied only in the United States, and other measurement scales to determine acculturation in studies in other countries should be evaluated and applied in accordance with accepted acculturation scales within their region of study.

Ethical Procedures

Approval for this study was provided by the Walden University Institutional Review Board (IRB), with an approval number of 09-10-21-00648439. Upon approval from my dissertation committee, the university research reviewer (URR) was requested. Once assigned, the URR reviewed and all requested revisions were provided, and the research did not commence until URR approval has been granted. This quantitative research study followed ethical guidelines by thoroughly explaining that participation is voluntary, and the partners were also instructed to ensure that all participants understand participation was voluntary. The informed consent form was provided in both English and Arabic on the Qualtrics XM website so as to further ensure there was no

misunderstanding between the participants, partners, and myself. Both the BAI and ASMA were provided in Arabic on the Qualtrics XM website, which provided an option for participants to view the Arabic version. Per the Walden University Dissertation Guidebook, all data, to include informed consent forms, demographic questionnaires, BAI and ASMA measurement forms, and any other data obtained from participants, will be safely stored for no less than five years upon completion of this research study, under double-locked security, and I will be the only individual with access. Participants remained anonymous as collected data on the Qualtrics XM platform was required to provide consent via a yes or no tab, and participants were not required to provide their name or personal information. The process of using a yes or no tab for consent was been approved by the Walden IRB. This research study followed the guidelines established by the Belmont Report of respect for persons, beneficence, and justice to establish ethical procedures and concerns used throughout this research study (Office for Human Research Protections, 2018).

Summary

This chapter provided a detailed narrative of the quantitative research design used to address the gaps in literature on the differences between anxiety and acculturation based on gender and education in adult Syrian emigrants living in the United States. In this chapter, I provided a review of the research design and rationale for my choice of a quantitative correlational research design and use of a Mann-Whitney U, the Spearman's correlation, generalized linear model, and a two-factor analysis of variance to examine the relationship between the dependent variables and independent variables. I provided a

detailed analysis of the dependent variables, anxiety and acculturation, as well as the independent variables, gender and education. I provided a description of the measurement scales, the BAI and ASMA, as well as a description of the demographic questionnaire. I described the population of study, recruitment procedures, how participants were recruited, how participants utilized the online forum Qualtrics XM website, the procedures for participants to enter the survey, and how participants will exit the survey. I provide the data analysis plan and the description of SPSS-25, and how data were analyzed to support either rejecting or failing to reject the null hypothesis. Furthermore, threats to internal validity, external validity, and construct validity were provided, as well as how I mitigated each identified threat. Lastly, the ethical procedures and policies for safeguarding data and protecting participants were provided, and hinged on approval from the Walden University IRB, and the Belmont Report.

The next chapter, the results of the study, will provide a detailed analysis of the collected data, the date and time of the study, and discrepancies. The chapter will include the descriptive statistics identified in the data, as well as detailed analysis and statistical significance of the collected data.

Chapter 4: Results

The purpose of this quantitative research study was to address the gap in literature on the differences in anxiety and acculturation among adult Syrian emigrants living in the United States based on gender and education. Data were collected through use of the Qualtrics XM platform, which remained open for 6 weeks in September and October 2021. The online platform maintained an informed consent and welcome to the study page, a demographic questionnaire, and both the BAI and ASMA. The dependent variables were anxiety and acculturation, with the independent variables being gender and education, as related to adult Syrian emigrants resettled in the United States since 2011. TMT served as the theoretical framework to drive this quantitative research study. The TMT posits that when an individual is faced with a significant threat, that individual will implement existential buffers as a coping mechanism to mitigate anxiety brought on by the fear of death and uncertainty.

In Chapter 4, the results of the study, I restate the research questions, corresponding hypotheses, and describe the research setting, to include possible factors that influenced data collection. Furthermore, I describe participant demographics, data collection methodology, and the development of the data collection period. The data cleansing and screening methodology is described in detail, along with the data analysis. I provide the results of the collected data, and address whether there was statistical significance to reject or fail to reject the null hypotheses. Lastly, I conclude with a summary of the results of the research study, and provide a review of Chapter 5, the discussion, conclusions, and recommendations for further research.

This quantitative correlational research study examined six research questions and hypotheses.

RQ1: Is there a difference in anxiety based on gender among adult Syrian emigrants?

*H*₀₁: There is no difference in anxiety based on gender among adult Syrian emigrants.

*H*₁₁: There is a difference in anxiety based on gender among adult Syrian emigrants.

RQ2: Is there a difference in anxiety based on education among adult Syrian emigrants?

*H*₀₂: There is no difference in anxiety based on education among adult Syrian emigrants.

*H*₁₂: There is a difference in anxiety based on education among adult Syrian emigrants.

RQ3: Is there a difference in anxiety based on gender and education?

*H*₀₃: There is no difference in anxiety based on gender and education among adult Syrian emigrants.

*H*₁₃: There is a difference in anxiety based on gender and education among adult Syrian emigrants.

RQ4: Is there a difference in acculturation based on gender among adult Syrian emigrants?

*H*₀₄: There is no difference in acculturation based on gender among adult Syrian emigrants.

*H*₁₄: There is a difference in acculturation based on gender among adult Syrian emigrants.

RQ5: Is there a difference in acculturation based on education among adult Syrian emigrants?

*H*₀₅: There is no difference in acculturation based on education among adult Syrian emigrants.

*H*₁₅: There is a difference in acculturation based on education among adult Syrian emigrants.

RQ6: Is there a difference in acculturation based on gender and education?

*H*₀₆: There is no difference in acculturation based on gender and education among adult Syrian emigrants.

*H*₁₆: There is a difference in acculturation based on gender and education among adult Syrian emigrants.

Setting

Due to the COVID-19 pandemic in 2020, and residual effects of the pandemic in 2021, in-person interviews were not feasible, and would have posed an unnecessary risk to research participants. Therefore, this study was conducted via an online platform (Qualtrics XM) with participants recruited through two contacts via a research flyer; the two contacts were approved by the Walden University IRB. Recruitment of Syrian emigrants proved challenging, and I established the research flyer distribution plan

through the development of the two contacts, described as partners, who had Syrian emigrant contacts through charitable organizations. One partner was located in the upper Midwest, while the second was located on the West Coast of the United States; each partner received \$250 for their time, which was approved by the Walden University IRB. Through each site, the partner delivered the research flyer via email to an initial group of adult Syrian emigrant participants. The research flyer described the research study, criteria for participation, a statement that participation is anonymous, and that each participant would receive a small incentive of a \$10 gift card for participating. Furthermore, the research flyer stated the purpose of the study, that the research study was voluntary, and that informed consent must be provided, as well as two links to the Qualtrics XM online platform; the research flyer was delivered in both Arabic and English with links to an English version and an Arabic version of the survey. Once the participant opened the online platform link, and submitted their results, they were instructed to email my Walden University account to receive the \$10 gift card, which was delivered as an eGift card. Upon receipt of an email from a participant, and subsequent delivery of the eGift card, I asked each respondent if they knew additional friends or family who might wish to participate, and to email the research flyer, thereby creating a form of snowball sampling.

Data Collection

The online survey received a total of 82 visitors, with the overwhelming majority opening the Arabic link; only 17 total surveys were conducted in English. A total of 28 surveys, 27 Arabic and one English, were incomplete, meaning the participant did not

complete the survey and submit their results. A total of 68 online surveys were submitted, with 14 having unusable data, typically a key variable was missing such as the participant's gender, education, or age, while one participant did not accept informed consent, and two participants had left Syria prior to 2011; these responses were removed from the study. Thus, a total of 54 responses were deemed valid (*Female*=31; *Male*=23).

Permissions to collect data was approved by the IRB (IRB approval number 09-10-21-00648439) on September 10, 2021, and expired September 22, 2022. The research flyer, both English and Arabic versions, were distributed to the two partners on September 14, 2021, with the intent of leaving the survey open for 2 weeks. However, due to a low response rate, following the guidance of my committee chair, I opted to keep the survey open until October 29, 2021 and sent multiple emails asking my partners and all respondents to forward the research flyer and link to any other potential participants. By October 29, the response rate had fallen to zero, and through discussion with the committee chair, we felt all means to gather recruits for the study had been exhausted and moved to data analysis.

Once the Qualtrics XM link is opened, the respondent encountered the informed consent and welcome to the study page, followed by demographic questionnaire; this portion took approximately 3-5 minutes to read and complete. Next, the respondent was directed to the ASMA and BAI acculturation and anxiety measurement scales respectively. The ASMA is 16 questions on a Likert scale, and the BAI is 21 questions on a Likert scale, and took approximately 15-20 minutes to complete both combined, with the entirety of the survey taking about 20-30 minutes to complete. However, the amount

of time to complete the entire survey is dependent on the participants fluency, so some participants may have taken longer than 30 minutes to complete the study. The frequency of the survey was once per participant. A known hazard of using an online survey is incomplete survey responses, and this was proven true, as a full 33% of respondents did not complete the survey as instructed. The Qualtrics XM platform did not provide location, as location was not considered as a variable in this research study. Hence, the location can only be described as either from the upper Midwest, or from the west coast.

Data were downloaded from Qualtrics XM site to an Excel spreadsheet, modified for SPSS-25, and uploaded into the program. There were no variations in the plan presented with the exception of extending the dates to which it was open by 4 weeks to allow for an acceptable number of participants, and there were no unusual circumstances encountered during data collection.

Demographics

The total number of valid participants in this research study were 54 (*Female*=31; *Male*=23), with 57.4% female and 42.6% male (Table 1). The majority of participants were relatively young, with 51.8% (28 participants) between 21 and 29 years old. The education level of participants in this research study can be seen in Table 1, but 66.7% of participants had a high school degree or higher.

Table 1*Demographic Characteristics of Participant Education Level*

Demographic category	<i>n</i>	Percent
Gender		
Female	31	57.4
Male	23	42.6
Age		
21-29	28	51.8
30-39	13	24.1
40-49	9	16.7
Over 50	4	7.4
Education level		
Less than 7th grade	4	7.4
Less than 9th grade	2	3.7
9th grade	12	22.2
High school	31	57.4
Professional or doctoral	5	9.3

Data cleansing and screening for the BAI and ASMA was conducted by mean substitution, entering the combined average for missing responses, with survey returns having completed at least 80% of the response. According to Downey and King (1998), the method of mean substitution replaces the missing value with the mean for the variable from all individuals completing that variable. This approach retains the original mean but reduces the variance for the new scale. In turn, participants who failed to enter a minimum of 80% of the response on either the BAI and ASMA, and key demographic questions of age, education, and gender, had their responses removed from the research study.

Data Analysis

The data collected from the Qualtrics XM online survey resulted in 82 visits, with a total of 54 valid surveys (*Female*=31; *Male*=23). A readily available feature of the Qualtrics XM survey site is to download surveys into an Excel spreadsheet. The initial reports were thoroughly analyzed to develop general themes in the data, highlight missing entries, and removed participant survey data that were incomplete or had key components missing (i.e., missing age, gender, education, or informed consent). Once the initial analysis was complete, the data were re-formatted and uploaded into the IBM Statistical Package for the Social Sciences Version 25 (SPSS-25). Coding for the SPSS-25 version of the Excel spreadsheet maintained the written answers per the ASMA and BAI questionnaires, then re-coded within SPSS-25 accordingly so as to perform diagnostics and statistical analysis; all survey responses deemed invalid or discrepant were discarded and removed prior to uploading into SPSS-25. A histogram and Q-Q Plot was conducted to determine the distribution, revealing the ASMA as having a normal distribution, however the BAI was identified as not having a normal distribution. Thus, for Research Questions 3 and 6, a generalized regression and two-factor analysis of variance were performed to account for not having a normal distribution.

According to Brysbaert (2019), studies with a low sample size can be underpowered, thus are less likely to find a true effect with the statistical significance, tend to have inflated effect sizes, and when a statistical significance is found, it is more likely to present false positives. Due to the low number of participants, the education dataset was re-categorized into two categories, with one level including those achieving

less than a high school education, and a second level including those achieving a high school education or higher, with 11 female and seven male participants having less than a high school education, and 20 female and 16 male participants having a high school education or higher.

Descriptive statistics for the BAI and ASMA are displayed in Table 2, with all 54 participants accounted for. The BAI had a mean of 9.8, a median of 3.5, and a standard deviation of 13.3. The ASMA had a mean of 44.3, a median of 44.5, and a standard deviation of 5.54. Table 2 displays the BAI skewness as 1.73 and kurtosis as 3.25, further establishing the BAI as not having a normal distribution for the BAI, while the ASMA has a skewness of -0.65 and a kurtosis of 1.07, thereby establishing the ASMA as having approximate normal distribution.

Table 2*Demographic Characteristics for BAI and ASMA*

	<i>N</i>	Mean	Std. deviation	Minimum	Maximum	Skewness	Kurtosis
BAI	54	9.89	13.37	0	60.00	1.73	3.25
ASMA	54	44.31	5.54	27.00	56.00	-0.65	1.07

The most significant theme from the collected data was what appeared to be consistently low scores with the BAI, as displayed in the BAI histogram, Figure 1, and supported by the BAI Q-Q Plot, Figure 2. Each individual question on the BAI is measured on a scale of 0-3, with 0 being the lowest level of anxiety, and 3 being the highest level of anxiety. These individual scores are summed to calculate the total score, which has a range of 0 - 63. Clinically, individuals with scores between 0 – 7 are considered to have Minimal Anxiety, individuals with scores between 8 – 15 are considered to have Mild Anxiety, individuals with scores between 16 – 25 are considered to have Moderate Anxiety, and higher scores are considered to have Severe Anxiety. As viewed in the BAI histogram, Figure 1, nearly a majority of respondents, 25 of 54, reported no anxiety, while Severe Anxiety (BAI score > 25), was uncommon, suggesting most participants displayed Minimal or Mild Anxiety.

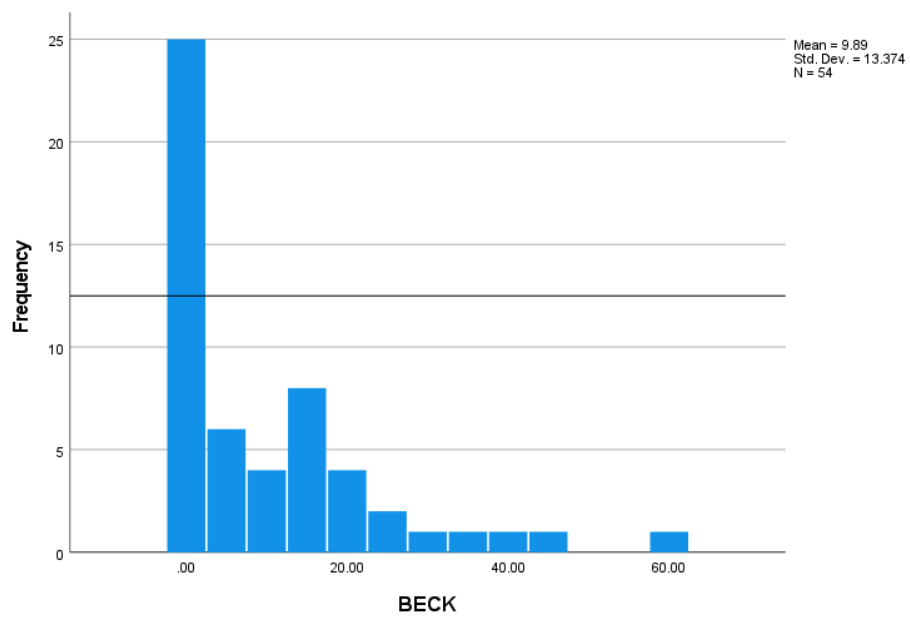
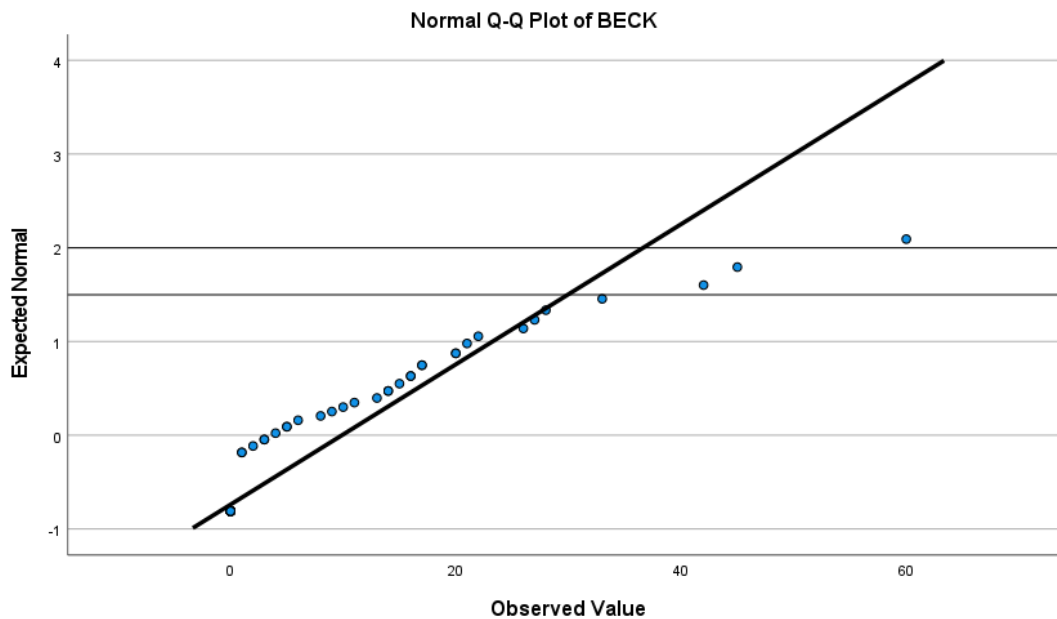
Figure 1*Histogram - BAI*

Figure 2*Q-Q Plot Beck Anxiety Inventory*

The ASMA is measured on a scale of 1-5 with higher scores displaying a stronger adherence to American customs and values. From the ASMA Histogram, Figure 3, supported by the ASMA Q-Q Plot, Figure 4, of the 54 responses, the mean score on the ASMA was 44.31 with a standard deviation of 5.54. Thus, participants from this sample display a slight tendency to lean toward American customs and values.

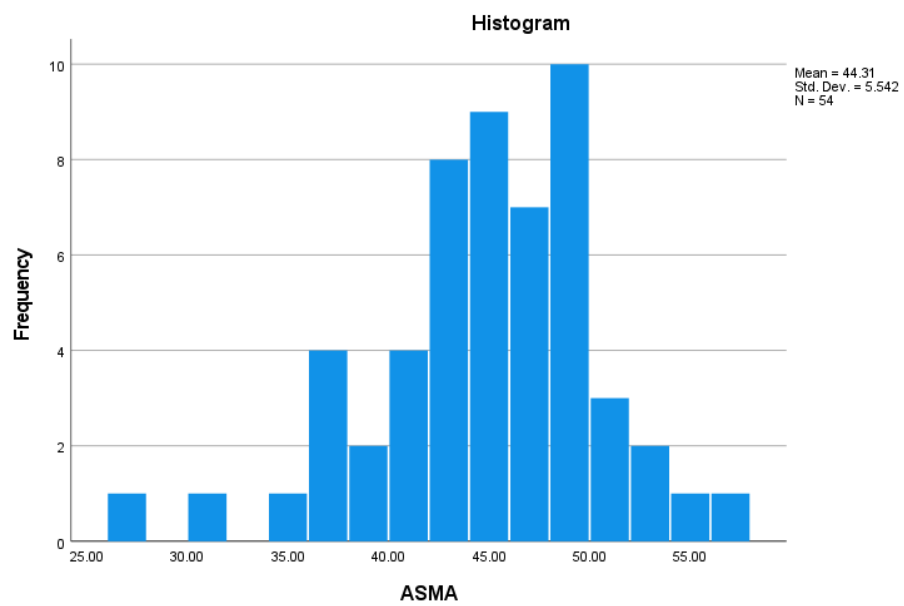
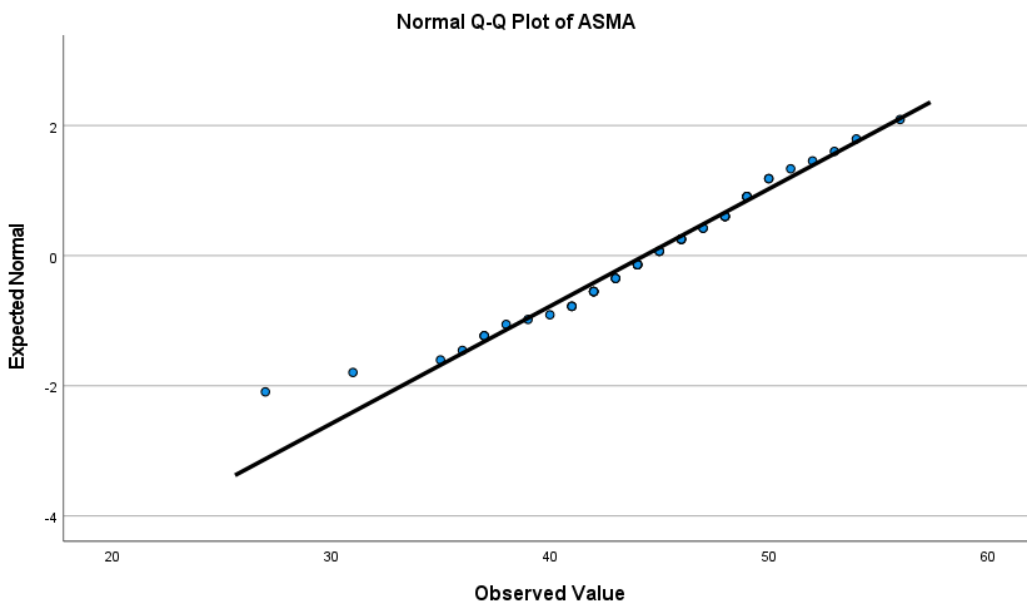
Figure 3*Histogram ASMA*

Figure 4*Q-Q Plot ASMA*

Results

For Hypotheses 1 and 4, due to the collected data not being normally distributed, a Mann-Whitney U test was performed to determine the p -value (probability value) and to determine whether there is evidence to reject the null hypothesis. The results with a p -value of less than 5% ($p \leq 0.05$) will determine statistical significance and provide evidence for rejecting the null hypothesis. For Hypotheses 2 and 5, due to the data being not normally distributed, a Spearman's correlation test was performed, results with p -value of less than 5% ($p \leq 0.05$) will determine statistical significance and provide evidence for rejecting the null hypothesis. For Hypotheses 3, a generalized linear model test was performed due to the collected data not being normally distributed, and for

hypothesis 6, a two-factor analysis of variance was performed, the results with p -value of less than 5% ($p \leq 0.05$) will determine statistical significance and provide evidence for rejecting the null hypothesis.

Research Question 1 and Research Question 4

RQ1: Is there a difference in anxiety based on gender among adult Syrian emigrants?

H_{01} : There is no difference in anxiety based on gender among adult Syrian emigrants.

H_{11} : There is a difference in anxiety based on gender among adult Syrian emigrants.

RQ4: Is there a difference in acculturation based on gender among adult Syrian emigrants?

H_{04} : There is no difference in acculturation based on gender among adult Syrian emigrants.

H_{14} : There is a difference in acculturation based on gender among adult Syrian emigrants.

As displayed in Table 3 and Table 4, the Mann-Whitney U test was performed to determine the p -value for research question one and four. In Table 4, the sum of ranks displays few differences between the BAI and ASMA as related to gender, and the statistical significance displayed is 0.57 for the BAI, and 0.71 for the ASMA. Thus, there is no statistical significance between anxiety and gender, and anxiety and acculturation, and we fail to reject the null hypotheses for research question one and research question

four that there is a difference in anxiety and acculturation based on gender among adult Syrian emigrants.

Table 3

Mann-Whitney U for Gender Against Anxiety and Acculturation

Scale	Gender	<i>N</i>	Mean rank	Sum of rank
BAI	Female	31	28.50	883.50
	Male	23	26.15	601.50
	Total	54		
ASMA	Female	31	28.18	873.50
	Male	23	26.59	611.50
	Total	54		

Table 4

Mann-Whitney U Outputs Gender Against Anxiety and Acculturation

	BAI	ASMA
Mann-Whitney U	325.500	335.500
Wilcoxon W	601.500	611.500
Z	-.562	-.368
Asymp. Sig. (2-tailed)	.574	.713

Note. Grouping variable: gender.

The mean for the BAI, Table 5, is displayed as 8.39 for male participants and 11.00 for female participants. In turn, the mean for the ASMA were displayed in Table 5 as 44.39 for male participants, and 44.26 for female participants. While the mean for the BAI displays a slight difference between male and female participants, the differences were not statistically significant.

Table 5

Descriptive Statistics for Gender Against the BAI and ASMA

Gender	BAI		ASMA	
	Mean	Median	Mean	Median
Male	8.39	1	44.39	44
Female	11.00	5	44.26	45

Research Question 2 and Research Question 5

RQ2: Is there a difference in anxiety based on education among adult Syrian emigrants?

H_02 : There is no difference in anxiety based on education among adult Syrian emigrants.

H_12 : There is a difference in anxiety based on education among adult Syrian emigrants.

RQ5: Is there a difference in acculturation based on education among adult Syrian emigrants?

H_05 : There is no difference in acculturation based on education among adult Syrian emigrants.

H_15 : There is a difference in acculturation based on education among adult Syrian emigrants.

As displayed in Table 6, the Spearman's correlations test was performed to determine the p -value for research question two and research question five. Table 6, Spearman's correlations related to Education against the BAI and ASMA, reveals a small negative correlation of -0.18 with the BAI, and -0.02 with the ASMA. Education as

related to the BAI is displayed as 0.19, and 0.85 for the ASMA. Thus, there is no statistical significance, and I fail to reject the null hypothesis for Research Question 2 and Research Question 5 that there is a difference in anxiety and acculturation based on education among adult Syrian emigrants.

Table 6

Spearman's Correlations for Education Against Anxiety and Acculturation

		Education	BAI	ASMA
Education	Correlation Coefficient	1.000	-.180	-.026
	Sig. (2-tailed)	.	.192	.851
	<i>N</i>	54	54	54
BAI	Correlation Coefficient	-.180	1.000	.160
	Sig. (2-tailed)	.192	.	.249
	<i>N</i>	54	54	54
ASMA	Correlation Coefficient	-.026	.160	1.000
	Sig. (2-tailed)	.851	.249	.
	<i>N</i>	54	54	54

Research Question 3 and Research Question 6

RQ3: Is there a difference in anxiety based on gender and education?

H_03 : There is no difference in anxiety based on gender and education among adult Syrian emigrants.

H_{13} : There is a difference in anxiety based on gender and education among adult Syrian emigrants.

RQ6: Is there a difference in acculturation based on gender and education?

H_06 : There is no difference in acculturation based on gender and education among adult Syrian emigrants.

*H*₁₆: There is a difference in acculturation based on gender and education among adult Syrian emigrants.

For Research Question 3, a generalized linear model was used to examine the effects of gender and education and their interaction effect on anxiety. The test of the model effects for gender and education and their interaction effect on anxiety is displayed in Table 7. An omnibus test, Table 8, was performed to reveal a range of departures from the intercept between independent variables, revealing three degrees of freedom, a chi-square of 2.81, and displaying a non-statistically significant value of 0.42. Therefore, for research question three, we fail to reject the null hypothesis that there is no difference in anxiety between gender and education and their interaction effects.

Table 7

Effects of Gender and Education on BAI Scores in 2-Factor Generalized Linear Model

	Wald chi-square	<i>df</i>	Sig.
(Intercept)	3.325	1	.068
Gender	.001	1	.988
High school graduate	.011	1	.916
Gender * High school graduate	.337	1	.562

Note. Dependent variable: BAI. Model: (Intercept), Gender, High School

Graduate, Gender1 * High School Graduate

Table 8

Omnibus Test^a BAI Against Gender and Education

Likelihood ratio chi-square	<i>df</i>	Sig.
2.819	3	.420

Note. Dependent variable: BAI. Model: (Intercept), Gender, High School Graduate, Gender * High School Graduate^a.

^a. Compares the fitted model against the intercept-only model.

As displayed in Table 9, the mean for male participants with less than a high school degree is 13.00 and those with a high school degree or higher was 6.37, while the mean for female participants with less than a high school degree was 12.90, and for female participants with a high school degree or higher was 9.95. While there were some differences with the mean between participants with less than a high degree and participants with a high school degree or higher, these differences were too small to be statistically significant in the statistical analysis for research question three.

Table 9

Descriptive Statistics for BAI Scores by Gender and Education Level

Education level	Males				Females			
	<i>n</i>	Median	Mean	Std. dev.	<i>n</i>	Median	Mean	Std. dev.
Less than high school	7	17.00	13.00	12.32	11	3.00	12.90	18.91
High school or higher	16	0.50	6.37	11.06	20	5.00	9.95	12.10

A two-factor analysis of variance was performed for research question six. For Research Question 6, the p value for the joint effects of gender and education on the ASMA score was 0.81, thus there is no statistically significant effect on acculturation with gender and education and we fail to reject the null hypothesis that there is no difference in anxiety and education and their interaction effect with acculturation.

Table 10*Effects of Gender and Education on ASMA Scores in 2-Factor ANOVA Model*

Source	Type III sum of squares	<i>df</i>	Mean square	<i>F</i>	Sig.
Corrected model	.118 ^a	3	.039	.314	.815
Intercept	351.160	1	351.160	2813.577	.000
Gender	.003	1	.003	.026	.874
HS graduate	.083	1	.083	.668	.418
Gender * HS graduate	.016	1	.016	.126	.724
Error	6.240	50	.125		
Total	420.598	54			
Corrected total	6.358	53			

Note. a. *R* Squared = .018 (Adjusted *R* Squared = -.040)

As displayed in Table 11, the mean for male participants with less than a high school degree is displayed as 43.85, and those with a high school degree or higher was 44.62, while the mean for female participants with less than a high school degree was 43.00, and female participants with a high school degree or higher was 44.95. While the mean for the ASMA displays a slight difference between those with less than a high school degree and those with a high school degree or higher, the interaction effects are not statistically significant. Hence, as displayed in Table 9, the omnibus P-value for the effects of gender and education on the ASMA score was not statistically significant, and I failed to reject the null hypothesis that there is no difference in anxiety and education and their interaction effect with acculturation.

Table 11*Descriptive Statistics for ASMA Scores by Gender and Education*

Education level	Males				Females			
	<i>n</i>	Median	Mean	Std. dev.	<i>n</i>	Median	Mean	Std. dev.
Less than high school	7	46.00	43.85	4.59	11	46.00	43.00	7.44
High school or higher	16	44.00	44.62	5.07	20	44.50	44.95	5.28

Summary

In Chapter 4, the results of the study, I discussed in detail the data collection methodology, data analysis, research setting, and results of the collected data. This research study was designed with the purpose of addressing the gap in literature on the differences in anxiety and acculturation among adult Syrian emigrants living in the United States based on gender and education. This research study used a quantitative correlational research design using a Mann-Whitney U test, Spearman's correlation, a generalized linear model, and a two-factor analysis of variance to determine if a statistically significant relationship exists between the two dependent variables, anxiety and acculturation, and two independent variables, gender and education. Data were collected from adult Syrian emigrants resettled in the United States using a research flyer and an online platform (Qualtrics XM) to conduct the survey. Ultimately, there were 54 participants (*Female*=31; *Male*=23). The results of this quantitative survey revealed no statistically significant differences in all six research questions; therefore, we fail to reject the null hypothesis for Research Questions 1 through 6.

In Chapter 5, Discussion, Conclusions, and Recommendations, I will provide my interpretation of the findings, limitations of the study, my recommendations grounded within the scope of this study, and the implications of this research study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative research study was to address the gap in literature on the differences in anxiety and acculturation among adult Syrian emigrants living in the United States based on gender and education. Research with Syrian refugees forced to flee the country, and Syrian emigrants resettled in host nations, reveals an increased likelihood of suffering from mental health issues, to include high levels of anxiety. According to Rizkalla and Segal (2018), an overwhelming majority of Syrians experienced traumatic events, and the vast majority were exposed to atrocities, as 92.7% of Syrian civilians surveyed in Jordan experienced one or more traumatic event, and more than half of the Syrian sample, 57.6%, screened positive for mental illness. In this research study, I failed to reject the null hypothesis in all six research questions, therefore having no statistically significant findings between the dependent variables anxiety and acculturation in relation to the two independent variables, gender and education.

In Chapter 5, the discussion, conclusions, and recommendations, I provide my interpretation of the results of this research study, as well as identify limitations of the study. Next, I provide recommendations for future research studies that fall within the scope and parameters of this research design. Lastly, I conclude with the implications this research study may have relative to Syrian emigrants, and the potential for positive social change in relation to Syrian emigrants resettled in the United States.

Restatement of Method and Sample

This research study was a quantitative correlation research designed to examine the differences between anxiety and acculturation based on gender and education. I

implemented a Mann-Whitney U test, Spearman's correlation, generalized linear model, and a two-factor analysis of variance to determine if a statistically significant relationship existed between the two dependent variables, anxiety and acculturation, based on the two independent variables, gender and education. There were 54 participants (*Female* = 31; *Male* = 23), with a majority in the 21-29 age bracket, and more than two-thirds having a high school degree or higher.

Interpretation of the Findings

Dependent Variable Anxiety

The results of this study revealed no statistically significant differences in anxiety based on education in adult Syrian emigrants resettled in the United States. As previously discussed, education is known to have an association with an emigrant's psychological well-being and mental health. In addition, the construct of education relative to emigrants and resettlement is viewed as twofold: Those with higher levels of education may find the resettlement process easier to navigate; however, they may suffer from higher levels of anxiety due to higher expectations upon resettlement, as emigrants are typically underemployed and may have lower levels of social status prior to migration. However, the antithesis may also be true, as emigrants with lower levels of education may harbor less anxiety due to lower expectations (Ellis, 2020).

Education is a known factor of anxiety relative to emigrants from all nations. As discussed in the literature review, Posselt et al. (2018) studied the psychological well-being of refugees and asylum-seeking individuals, finding eight primary enablers of psychological health, which identified education and job training opportunities as crucial,

and identified three other enablers, cognitive strategies, employment and economic activities, and behavioral strategies, which are indirectly related to education.

Furthermore, as previously discussed, Haumeder et al. (2019) conducted a study with Syrian emigrants who migrated to Germany that revealed that coping, self-efficacy, resilience, and environmental factors are predictors of psychological adaptation and PTSD. The findings of Haumeder et al. suggest that having a higher perceived ability to deal with the consequences of potentially traumatic events, as well as access to certain environmental factors, were associated with better perceived psychological adaptation to German society and better mental health. The Haumeder et al. study resonates with studies by Sheikh et al. (2019) and Björkenstam (2020), which suggest a lack of educational opportunities for emigrants creates an environment that foments poor psychological well-being, creates higher levels of stress, lowers self-esteem, and increases the likelihood of developing symptoms of anxiety.

The anxiety levels found with the sample in this research study were displayed as mild, and there are several possible explanations. First, as assumed in this study, the respondents quite possibly answered truthfully and do not display high levels of anxiety. This could be partially explained by the sample themselves. This group of participants quite simply may have suffered less trauma during migration. The sample may have held a higher socioeconomic status, therefore had the resources necessary to flee Syria, and had a less traumatic migration and a more positive resettlement experience, thus a more successful acculturation period. Also discussed previously, respondents were self-selected and possibly more comfortable upon resettlement, or possibly displayed recall

bias and did not answer all questions truthfully. Both phenomena are recognized, and the assumption remains that all respondents did answer truthfully and to the best of their ability. Quite possibly, respondents did not answer questions truthfully out of perceived fear or failure to comprehend the questions, also addressed in this study as a disadvantage. The majority of respondents opted for the Arabic version of the survey, which may have caused confusion, specifically with the BAI. Hence, per the limitations and assumptions, all responses were considered as having been answered truthfully and to the best of the participants ability. The sample population spoke Arabic as their first language, and few could be considered as having anything beyond limited English skills. Therefore, translation was both a limitation and an assumption. That MT literal word-for-word translation from English to Arabic, and back to English for analysis, possibly created comprehension issues, however this method was the only viable option due to limited resources and availability during the COVID-19 pandemic. Moreover, translation also served as an assumption, as it is assumed all MT measurement instruments were understood by participants and there was no mistranslated verbiage.

One perspective that must be addressed pertaining to mild levels of anxiety in these research findings is the possibility that Syrian mental health in the United States may be geographically oriented, and some regions may have resettled emigrants with less severe mental health issues, possibly a more thorough mental health screening apparatus, or Syrian emigrants simply may be hesitant to provide accurate responses. Therefore, the wide ranges of anxiety levels from separate studies may actually display consistent findings within this research study, as Syrian anxiety levels identified in recent research

studies are mixed, with wide ranges of anxiety. As previously discussed in the Literature Review, only a few studies have been published examining the mental-health and psychosocial needs of Syrian refugees, and these barriers make it challenging for academic researchers to carry out studies beyond basic needs assessments on Syrian refugees' mental health status (Yalim & Kim, 2018). Previous studies on Syrian emigrant mental health reveal a mixed result as studies display a distorted perspective on the levels of anxiety found in Syrian emigrants. For example, the Peconga and Thøgersen (2019) study on Syrian emigrants resettled in 10 countries revealed 26.6% had symptoms of anxiety, while the Dietrich et al. (2019) study on Syrian emigrants in Greece revealed 75% had symptoms of anxiety, and the M'Zah et al. (2018) study with Syrian emigrants resettled in Atlanta, Georgia that revealed levels of anxiety at 60%. Thus, the findings within this research study are consistent with recent research on Syrian emigrant mental health and the levels of anxiety found in adult Syrian emigrants.

As discussed, the method to recruit participants through two partners sending a research flyer via email, then using an online platform, was extremely challenging and proved to be a limitation within this research study. Initially, the link to the research study was intended to be available for two weeks, however due to a low response rate the study continued for 6 weeks. At that point, the response rate fell to zero despite all attempts to recruit more subjects and the decision was made by the chair and I to move to analysis.

In addition to recruiting only 54 subjects, results from the study suggest that there may have been issues with the original power analysis. A power analysis uses the

significance level (typically .05), the statistical power (typically .8), and the effect size of the measure to estimate the number of subjects needed for the study. According to Kang (2021), the effect size shows the difference or strength of relationships and represents a minimal clinically meaningful difference. In the initial power analysis, a moderate effect size was assumed for the BAI (.54). However, when the data from this study were analyzed, the effect size was 0.2 (a small effect size). With that small effect size, this study would have required 191 subjects in order to detect such a small effect. This suggests that a limitation of the current study was that not enough subjects were recruited to detect a significant result and that future studies should aim to recruit a larger number of subjects.

Dependent Variable Acculturation

The results of this research revealed no statistical significance in the differences in acculturation based on gender and education among adult Syrian emigrants. According to Hashemi et al. (2019) in a study with Middle Eastern migrants in Australia, gender and education could affect attitudes toward ethnic and mainstream Australian culture and willingness to acculturate, and education has been identified as an important factor that influences one's strength of cultural identification, and thus their acculturation. As stated by Sheikh and Anderson (2018), the relationship between education and acculturation is bi-directional and cyclical, as acculturation may facilitate education; however, education may also facilitate acculturation. Sheikh and Anderson stated that participants in their study who had attained lower levels of education prior to migration found it more difficult to find employment and reported lower levels of self-esteem and that through the

process of acculturation, students who were better integrated into the host nation reported more confidence in academic achievement. Thus, this suggested that education is associated with increased identification with the host nation, regardless of their continued identification with their country of origin. Therefore, the findings in this research study reveal a relationship between acculturation and education. Future studies might investigate whether those adult Syrian emigrants resettled in the United States with higher pre-migration education may have better success with acculturation.

Theoretical Framework

The findings in this research loosely align with the theoretical framework used to drive this study, the TMT. According to TMT, when faced with a significant threat to one's safety, the distressed person will activate existential buffers and other coping mechanisms to assuage debilitating anxiety from thoughts of death, thereby protecting the individual from psychological distress (Juhl & Routledge, 2016; Kesebir, 2014). As the individual develops psychological buffers that protect against anxiety brought on by awareness of mortality, they acquire the psychological tools necessary to protect against distress and promote an existential theme of managing the fear of death with an emphasis on one's relationship with various buffers, which can include cultural worldviews such as religion and spirituality (Kesebir, 2014).

The relevance of these two questions and high cumulative average score aligns with the central component of the TMT that individuals, both male and female, develop psychological buffers, which can include religion and spirituality, to defend against, and mitigate, anxiety brought on by the awareness of death (Kesebir, 2014). Hence, with

regard to the central component found within the TMT, we might postulate that participants in this research study display mild levels of anxiety through an adherence to the core principles of the Islamic faith, and by following the central tenants of Islam, they may assuage their fear brought on by the awareness of death by employing religious faith as a psychological buffer. The TMT in relation to Syrian emigrants, as well as emigrants from other nations, is an interesting connection to the development of anxiety symptoms and other mental health issues and is an area worth exploring in future research.

Limitations of the Study

There were four primary limitations in this research study, with the language barrier being most significant. In addition, data collection and design, a small number of participants in the study, and cultural factors and confounding variables also served as limitations.

Language

The most significant limitation likely impacting the results was the language barrier. The 2020-2021 COVID-19 pandemic created recruitment and data collection concerns that were unforeseen. Due to the necessity of finding a way to collect data beyond the in-person interview, the method of an online platform was introduced, and was the only responsible method to conduct the survey and collect data. The language barrier was also a limitation as the entire population in this study speaks Arabic as a first language, and few participants had English skills.

Due to the necessity of an online platform to collect data, the opportunity to thoroughly explain the purpose of the study to participants was extremely limited. The

entire survey could only be explained through use of a research flyer, with limited ability to correct misinterpretations. The structure and presentation of the research flyer required a short descriptive representation of the study, with mandatory verbiage so as to ensure ethical guidelines were met and designed so potential participants would understand and continue with the study. Furthermore, MT word-for-word literal translation was implemented due to available resources during the COVID-19 pandemic. Hence, with subtle nuances of translating English to Arabic, and survey returns in Arabic back to English for analysis, the measurement instruments such as the BAI and ASMA may have been difficult to comprehend, and the reliability and validity of these instruments may have varied from the English-language versions that have been published.

Research Design and Data Collection

The research design and data collection also were identified as a limitation. Due to the necessity of an online platform to collect data, when coupled with the language barrier, the design likely was a limiting factor that potentially influenced results. As discussed by Queiros et al. (2017), a quantitative research methodology seeks to obtain accurate and reliable measurements that allow a statistical analysis, which generally provides results that are objective and considered to be a sufficiently comprehensive view of the entire population. However, when using a survey to collect data, reliability is dependent on the quality of answers and the structure of the survey. While attempts to mitigate the limitation of an online survey, through development of a sensitive welcome to the study page, development of an Arabic version of both the research flyer and online survey, and verbal discussion with the partner leads so as to assure there is no threat to

their constituents, the potential for negative influence on the results existed, with limited ability to introduce adequate control measures. Moreover, as previously discussed, while there are numerous advantages of using an online survey to collect data, the use of an online platform is a disadvantage as online surveys are known to develop lower response rates, as well as having issues due to a lack of follow-up questions and answers, and comprehension errors with those having achieved lower levels of education; in this description, English as a second language or limited English skills serves as the lower level of education (Plutzer, 2019; Rice et al., 2017; Salah & Bista, 2017).

Subject Numbers

The low number of response rates was also identified as a limitation. The number of adequate and acceptable responses were lower than the minimum of 88 required participants and provided a lower statistical power due to the inability to recruit an adequate sample. In addition, as described previously, the analysis of the data from this study revealed a smaller effect size than was used in the original power analysis. Redoing the power analysis with this empirically-determined effect size reveals that 191 subjects would have been required to detect a significant difference. According to Brysbaert (2019), studies with a low sample size can be underpowered, thus are less likely to find a true effect with the statistical significance, tend to have inflated effect sizes, and when a statistical significance is found, it is more likely to present false positives. Hence, with no statistical significance identified, the negative results are possibly misleading, and the population of study may in fact exhibit a correlation between anxiety and acculturation with gender and acculturation.

Cultural Factors and Confounding Variables

From a cultural lens, the measurement instruments can be construed as invasive to the individual, and possibly viewed as asking sensitive and personal questions. To measure acculturation, the ASMA is relatively easy to answer, however the questions do relate to specific activities of a Muslim and could easily be construed as invasive. The measurement instrument for anxiety, the BAI, is seemingly more difficult to comprehend, and possibly presents challenges for an individual with limited English skills. To further illustrate this point, of the 28 surveys that were incomplete, 27 were initiated on the Arabic version, only one individual failed to complete the English version of the online survey. Thus, response rates were lower than the minimum of 88 required participants and provided a lower statistical power due to the inability to recruit an adequate sample. Had this survey been conducted in-person, rather than online, each section of the survey could have been explained in detail, and sensitive or difficult questions could have been resolved, thus mitigating this limitation. Therefore, as stated in my assumptions, for the purposes of this study, it is assumed all participants fully understood the survey questionnaires and answered all questions truthfully and accurately. Future studies could address this by conducting the research in person in the participant's native language, to increase the chances that the questions are understood thoroughly.

The confounding variable of recall bias was possibly a limitation. As discussed, the political climate in the United States regarding immigrants, regardless of country or region, is divisive and the anti-immigrant rhetoric is likely a subject of stress for immigrants in the United States. In addition, according to Abuelezam et al. (2018) in a

recent report from the Arab American Institute Foundation, in line with bias-motivated violence, Arab Americans are at an increased risk for hate crimes. Therefore, recall biases may be a factor which influenced the results, specifically the anxiety measurement. According to Colombo et al. (2020), there is evidence suggesting that people's past-oriented disposition and, more specifically, the way people recall, may in itself be a tool to regulate current emotions. Consequently, the presence of a recall bias may have direct consequences for present affective states and, therefore, individuals' mental health status and well-being. Colombo et al. argued that an individual may have a tendency to overestimate or underestimate negative affective experiences on mental health outcomes, such as depression, anxiety, and overall psychological well-being. Therefore, recall biases remain a limitation in this research study, and through the development of an online survey, there was little opportunity to mitigate the effects. Without the opportunity to conduct an in-person interview and provide responsible and sensitive answers to all questions of risk to the participant and assuage concerns, the use of an online forum to collect data with a non-English speaking population is potentially problematic.

Recommendations

From the results of this study, it appears clear that using an online forum to conduct a survey with a population that does not have English as a first language is challenging. The most significant recommendation is to replicate this study using the in-person interview format. Through an in-person forum, the researcher can address all concerns prior to conducting the survey. I believe this is critical with a population that has been forced to flee their country, seeking shelter in a foreign country, and attempting

to find some semblance of normalcy. For a Syrian emigrant resettled in the United States, the construct of trust is likely low, specifically with an individual external to their social milieu. Thus, to retain a larger sample, acquire well thought out entries to sensitive questions such as issues of anxiety, one must perform this research in-person.

Second, the recommendation of possibly conducting the in-person interviews gender-specific, meaning distribute the surveys to male and female participants separately. As discussed in the literature review, according to Doğan (2016), religious beliefs and practices found in the Muslim majority nations of the MENA are a factor in gender inequality; and can be found in the well-developed patriarchal Islamic social and political systems. Women born and raised in a social and political system with gender inequality built into its foundation may result in lower self-esteem, as well as gender discrimination, leading to negative mental-health effects (Kira et al., 2015). Thus, with gender inequality found in MENA nations, those migrating away from the region possibly face gender differences in knowledge of mental and physical health, as Read and Reynolds (2012) identified disparities between men and women regarding health status. Men from the Middle East typically report better health than their female counterparts, suggesting women possibly have less interaction with health care systems, and the differences in mental and physical health remains largely unknown and ambiguous. Therefore, conducting a survey with female and male participants separately, may provide more honest entries, and more reliable results; if conducting separate in-person interviews with a female sample, the researcher should retain a female research assistant, if possible, in order to impart cultural sensitivities with the audience. Furthermore,

conducting a study using a low effect size and a larger sample, as described previously, would greatly enhance reliability.

Lastly, I would encourage a research design that expands to account for regionally specific populations, thereby developing a more diverse population, to include age of participants and number of years in host country. While this research study did not request the location one currently resides, future studies can add this feature into the research design, identify a population by region, while still maintaining anonymity and remaining within the scope of this study. Hence, the results can be analyzed by region, and to a greater extent age, which can be used to better examine demographic details, and better identify development and growth of acculturation and assimilation. Humanitarian organizations and others involved in resettlement of Syrian emigrants might identify their constituent's success, or failure, to assimilate in their region. In turn, lessons learned from a regional focus, will serve as an enabler from which those who are involved can apply to their resettlement methodology.

Implications

The findings of this research study have an effect on positive social change in two primary areas relating to Syrian emigrants resettled in the United States. First and foremost, this study might be used as a baseline from which to launch additional studies with an under researched population such as Syrian emigrants. As discussed by M'zah et al. (2018), while the vast majority of Syrian emigrants suffer from symptoms of anxiety, only 20% had been evaluated by mental health professionals. Furthermore, Javanbakht et al. (2018) wrote that 40.3% of Syrian emigrants in the United States suffered from

anxiety disorders, and women displayed higher rates than men. Hence, from recommendations in this study, research might be modified, specifically for use with an in-person data collection method, and further explore the differences in anxiety and acculturation between male and female Syrian emigrants resettled in the United States, with results being exploited to develop a higher quality of life.

This research study serves to further develop academic research with Syrian emigrants resettled in the United States that can be used to influence immigration policy and enhance mental health screening not only with Syrian emigrants, but with emigrants from all regions. As discussed by Utržan et al. (2018), funding for mental health screening of emigrants is limited, and only 25 states conduct mental health screening upon arrival, and 17 of these states use informal conversation rather than standardized instruments to determine the mental health of emigrants resettled in the United States. Simple modifications to policies and procedures, such as implementing standardized mental health screening, can assist in developing more streamlined processes, and more focused funding, thereby possibly lowering cost and achieving better results, all of which leads to successful assimilation of the emigrant and development of more normalized behavioral patterns that lead toward better opportunities for higher education, employment, and quality of life.

Conclusion

According to the UNHCR (2021) for the sixth year in a row, Syrian refugees are among those with the highest resettlement needs, and as a result of the pandemic, many of those displaced globally are now faced with increased poverty, destitution, and

widespread protection risks, to include exploitation, trafficking, sexual and gender-based violence, child labor, early marriage, arrest, detention, and deportation. Since the Syrian conflict began in 2011, more than 21,000 Syrian emigrants have been resettled in the United States, and overall, throughout the world, 80% of Syrian refugees are living below the poverty line with limited access to basic services, education, or job opportunities (UNHCR, 2021a; Duffin, 2020; Kartal et al., 2018). According to the UNHCR's chief of international protection, Gillian Triggs, despite the pandemic, wars and conflict continue to rage across the world, as displayed in the Ukraine-Russia conflict, and will continue to displace millions, barring many from returning home. Not only is resettlement a life-saving tool of protection for refugees facing extreme vulnerability in these countries of asylum, it is a tangible way for other states to step up and help share this responsibility (UNHCR, 2021e).

The results of this study can be included in the overarching assessment that Syrian emigrants, along with those who remain as refugees and those internally displaced within Syria, suffer from high levels of anxiety, as well as myriad other mental health disorders. Moreover, the process of acculturation is challenging, and many have difficulty throughout the process, and ultimately face many impediments with attempts to assimilate. War and ethnic, tribal, and religious violence are leading causes of refugees fleeing their countries; however, climate related displacement is a significant concern. In the next 30 years, the United Nations projects, with climate related displacements factored in, the number of people requiring humanitarian assistance could double to over 200 million more persons each year by 2050 (UNHCR, 2020f). The issue of individuals

being forced to flee their country or region of origin will remain and could become dramatically worse. While this research study examined the differences in anxiety and acculturation based on gender and education, more research is needed to assist policy makers and organizations involved in assistance and resettlement. Academic research into related issues that influence successful resettlement is necessary and might serve as an enabler that fosters healthy outcomes for the millions who remain displaced.

References

- Abbara, A., Coutts, A., Fouad, F. M., Ismail, S. A., & Orcutt, M. (2016). Mental health among displaced Syrians: Findings from the Syria Public Health Network. *Journal of the Royal Society of Medicine*, *109*(3), 88–90.
<https://doi.org/10.1177/0141076816629765>
- Abdo, N., Sweidan, F., & Batiha, A. (2019). Quality-of-life among Syrian refugees residing outside camps in Jordan relative to Jordanians and other countries. *PeerJ Publishing*, *7*. <https://doi.org/10.7717/peerj.6454>
- Abuelezam, N. N., El-Sayed, A. M., & Galea, S. (2018). The health of Arab Americans in the United States: An updated comprehensive literature review. *Frontiers in Public Health*, *6*. <https://doi.org/10.3389/fpubh.2018.00262>
- Alhasanat-Khalil, D., Fry-McComish, J., Dayton, C., Benkert, R., Yarandi, H., & Giurgescu, C. (2018). Acculturative stress and lack of social support predict postpartum depression among U.S. immigrant women of Arabic descent. *Archives of Psychiatric Nursing*, *32*(4), 530–535.
<https://doi.org/10.1016/j.apnu.2018.02.005>
- Ali, A. (2016). Exploring The problems of machine translation from Arabic into English language faced by Saudi University student of translation at the faculty of arts, Jazan University Saudi Arabia. *IOSR Journal of Humanities and Social Science*, *21*(04), 55–66. <https://doi.org/10.9790/0837-2104025566>
- Alonso, J., Liu, Z., Evans-Lacko, S., Sadikova, E., Sampson, N., Chatterji, S., Abdulmalik, J., Aguilar-Gaxiola, S., Al-Hamzawi, A., Andrade, L. H., Bruffaerts,

- R., Cardoso, G., Cia, A., Florescu, S., de Girolamo, G., Gureje, O., Haro, J. M., He, Y., de Jonge, P., ... Thornicroft, G. (2018). Treatment gap for anxiety disorders is global: Results of the World Mental Health Surveys in 21 countries. *Depression and Anxiety, 35*(3), 195–208. <https://doi.org/10.1002/da.22711>
- Altemus, M., Sarvaiya, N., & Neill Epperson, C. (2014). Sex differences in anxiety and depression clinical perspectives. *Frontiers in Neuroendocrinology, 35*(3), 320–330. <https://doi.org/10.1016/j.yfrne.2014.05.004>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: Dsm-5* (5th ed.). American Psychiatric Publishing.
- Anyan, F., & Hjemdal, O. (2017). Stress of home life and gender role socializations, family cohesion, and symptoms of anxiety and depression. *Women & Health, 58*(5), 548–564. <https://doi.org/10.1080/03630242.2017.1316343>
- Anxiety and Depression Association of America. (2020). Facts & Statistics. <https://adaa.org/about-adaa/press-room/facts-statistics>
- Asher, M., & Aderka, I. M. (2018). Gender differences in social anxiety disorder. *Journal of Clinical Psychology, 74*(10), 1730–1741. <https://doi.org/10.1002/jclp.22624>
- Aydin, H., & Kaya, Y. (2017). The educational needs of and barriers faced by Syrian refugee students in Turkey: A qualitative case study. *Intercultural Education, 28*(5), 456–473. <https://doi.org/10.1080/14675986.2017.1336373>
- Bagasra, A., & Mackinem, M. (2019). Assessing aspects of acculturation in a Muslim American sample: Development and testing of the acculturation scale for Muslim Americans. *Religions, 10*(1), 26. <https://doi.org/10.3390/rel10010026>

- Barrow, J. M. M., Brannan, G. D., & Khandhar, P. B. (2021, August 28). *Research ethics*. StatPearls [Internet]. <https://www.ncbi.nlm.nih.gov/books/NBK459281/>
- Bauer, J. M., Brand, T., & Zeeb, H. (2020). Pre-migration socioeconomic status and post-migration health satisfaction among Syrian refugees in Germany: A cross-sectional analysis. *PLOS Medicine*, *17*(3), 1. <https://doi.org/10.1371/journal.pmed.1003093>
- Beck, A. T., Emery, G., & Greenberg, R. L. (2005). *Anxiety disorders and phobias: A cognitive perspective*. Basic Books.
- Beck, A. T., Epstein, N., Brown, G., & Steer, R. A. (1988). An inventory for measuring clinical anxiety: Psychometric properties. *Journal of Consulting and Clinical Psychology*, *56*(6), 893–897. <https://doi.org/10.1037/0022-006x.56.6.893>
- Becker, E. (1975). *The denial of death*. The Free Press.
- Bentley, J. A., Dolezal, M. L., & Alsubaie, M. K. (2019). Does duration of residency in the United States influence psychological symptoms and postmigration stressors among refugees? Potential implications of populism for refugee mental health. *International Perspectives in Psychology*, *8*(3), 161–176. <https://doi.org/10.1037/ipp0000109>
- Bergman, Y. S., & Segel-Karpas, D. (2018). Subjective nearness-to-death, filial obligations, and depressive symptoms: The case of Jews and Arabs in Israel. *Aging & Mental Health*, *24*(4), 557–563. <https://doi.org/10.1080/13607863.2018.1547682>

- Björkenstam, E., Helgesson, M., Norredam, M., Sijbrandij, M., de Montgomery, C. J., & Mittendorfer-Rutz, E. (2020). Common mental disorders among young refugees in Sweden: The role of education and duration of residency. *Journal of Affective Disorders, 266*, 563–571. <https://doi.org/10.1016/j.jad.2020.02.015>
- Brysbaert, M. (2019). How many participants do we have to include in properly powered experiments? A tutorial of power analysis with reference tables. *Journal of Cognition, 2*(1). <https://doi.org/10.5334/joc.72>
- Bystritsky, A., Khalsa, S. S., Cameron, M. E., & Schiffman, J. (2013, January). Current diagnosis and treatment of anxiety disorders. *P & T: a peer-reviewed journal for formulary management*.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3628173/>
- Calderon, C., & Rominger, A. (2019). An overview of the health profile of Syrian refugees arriving in Kentucky from 2012-2017. *Journal of Refugee & Global Health, 2*(2). <https://doi.org/10.18297/rgh/vol2/iss2/13>
- Çelebi, E., Verkuyten, M., & Bagci, S. C. (2017). Ethnic identification, discrimination, and mental and physical health among Syrian refugees: The moderating role of identity needs. *European Journal of Social Psychology, 47*(7), 832–843.
<https://doi.org/10.1002/ejsp.2299>
- Central Intelligence Agency. (2020, March 31). *Central Intelligence Agency: Syria*.
<https://www.cia.gov/the-world-factbook/>

- Chan, K. J., Young, M. Y., & Sharif, N. (2016). Well-being after trauma: A review of posttraumatic growth among refugees. *Canadian Psychology/Psychologie Canadienne*, 57(4), 291–299. <https://doi.org/10.1037/cap0000065>
- Chiang, I.-C. A., Jhangiani, R. S., & Price, P. C. (2015, October 13). Correlational research. *Research Methods in Psychology 2nd Canadian edition*. <https://opentextbc.ca/researchmethods/chapter/correlational-research/>
- Choi, E. Y., Jang, Y., & Chiriboga, D. A. (2020). Gender as a moderator of the effect of education and acculturation on cognitive function: A study of older Korean immigrants. *Journal of Aging and Health*, 32(10), 1659–1666. <https://doi.org/10.1177/0898264320950554>
- Chung, M. C., AlQarni, N., Al Muhairi, S., & Mitchell, B. (2017). The relationship between trauma centrality, self-efficacy, posttraumatic stress and psychiatric comorbidity among Syrian refugees: Is gender a moderator? *Journal of Psychiatric Research*, 94, 107–115. <https://doi.org/10.1016/j.jpsychires.2017.07.001>
- Colombo, D., Suso-Ribera, C., Fernández-Álvarez, J., Cipresso, P., Garcia-Palacios, A., Riva, G., & Botella, C. (2020). Affect recall bias: Being resilient by distorting reality. *Cognitive Therapy and Research*, 44(5), 906–918. <https://doi.org/10.1007/s10608-020-10122-3>
- Dallo, F. J., Prabhakar, D., Ruterbusch, J., Schwartz, K., Peterson, E. L., Liu, B., & Ahmedani, B. K. (2018). Screening and follow-up for depression among Arab Americans. *Depression and Anxiety*, 35(12), 1198–1206. <https://doi.org/10.1002/da.22817>

- Dattani, S., Ritchie, H., & Roser, M. (2021, August 20). Mental health. Our World in Data. <https://ourworldindata.org/mental-health>
- Demakakos, P., Nazroo, J., Breeze, E., & Marmot, M. (2008, April 24). Socioeconomic status and health: The role of subjective social status. *Social Science & Medicine* (1982). <https://pubmed.ncbi.nlm.nih.gov/18440111/>
- Dietrich, H., Al Ali, R., Tagay, S., Hebebrand, J., & Reissner, V. (2019). Screening for posttraumatic stress disorder in young adult refugees from Syria and Iraq. *Comprehensive Psychiatry, 90*, 73–81. <https://doi.org/10.1016/j.comppsy.2018.11.001>
- Doğan, N. (2016). Gender inequality in Muslim-majority countries: Myths versus facts. *Acta Oeconomica, 66*(2), 213–231. <https://doi.org/10.1556/032.2016.66.2.2>
- Downey, R. G., & King, C. V. (1998). Missing data in Likert Ratings: A comparison of replacement methods. *The Journal of General Psychology, 125*(2), 175–191. <https://doi.org/10.1080/00221309809595542>
- Duffin, E. (2020, January 10). Syrian refugee arrivals U.S. 2021. *Statista*. <https://www.statista.com/statistics/742553/syrian-refugee-arrivals-us/>
- El-Ghali, H. A., & Al-Hawamdeh, A. (2017). Higher education and Syrian refugee students: The case of Jordan. <https://doi.org/10.13140/RG.2.2.19086.66884>
- Ellis, B. H., MacDonald, H. Z., Klunk-Gillis, J., Lincoln, A., Strunin, L., & Cabral, H. J. (2010). Discrimination and mental health among Somali refugee adolescents: The role of acculturation and gender. *American Journal of Orthopsychiatry, 80*(4), 564–575. <https://doi.org/10.1111/j.1939-0025.2010.01061.x>

- Esala, J. J., Vukovich, M. M., Hanbury, A., Kashyap, S., & Joscelyne, A. (2018). Collaborative care for refugees and torture survivors: Key findings from the literature. *Traumatology, 24*(3), 168–185. <https://doi.org/10.1037/trm0000143>
- Esses, V. M., Hamilton, L. K., & Gaucher, D. (2017). The Global Refugee Crisis: Empirical evidence and policy implications for improving public attitudes and facilitating refugee resettlement. *Social Issues and Policy Review, 11*(1), 78–123. <https://doi.org/10.1111/sipr.12028>
- Fajkowska, M., Domaradzka, E., & Wytykowska, A. (2018). Types of anxiety and depression: Theoretical assumptions and development of the anxiety and depression questionnaire. *Frontiers in Psychology, 8*. <https://doi.org/10.3389/fpsyg.2017.02376>
- Faruquzzaman Akan, Md., Rezaul Karim, Md., & Kabir Chowdhury, A. M. (2019). An analysis of Arabic-English translation: problems and prospects. *Advances in Language and Literary Studies, 10*(1), 58. <https://doi.org/10.7575/aiac.all.v.10n.1p.58>
- Filges, T., Montgomery, E., & Kastrup, M. (2016). The impact of detention on the health of asylum seekers. *Research on Social Work Practice, 28*(4), 399–414. <https://doi.org/10.1177/1049731516630384>
- Gallup. (2021, July 27). Immigration. *Gallup.com*. <https://news.gallup.com/poll/1660/immigration.aspx>

- Ghumman, U., McCord, C. E., & Chang, J. E. (2016). Posttraumatic stress disorder in Syrian refugees: A review. *Canadian Psychology/Psychologie Canadienne*, 57(4), 246–253. <https://doi.org/10.1037/cap0000069>
- Gillis, M. M., Haaga, D. A., & Ford, G. T. (1995). Normative values for the Beck Anxiety Inventory, Fear Questionnaire, Penn State Worry Questionnaire, and social phobia and Anxiety Inventory. *Psychological Assessment*, 7(4), 450–455. <https://doi.org/10.1037/1040-3590.7.4.450>
- Glen, S. (2021, June 3). Confounding variable: Simple definition and example. *Statistics How To*. <https://www.statisticshowto.com/experimental-design/confounding-variable/>
- Green, M., King, E., & Fischer, F. (2019). Acculturation, social support and mental health outcomes among Syrian refugees in Germany. *Journal of Refugee Studies*, 34(2), 2421–2433. <https://doi.org/10.1093/jrs/fez095>
- Greenberg, E., & Fejzic, A. (2019). Immigrant and refugee mental health. *Immigrant and Refugee Mental Health*. William James Interface Referral Service. <https://interface.williamjames.edu/topic/immigrant-refugee-mental-health>
- Guajardo, M. G., Slewa-Younan, S., Smith, M., Eagar, S., & Stone, G. (2016). Psychological distress is influenced by length of stay in resettled Iraqi refugees in Australia. *International Journal of Mental Health Systems*, 10(1). <https://doi.org/10.1186/s13033-016-0036-z>

- Gunn, A. D. (2022). Yandex Translate vs Google Translate: Which one should you choose? TranslatePress. <https://translatepress.com/yandex-translate-vs-google-translate/>
- Gürsoy, E., & Ertaşoğlu, L. D. (2018). Syrian refugees' perception of barriers and bridges towards integration into Turkish society. *Language, Culture and Curriculum*, 32(2), 128–141. <https://doi.org/10.1080/07908318.2018.1542000>
- Hankin, B. L., Snyder, H. R., Gulley, L. D., Schweizer, T. H., Bijttebier, P., Nelis, S., Toh, G., & Vasey, M. W. (2016). Understanding comorbidity among internalizing problems: Integrating latent structural models of psychopathology and Risk Mechanisms. *Development and Psychopathology*, 28(4pt1), 987–1012. <https://doi.org/10.1017/s0954579416000663>
- Harvell, L. A., & Nisbett, G. S. (2016). Denying death an interdisciplinary approach to *Terror Management Theory*. Taylor and Francis.
- Hasan, N., Mitschke, D. B., & Ravi, K. E. (2018). Exploring the role of faith in resettlement among Muslim Syrian refugees. *Journal of Religion & Spirituality in Social Work: Social Thought*, 37(3), 223–238. <https://doi.org/10.1080/15426432.2018.1461045>
- Hashemi, N., Marzban, M., Sebar, B., & Harris, N. (2019). Acculturation and psychological well-being among Middle Eastern migrants in Australia: The mediating role of social support and perceived discrimination. *International Journal of Intercultural Relations*, 72, 45–60. <https://doi.org/10.1016/j.ijintrel.2019.07.002>

- Haumeder, A. V., Ghafoori, B., & Retailleau, J. (2019). Psychological adaptation and posttraumatic stress disorder among Syrian refugees in Germany: A mixed-methods study investigating environmental factors. *European Journal of Psychotraumatology, 10*(1), 1686801. <https://doi.org/10.1080/20008198.2019.1686801>
- Hayes, J., Schimel, J., Arndt, J., & Faucher, E. H. (2010). A theoretical and empirical review of the death-thought accessibility concept in terror management research. *Psychological Bulletin, 136*(5), 699–739. <https://doi.org/10.1037/a0020524>
- Heale, R., & Twycross, A. (2015). Validity and reliability in quantitative studies. *Evidence Based Nursing, 18*(3), 66–67. <https://doi.org/10.1136/eb-2015-102129>
- Hoebel, J., Maske, U. E., Zeeb, H., & Lampert, T. (2017, January 20). Social inequalities and depressive symptoms in adults: The role of objective and subjective socioeconomic status. *Plos One*. <https://journals.plos.org/plosone/article?id=10.1371%2Fjournal.pone.0169764>
- Horváth, A., Montana, X., Lanquart, J.-P., Hubain, P., Szűcs, A., Linkowski, P., & Loas, G. (2016). Effects of state and trait anxiety on sleep structure: A polysomnographic study in 1083 subjects. *Psychiatry Research, 244*, 279–283. <https://doi.org/10.1016/j.psychres.2016.03.001>
- Hui, C. H., Chan, S. W. Y., Lau, E. Y. Y., Cheung, S.-F., & Mok, D. S. (2012). The role of religion in moderating the impact of life events on Material Life Goals: Some evidence in support of terror management theory. *Mental Health, Religion & Culture, 17*(1), 52–61. <https://doi.org/10.1080/13674676.2012.745494>

- Ibraheem, B., Kira, I. A., Aljakoub, J., & Al Ibraheem, A. (2017). The health effect of the Syrian conflict on idps and refugees. *Peace and Conflict: Journal of Peace Psychology, 23*(2), 140–152. <https://doi.org/10.1037/pac0000247>
- Immerstein, S., & Shaikhly, S. A. (2016, April 4). *Education in Syria*. <https://wenr.wes.org/2016/04/education-in-syria>
- International Organization for Migration. (2020, January 17). Key migration terms. *Key Migration Terms*. <https://www.iom.int/key-migration-terms#Emigration>
- Jabbar, S. A., & Zaza, H. I. (2015). Evaluating a vocational training programme for women refugees at the Zaatari Camp in Jordan: Women empowerment: A journey and not an output. *International Journal of Adolescence and Youth, 21*(3), 304–319. <https://doi.org/10.1080/02673843.2015.1077716>
- Javanbakht, A., Amirsadri, A., Abu Suhaiban, H., Alsaud, M. I., Alobaidi, Z., Rawi, Z., & Arfken, C. L. (2018). Prevalence of possible mental disorders in Syrian refugees resettling in the United States screened at Primary Care. *Journal of Immigrant and Minority Health, 21*(3), 664–667. <https://doi.org/10.1007/s10903-018-0797-3>
- Juhl, J., & Routledge, C. (2016). Putting the terror in terror management theory. *Current Directions in Psychological Science, 25*(2), 99–103. <https://doi.org/10.1177/0963721415625218>
- Julian, L. J. (2011). Measures of anxiety: State-trait anxiety inventory (STAI), Beck anxiety inventory (BAI), and hospital anxiety and depression scale-anxiety

(HADS-A). *Arthritis Care & Research*, 63(S11).

<https://doi.org/10.1002/acr.20561>

Kang, H. (2021). Sample size determination and power analysis using the G*Power software. *Journal of Educational Evaluation for Health Professions*, 18(17), 17.

<https://doi.org/10.3352/jeehp.2021.18.17>

Karam, F. J., Kibler, A. K., & Yoder, P. J. (2017). “Because even us, Arabs, now speak English”: Syrian refugee teachers’ investment in English as a foreign language.

International Journal of Intercultural Relations, 60, 169–182.

<https://doi.org/10.1016/j.ijintrel.2017.04.006>

Kartal, D., Alkemade, N., Eisenbruch, M., & Kissane, D. (2018). Traumatic exposure, acculturative stress and cultural orientation: The influence on PTSD, depressive and anxiety symptoms among refugees. *Social Psychiatry and Psychiatric Epidemiology*, 53(9), 931–941.

<https://doi.org/10.1007/s00127-018-1532-z>

Kesebir, P. (2014). A quiet ego quiets death anxiety: Humility as an existential anxiety buffer. *Journal of Personality and Social Psychology*, 106(4), 610–623.

<https://doi.org/10.1037/a0035814>

Khamis, V. (2015). Coping with war trauma and psychological distress among school-age Palestinian children. *American Journal of Orthopsychiatry*, 85(1), 72–79.

<https://doi.org/10.1037/ort0000039>

Khoury, S. J. (2018). Factors that impact the sociocultural adjustment and well-being of Syrian refugees in Stuttgart, Germany. *British Journal of Guidance & Counselling*, 47(1), 65–80.

<https://doi.org/10.1080/03069885.2018.1520196>

- Kira, I. A., Omidy, A. Z., Fawzi, M., Rice, K. G., Fawzi, M., Lewandowski, L., & Bujold-Bugeaud, M. (2015). Are the negative mental health effects of gender discrimination (GD) salient across cultures? does self-esteem mediate these effects: Gd as a continuous traumatic stress and the pathways to its negative dynamics? *Psychology, 06*(01), 93–116.
<https://doi.org/10.4236/psych.2015.61009>
- Knappert, L., Kornau, A., & Figengül, M. (2018). Refugees' exclusion at work and the intersection with gender: Insights from the Turkish-syrian border. *Journal of Vocational Behavior, 105*, 62–82. <https://doi.org/10.1016/j.jvb.2017.11.002>
- Koc, Y., & Anderson, J. R. (2018). Social distance toward Syrian refugees: The role of intergroup anxiety in facilitating positive relations. *Journal of Social Issues, 74*(4), 790–811. <https://doi.org/10.1111/josi.12299>
- Koç, V., & Kafa, G. (2019). Dehşet Yönetimi Kuramı çerçevesinde Benlik Saygısı ve Bağlanmanın Rolü. *Psikiyatride Guncel Yaklasimler. Current Approaches in Psychiatry, 11*(1), 129–139. <https://doi.org/10.18863/pgy.419330>
- Lewinsohn, P. M., Gotlib, I. H., Lewinsohn, M., Seeley, J. R., & Allen, N. B. (1998). Gender differences in anxiety disorders and anxiety symptoms in adolescents. *Journal of Abnormal Psychology, 107*(1), 109–117. <https://doi.org/10.1037/0021-843x.107.1.109>
- Lijster, J. M., Dierckx, B., Utens, E. M. W. J., Verhulst, F. C., Zieldorff, C., Dieleman, G. C., & Legerstee, J. S. (2016). The age of onset of anxiety disorders. *The Canadian*

Journal of Psychiatry, 62(4), 237–246.

<https://doi.org/10.1177/0706743716640757>

Loo, B. (2021, October 6). What help do refugees need to enroll in North American higher education? *World Education News and Reviews*.

<https://wenr.wes.org/2017/05/early-insights-from-a-canada-what-help-do-refugees-need-to-enroll-in-north-american-higher-education>

Lumen Learning. (n.d.). Introduction to Psychology. *Lumen*.

<https://courses.lumenlearning.com/wmopen-psychology/chapter/reading-correlational-research/>.

Mangolini, V. I., Andrade, L. H., Lotufo-Neto, F., & Wang, Y.-P. (2019). Treatment of anxiety disorders in clinical practice: A critical overview of recent systematic evidence. *Clinics*, 74. <https://doi.org/10.6061/clinics/2019/e1316>

Matsumoto, D. R. (2001). *The Handbook of Culture and Psychology*. Oxford University Press.

Mayo Clinic. (2018, May 4). Anxiety disorders. *Mayo Clinic*.

<https://www.mayoclinic.org/diseases-conditions/anxiety/symptoms-causes/syc-20350961>

McInroy, L. B. (2016). Pitfalls, potentials, and ethics of online survey research: LGBTQ and other marginalized and hard-to-access youths. *Social Work Research*, 40(2), 83–94. <https://doi.org/10.1093/swr/svw005>

Miller, A., Hess, J. M., Bybee, D., & Goodkind, J. R. (2018). Understanding the mental health consequences of family separation for refugees: Implications for policy and

practice. *American Journal of Orthopsychiatry*, 88(1), 26–37.

<https://doi.org/10.1037/ort0000272>

Mohwinkel, L.-M., Nowak, A. C., Kasper, A., & Razum, O. (2018). Gender differences in the mental health of unaccompanied refugee minors in Europe: A systematic review. *BMJ Journals*, 8(7). <https://doi.org/10.1136/bmjopen-2018-022389>

Murphy, S., Elklit, A., Chen, Y. Y., Ghazali, S. R., & Shevlin, M. (2019). Sex differences in PTSD symptoms: A differential item functioning approach. *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(3), 319–327.

<https://doi.org/10.1037/tra0000355>

M'zah, S., Lopes Cardozo, B., & Evans, D. P. (2018). Mental health status and service assessment for adult Syrian refugees resettled in Metropolitan Atlanta: A cross-sectional survey. *Journal of Immigrant and Minority Health*, 21(5), 1019–1025.

<https://doi.org/10.1007/s10903-018-0806-6>

Nakash, O., Nagar, M., Shoshani, A., & Lurie, I. (2015). The association between acculturation patterns and mental health symptoms among Eritrean and Sudanese asylum seekers in Israel. *Cultural Diversity and Ethnic Minority Psychology*,

21(3), 468–476. <https://doi.org/10.1037/a0037534>

Nazzal, K. H., Forghany, M., Geevarughese, M. C., Mahmoodi, V., & Wong, J. (2014). An innovative community-oriented approach to prevention and early intervention with refugees in the United States. *Psychological Services*, 11(4), 477–485.

<https://doi.org/10.1037/a0037964>

Office for Human Research Protections. (2018, January 15). The Belmont Report. *U.S.*

Department of Health and Human Services.

<https://www.hhs.gov/ohrp/regulations-and-policy/belmont-report/read-the-belmont-report/index.html>

Pampati, S., Alattar, Z., Cordoba, E., Tariq, M., & Mendes de Leon, C. (2018). Mental

health outcomes among Arab refugees, immigrants, and U.S. born Arab

Americans in Southeast Michigan: A cross-sectional study. *BMC Psychiatry,*

18(1). <https://doi.org/10.1186/s12888-018-1948-8>

Pearson. (n.d.). Beck Anxiety Inventory. Beck Anxiety Inventory Kit.

<https://www.pearsonassessments.com/store/usassessments/en/Store/Professional-Assessments/Personality-%26-Biopsychosocial/Beck-Anxiety-Inventory/p/100000251.html>.

Peconga, E. k., & Høgh Thøgersen, M. (2019). Post-traumatic stress disorder, depression,

and anxiety in adult Syrian refugees: What do we know? *Scandinavian Journal of*

Public Health, 48(7), 677–687. <https://doi.org/10.1177/1403494819882137>

Perera, S., Gavian, M., Frazier, P., Johnson, D., Spring, M., Westermeyer, J., Butcher, J.,

Halcon, L., Robertson, C., Savik, K., & Jaranson, J. (2013). A longitudinal study

of demographic factors associated with stressors and symptoms in African

refugees. *American Journal of Orthopsychiatry, 83*(4), 472–482.

<https://doi.org/10.1111/ajop.12047>

- Plutzer, E. (2019, June 28). Privacy, sensitive questions, and informed consent: Their impacts on total survey error, and the future of Survey Research. *Public Opinion Quarterly*. <https://doi.org/10.1093/poq/nfz017>
- Portelinha, I. G., Verhliac, J.-F., Meyer, T., & Hutchison, P. (2012). Terror management and biculturalism. *European Psychologist*, *17*(3), 237–245.
<https://doi.org/10.1027/1016-9040/a000111>
- Posselt, M., Eaton, H., Ferguson, M., Keegan, D., & Procter, N. (2018). Enablers of psychological well-being for refugees and asylum seekers living in transitional countries: A systematic review. *Health & Social Care in the Community*, *27*(4), 808–823. <https://doi.org/10.1111/hsc.12680>
- Pyszczynski, T., Solomon, S., & Greenberg, J. (2015). Thirty years of Terror Management theory. *Advances in Experimental Social Psychology*, 1–70.
<https://doi.org/10.1016/bs.aesp.2015.03.001>
- Queirós, A., Faria, D., & Almeida, F. (2017, September 7). Strengths and limitations of qualitative and quantitative research methods. *Zenodo*.
<https://doi.org/10.5281/zenodo.887089>
- Read, J. G., & Reynolds, M. M. (2012). Gender differences in immigrant health. *Journal of Health and Social Behavior*, *53*(1), 99–123.
<https://doi.org/10.1177/0022146511431267>
- Regev, S., & Slonim-Nevo, V. (2019). Sorrow shared is halved? war trauma experienced by others and mental health among Darfuri Asylum Seekers. *Psychiatry Research*, *273*, 475–480. <https://doi.org/10.1016/j.psychres.2019.01.049>

- Resnik, D. (2015). Bioethical issues in providing financial incentives to research participants. *Medicolegal and Bioethics*, 35. <https://doi.org/10.2147/mb.s70416>
- Rice, S., Winter, S. R., Doherty, S., & Milner, M. (2017). Advantages and disadvantages of using internet-based survey methods in aviation-related research. *Journal of Aviation Technology and Engineering*, 7(1). <https://doi.org/10.7771/2159-6670.1160>
- Rizkalla, N., & Segal, S. P. (2018). Well-being and posttraumatic growth among Syrian refugees in Jordan. *Journal of Traumatic Stress*, 31(2), 213–222. <https://doi.org/10.1002/jts.22281>
- Robinson, O. J., Vytal, K., Cornwell, B. R., & Grillon, C. (2013). The impact of anxiety upon cognition: Perspectives from human threat of shock studies. *Frontiers in Human Neuroscience*, 7. <https://doi.org/10.3389/fnhum.2013.00203>
- Roblain, A., Malki, B., Azzi, A., & Licata, L. (2017). After coming in, settling in: An analysis of early-stage acculturation preferences of male Syrian and Iraqi asylum seekers in Belgium. *International Review of Social Psychology*, 30(1), 20. <https://doi.org/10.5334/irsp.49>
- Safak-Ayvazoglu, A., & Kunuroglu, F. (2019). Acculturation experiences and psychological well-being of Syrian refugees attending universities in Turkey: A qualitative study. *Journal of Diversity in Higher Education*, 14(1), 96–109. <https://doi.org/10.1037/dhe0000148>
- Saleh, A., & Bista, K. (2017, September 26). Examining factors impacting online survey response rates in educational research: Perceptions of graduate students. *Journal*

of MultiDisciplinary Evaluation.

https://journals.sfu.ca/jmde/index.php/jmde_1/article/view/487

Schuster, R., Kaiser, T., Terhorst, Y., Messner, E. M., Strohmeier, L.-M., & Laireiter, A.-

R. (2021). Sample size, sample size planning, and the impact of study context: systematic review and recommendations by the example of psychological depression treatment. *Psychological Medicine*, *51*(6), 902–908.

<https://doi.org/10.1017/s003329172100129x>

Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the

concept of acculturation: Implications for theory and research. *American Psychologist*, *65*(4), 237–251. <https://doi.org/10.1037/a0019330>

Schweitzer, R. D., Vromans, L., Brough, M., Asic-Kobe, M., Correa-Velez, I., Murray,

K., & Lenette, C. (2018). Recently resettled refugee women-at-risk in Australia evidence high levels of psychiatric symptoms: Individual, trauma and post-migration factors predict outcomes. *BMC Medicine*, *16*(1).

<https://doi.org/10.1186/s12916-018-1143-2>

Scott, C., & Safdar, S. (2017). Threat and prejudice against Syrian refugees in Canada:

Assessing the moderating effects of multiculturalism, interculturalism, and assimilation. *International Journal of Intercultural Relations*, *60*, 28–39.

<https://doi.org/10.1016/j.ijintrel.2017.06.003>

Seeley, J. R., Kosty, D. B., Farmer, R. F., & Lewinsohn, P. M. (2011). The modeling of

internalizing disorders on the basis of patterns of lifetime comorbidity:

Associations with psychosocial functioning and psychiatric disorders among first-

degree relatives. *Journal of Abnormal Psychology*, *120*(2), 308–321.

<https://doi.org/10.1037/a0022621>

Sheikh, M., & Anderson, J. R. (2018). Acculturation patterns and education of refugees and asylum seekers: A systematic literature review. *Learning and Individual Differences*, *67*, 22–32. <https://doi.org/10.1016/j.lindif.2018.07.003>

Sheikh, M., Koc, Y., & Anderson, J. R. (2019). A qualitative exploration of the tertiary education experiences of refugee and asylum seekers in Australia. *Journal of Education for Students Placed at Risk*, *24*(4), 346–368.

<https://doi.org/10.1080/10824669.2019.1657867>

Shultz, J. M., Rechkemmer, A., Rai, A., & McManus, K. T. (2018). Public health and mental health implications of environmentally induced forced migration. *Disaster Medicine and Public Health Preparedness*, *13*(02), 116–122.

<https://doi.org/10.1017/dmp.2018.27>

Simundic, A. M. (2013). Bias in research. *Biochemia Medica*, 12–15.

<https://doi.org/10.11613/bm.2013.003>

Solomon, Z., Gelkopf, M., & Bleich, A. (2005). Is terror gender-blind? Gender differences in reaction to terror events. *Social Psychiatry and Psychiatric Epidemiology*, *40*(12), 947–954. <https://doi.org/10.1007/s00127-005-0973-3>

Steinhilber, A. M. (2019). Higher education and forced migration: An evaluation of psychosocial support provided for Syrian refugees and the Jordanian host community. *Journal of Mental Health and Psychosocial Support in Conflict Affected Areas*, *17*(1), 96. https://doi.org/10.4103/intv.intv_53_18

- Tjew-A-Sin, M., & Koole, S. L. (2018). Terror management in a multicultural society: Effects of mortality salience on attitudes to multiculturalism are moderated by national identification and self-esteem among native Dutch people. *Frontiers in Psychology, 9*. <https://doi.org/10.3389/fpsyg.2018.00721>
- Trochim, W. M. K. (2020, March 10). Research design. Research Design. *Research Methods Knowledge Base*. <https://conjointly.com/kb/research-design/>
- United Nations Educational, Scientific and Cultural Organization. (2020). Syrian Arab Republic. <http://uis.unesco.org/en/country/sy>
- United Nations High Commissioner for Refugees. (2021a). Syrian refugee crisis: Aid, statistics and news: USA for UNHCR. <https://www.unrefugees.org/emergencies/syria/>
- United Nations High Commissioner for Refugees. (2020b). Figures at a glance. <https://www.unhcr.org/en-us/figures-at-a-glance.html>
- United Nations High Commissioner for Refugees. (2020c). Refugees in America. <https://www.unrefugees.org/refugee-facts/usa/>
- United Nations High Commissioner for Refugees. (2020d). What is a refugee? Definition and Meaning: USA for UNHCR. <https://www.unrefugees.org/refugee-facts/what-is-a-refugee/>
- United Nations High Commissioner for Refugees. (2021e, June 23). Un Refugee Agency releases 2022 resettlement needs. UNHCR. <https://www.unhcr.org/en-us/news/press/2021/6/60d32ba44/un-refugee-agency-releases-2022-resettlement-needs.html>.

- United Nations High Commissioner for Refugees. (2020f, November 30) climate change is the defining crisis of our time and it particularly impacts the displaced'. UNHCR. from <https://www.unhcr.org/en-us/news/latest/2020/11/5fbf73384/climate-change-defining-crisis-time-particularly-impacts-displaced.html>.
- Utržan, D., Wieling, E., & Piehler, T. (2018). A needs and Readiness Assessment of the United States Refugee Resettlement Program: Focus on Syrian asylum-seekers and refugees. *International Migration*, 57(1), 127–144.
<https://doi.org/10.1111/imig.12479>
- Vail, K. E., Goncy, E. A., & Edmondson, D. (2019). Anxiety buffer disruption: Worldview threat, death thought accessibility, and worldview defense among low and high posttraumatic stress symptom samples. *Psychological Trauma: Theory, Research, Practice, and Policy*, 11(6), 647–655.
<https://doi.org/10.1037/tra0000441>
- Vail, K. E., Soenke, M., Waggoner, B., & Mavropoulou, I. (2019). Natural, but not supernatural, literal immortality affirmation attenuates mortality salience effects on worldview defense in Atheists. *Personality and Social Psychology Bulletin*, 46(2), 312–326. <https://doi.org/10.1177/0146167219855051>
- VandenBos, G. R. (2015). *Apa Dictionary of Psychology* (2nd ed.). American Psychological Association.

- Vanderminden, J., & Esala, J. J. (2018). Beyond symptoms: Race and gender predict anxiety disorder diagnosis. *Society and Mental Health, 9*(1), 111–125.
<https://doi.org/10.1177/2156869318811435>
- Weeks, P., Hayley, A., & Stough, C. (2019). Do individual differences in state and trait anxiety predict sleep difficulties in healthy older adults? *Personality and Individual Differences, 144*, 141–146. <https://doi.org/10.1016/j.paid.2019.03.004>
- Wells, R., Steel, Z., Abo-Hilal, M., Hassan, A. H., & Lawsin, C. (2016). Psychosocial concerns reported by Syrian refugees living in Jordan: Systematic review of unpublished needs assessments. *British Journal of Psychiatry, 209*(2), 99–106.
<https://doi.org/10.1192/bjp.bp.115.165084>
- Wisman, A., Heflick, N., & Goldenberg, J. L. (2015). The great escape: The role of self-esteem and self-related cognition in terror management. *Journal of Experimental Social Psychology, 60*, 121–132. <https://doi.org/10.1016/j.jesp.2015.05.006>
- Yalim, A. C., & Kim, I. (2018). Mental health and psychosocial needs of Syrian refugees: A literature review and future directions. *Advances in Social Work, 18*(3), 833–852. <https://doi.org/10.18060/21633>
- Yandex. (n.d.). Yandex.translate dictionary and online translation between English and over 90 other languages. *Yandex Translate*.
<https://translate.yandex.com/?lang=en-ar>
- Yavcan, B., & El-Ghali, H. A. (2017). Higher education and Syrian refugee students: The case of Turkey. <https://doi.org/10.13140/RG.2.2.15731.22564>

Zayfert, C. C., & Becker, C. B. (2020). Cognitive-behavioral therapy for PTSD: A case formulation approach. *Guilford Press*.

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Appendix A: Permissions – Beck Anxiety Inventory



CLINICAL ASSESSMENT

Walden University
**Re: Use of Beck Anxiety Inventory (BAI) in Doctoral Research Project**

October 24, 2022

To whom it may concern:

NCS Pearson, Inc. (Pearson), through its Clinical Assessment business licensed Thomas Anderson (Doctoral Candidate, Walden University) to adapt and translate the Beck Anxiety Inventory (BAI) Record Form for use in his research project: Factors that Affect Anxiety and Acculturation in Syrian Emigrants Resettled in the United States.

Please be advised that Mr. Anderson was licensed under Master License Agreement LSR-251254 signed March 1, 2021, with Statement of Work No. 1 LSR-251254 signed March 8, 2021. Additionally, Change Order No. 1 LSR-318300 was signed July 19, 2021, to extend the research project end date to December 31, 2021.

Should you have further questions or require additional information, please email


Yours sincerely,

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Jen Nightingale (Oct.25, 2022 03:19 EDT)**Jen Nightingale**

Vice President of General Sales

Clinical Assessment


Appendix B: Permissions – Acculturation Scale for Muslim Americans

From: Anisah Bagasra <[REDACTED]>
Sent: Monday, February 24, 2020 8:12 PM
To: Thomas Anderson <[REDACTED]>
Subject: RE: Request permission for use of the Acculturation Scale for Muslim Americans

Hi Thomas!

You have permission to use the Acculturation Scale for Muslim Americans (ASMA) for your research. I have attached a PDF and Word copy of the scale. The word document also describes scoring of the scale when looking at the two sub-scales.

Please let me know if you have any questions as you start to put together your study.

Sincerely,

Anisah Bagasra
Assistant Professor of Psychology
Department of Psychological Science



p: [REDACTED]
e: [REDACTED]