The Impact of Post-Migration Stressors on Mental Health Outcomes for Ethiopian Asylum- Seekers Obtaining Services at a U.S.-Based Center for Survivors of Torture

by Nouf Bazaz

B.A. in International Affairs, May 2008, The George Washington University
M.A. in Trauma and Violence Transdisciplinary Studies, May 2010, New York University

A Dissertation submitted to

The Faculty of
The Graduate School of Education and Human Development
of the George Washington University
in partial fulfillment of the requirements
for the degree of Doctor of Philosophy

August 31, 2020

Dissertation directed by

Richard Lanthier
Associate Professor of Human Development

ProQuest Number: 28090076

All rights reserved

INFORMATION TO ALL USERS
The quality of this reproduction is dependent on the quality of the copy submitted.

In the unlikely event that the author did not send a complete manuscript
and there are missing pages, these will be noted. Also, if material had to be removed,
a note will indicate the deletion.

ProQuest 28090076

Published by ProQuest LLC (2020). Copyright of the Dissertation is held by the Author.

All Rights Reserved.
This work is protected against unauthorized copying under Title 17, United States Code
Microform Edition © ProQuest LLC.

ProQuest LLC
789 East Eisenhower Parkway
P.O. Box 1346
Ann Arbor, MI 48106 - 1346

The Graduate School of Education and Human Development of The George Washington University certifies that Nouf Bazaz has passed the Final Examination for the degree of Doctor of Education as of July 30, 2020. This is the final and approved form of the dissertation.

The Impact of Post-Migration Stressors on Mental Health Outcomes for Ethiopian Asylum- Seekers Obtaining Services at a U.S.-Based Center for Survivors of Torture

Nouf Bazaz

Dissertation Research Committee:

Richard P. Lanthier, Associate Professor of Human Development, Dissertation Director

Elizabeth Crunk, Assistant Professor of Counseling and Human Development, Committee Member

Suzan Song, Associate Professor of Psychiatry and Behavioral Sciences, Committee Member

Dedication

Dedicated to those rising up to release our world from torture and demanding freedom in every language.

Acknowledgements

This study would not have been possible had it not been for the passion and dedication of the research site staff and volunteers. In particular, I would like to thank Caitlin Tromiczak, Jennifer Isely, Léonce Byimana, Seini O'Conner, Colleen Daly, Morgan Neibich-Gianna, Shanta Kingham, and Semhar Stora and Shobila Kaligounder.

Thank you to those at GWU that were an integral part of this process. In particular, I would like to thank my chair and advisor Dr. Richard Lanthier, my committee members, Dr. Elizabeth Crunk and Dr. Suzan Song, my readers, Dr. Bernard Streitwieser and Dr. Joe Gorin, and my defense presider, Dr. Mary DeRaedt. I would also like to thank my GWU peers, especially Dr. Christian Chan and Dr. Quinn Smelser, and my colleagues at Loyola, especially Dr. Gayle Cicero.

Lastly, I would like to thank my parents, fiancé, sister, cousins, and friends for their support.

Abstract of Dissertation

The Impact of Post-Migration Stressors on Mental Health Outcomes for Ethiopian Asylum- Seekers Obtaining Services at a U.S.-Based Center for Survivors of Torture

There are an estimated 70.8 million people forcibly displaced worldwide due to conflict and persecution (UNHCR, 2019) and a backlog of 476,000 asylum cases awaiting review in the United States as of 2019 (USCIS, 2019). There is a lack of research focusing exclusively on asylum seekers, even though asylum seekers may carry a greater mental health burden than refugees (Iverson & Morken, 2004; Kashyap et al., 2019; NCTTP, 2015; Newnham et al., 2019; Nickerson et al., 2019; Toar et al., 2009). The purpose of this cross-sectional, archival study is to examine the relationship between client socio-demographics and post-migration stressors on mental health outcomes of anxiety, depression, and emotional distress. Participants included 172 Ethiopian asylum seekers who completed an intake at a torture treatment center in the U.S. between October 2015 – July 2019. The study hypothesized that post-migration stressors of time spent in the U.S., employment status, housing status, family separation, and need for an interpreter, would significantly predict mental health outcomes on the Hopkins Symptom Checklist -25 (HSCL-25) when controlling for socio-demographic variables of gender, age, education level, and marital status. The study also hypothesized that age, gender, and work authorization would moderate the relationship between post-migration stressors and more severe mental health outcomes. Multiple linear regression analysis found that post-migration variables and socio-demographic variables did not significantly predict mental health outcomes. Analysis of gender, age, and work authorization as moderating variables found that the interaction between gender and employment status was the only significant

interaction in the study. The findings showed that the impact of having work authorization may be gendered with men experiencing worse depression and emotional distress when they do not have work authorization and women experiencing worse depression and emotional distress when they do have work authorization. The findings also suggest that post-migration stressors may impact refugees and asylum seekers differently, thereby recommending further research that focuses exclusively on asylum seekers and in particular examines stressors endemic to the asylum-seeking process.

Table of Contents

List of Figures

List of Tables

The Impact of Post-Migration Stressors on Mental Health Outcomes for Ethiopian Asylum- Seekers Obtaining Services at a U.S.-Based Center for Survivors of Torture

Chapter 1: Introduction and Overview

There are an estimated 70.8 million people forcibly displaced worldwide due to conflict and persecution (UNHCR, 2019) and a backlog of 476,000 asylum cases awaiting review in the United States as of October 11, 2019 (USCIS, 2019). Refugees and asylum seekers have a fifteen times higher rate of Post-traumatic Stress Disorder (PTSD) and a fourteen times higher rate of depression than the general population during resettlement in Western countries (Bogic et al., 2015) and torture survivors in this population have high rates of depression and anxiety (Keller et al., 2006; Leaman & Gee, 2012; Schubert & Punamäki, 2011; Song et al., 2018; Tinghog et al., 2017). Studies have also found that post-migration stressors are associated with worse mental health outcomes (Bentley et al., 2012; Carswell, 2007; Carswell et al., 2011; Chu et al., 2013; Hollifield et al., 2018; Li et al., 2016; Miller & Rasmussen, 2010; Schick et al., 2018). The current study therefore examines the relationship between client socio-demographics and post-migration stressors on mental health outcomes among a clinical sample of torture survivors who are seeking asylum in the United States. The following sections will outline the study's theoretical foundation, the problem/gaps in the research it seeks to address, a description of the sample, research questions, research methodology, potential significance of the study, limitations, delimitations, assumptions, and key terms.

Theoretical Foundation

Research into the mental health of refugees and asylum seekers spans across multiple continents, cultures and contexts. Consequently, this study draws from theories on

psychosocial models of mental health as well as theories related to cross-cultural mental health practices. These theories will be examined as they relate to populations that have experienced conflict and persecution.

Psychosocial Mental Health Theories

Psychosocial theories of mental health stem from models by Bronfenbrenner (1979) that examine an individual's "ecological system," or family, community and social contexts that impact mental health. When applied to the refugee experience, this model examines the psychosocial stressors and risks that accompany each distinct phase in displacement- Pre-migration, migration, and post-migration (Miller & Rasmussen, 2017). Proponents of a "war-exposure model" of refugee distress posit that the functional impairment engendered by experiences in pre-migration may exert the most influence on post-migration living difficulties (Nuener, 2010), while proponents of a psychosocial model counter that post-migration experiences produce the most exigent stressors and thus impact on mental health (Miller & Rasmussen, 2010). The current study examines a dataset from a torture treatment center that utilizes an integrated or collaborative treatment intervention that seeks to address stressors throughout the displacement experience through services including clinical mental health counseling, intensive case management, legal aid, advocacy and more. However, the current study primarily adds to the literature on the psychosocial model of refugee mental health through its focus on examining the impact of post-migration stressors.

Cross-Cultural Mental Health Theories

It is critical to examine theories in the assessment of mental health cross-culturally in part because the outcome variable for the current study is a Western

instrument that measures symptoms of depression, anxiety, and emotional distress among diverse asylum seekers that are largely from Ethiopia. Social-constructivist theories posit that responses to mental health surveys generate values that need to be understood in the context of the environment in which they are administered (Miller, Kulkarni & Kushner, 2006). Mental health surveys must also be developed in ways that are responsive to the ways in which distress presents cross-culturally (Schubert & Punamaki, 2011) and translated cross-culturally with content, semantic, concept, criterion and technical equivalence of constructs and variables (de Jong & van Ommeren, 2002). As a result, the current study details in depth the development of the outcome measurement and the context in which it is utilized at the research site.

Statement of the Problem

Research examining the experiences of forced migrants often collapses the experiences of refugees and asylum seekers, referring to them collectively as "refugees," which can potentially obfuscate the differences that impact each group's mental health and wellness. As a result, there is a lack of research focusing exclusively on asylum seekers, even though asylum seekers may carry a greater mental health burden than refugees (Iverson & Morken, 2004; Kashyap et al., 2019; NCTTP, 2015; Newnham et al., 2019; Nickerson et al., 2019; Toar et al., 2009). As asylum seekers wait for extended periods of time for their cases to be adjudicated, they can face significant challenges with the uncertainty inherent in this process. This uncertainty can impact heath service utilization and accessing other forms of social or community support (Asgar & Segar, 2011; Brekke, 2010) as well as impair access to secure housing and employment

(Campbell & Steel, 2015; Hereen et al., 2014). The current study seeks to address this gap in the research by focusing exclusively on asylum seekers.

One of the biggest challenges in research on refugees and asylum seekers is the heterogeneity of the refugee and asylum seeking population on factors including culture, persecution history, traumatic experiences, stressors, ongoing political conditions in the country of origin and heterogeneity of resettlement environments on factors including policies, level of development, economies, and more. This can make generalizing or applying the findings of studies challenging (Li et al., 2016) and can be made even more difficult when studies do not report ethnicity or country of origin for participants. For example, studies such as Carswell et al. (2011), Chu et al. (2013), Piwowarczyk (2007), and Toar et al. (2009) reported that the majority of study participants were from "Africa" or "a number of African countries" rather than noting any particular countries or regions. However, the political environment or any ongoing conflict in the country of origin is critical for contextualizing mental health challenges for refugees and asylum seekers that are survivors of political torture and trauma (Porter & Haslam, 2005; Shannon et al., 2015).

The current study improves upon this inadequacy in the research by sampling participants from Ethiopia, thereby also addressing gaps that exist in understanding the mental health experiences of Ethiopian asylum seekers in a metropolitan region of the United States. In summary, the current study strengthens existing literature on the impact of post-migration stressors on mental health outcomes by examining these stressors in a relatively under-studied population of asylum seekers from a particular community.

Describing the Sample

Participants in the current study are adult torture survivors from Ethiopia in the process of seeking political asylum in the United States that have completed the Hopkins Symptom Checklist-25 (HSCL-25) as part of the intake process between October 2015 – July 2019 at a U.S. based integrated torture treatment center. Of the 172 Ethiopian clients included in the study, 83.1% % reported persecution on the basis of political opinion. The mean age of participants is 35.52 years (SD = 7.57) and the majority of participants are Orthodox Christian (74.4%), male (73.8%), married (62.2%) and have a level of education of largely 13-16 years (45.3%) or more than 16 years (32.6%). Participants are largely affirmative asylum applicants as 81.4% of participants reported that they arrived to the U.S. on a visa, a proxy for affirmative asylum status in this population (Bowmani, 2020). The average amount of time spent in the U.S. before the intake process was 17.55 months (SD = 26.39). Employment status ranges from those that are employed (FT/PT) with work authorization (44.8%) to those who are not employed due to a lack of work authorization (40.7%) and those who are currently seeking employment (11.0%). 59.9% of participants report housing status as "stable" and the majority of participants did not need an interpreter for services (77.3%). For participants who were married, 63.6% of spouses are residing outside of the U.S.

Purpose and Research Questions

The purpose of the study is to examine the relationship between client socio-demographics and post-migration stressors on mental health outcomes of anxiety, depression, and emotional distress among Ethiopian torture survivors that present for an intake session at a torture treatment center. The study also examines the impact of post-

migration stressors as predictors of anxiety, depression, and emotional distress among torture survivors at intake, when controlling for socio-demographic factors.

The following are the research questions for this study:

1. What post-migration stressors (time spent in the U.S., employment status, housing status, family separation, and need for an interpreter) when controlling for socio-demographic variables (gender, age, education level, and marital status) predict severity of mental health outcomes? Mental health outcomes are operationally defined as anxiety, depression and emotional distress as measured on the Hopkins Symptom Checklist -25 (HSCL-25).
    a. Greater length of time in the U.S. will predict more severe mental health outcomes.
    b. Greater instability with employment status will predict more severe mental health outcomes.
    c. Greater instability with housing status will predict more severe mental health outcomes.
    d. Family separation will predict more severe mental health outcomes.
    e. Need for an interpreter will predict less severe mental health outcomes.
2. Does age, gender or work authorization moderate the relationship between post-migration stressors and more severe mental health outcomes? Mental health outcomes are operationally defined as anxiety, depression and emotional distress as measured on the Hopkins Symptom Checklist -25 (HSCL-25).

a. Older age, female gender and lack of work authorization will strengthen the relationship between post-migration stressors and more severe mental health outcomes.

Summary of the Methodology

The current study is a cross-sectional archival study analyzing a client data set from an integrated torture treatment center in an urban metropolitan area in the mid-Atlantic region of the United States. The center is a survivors-led organization that supports torture survivors through an integrated approach providing services for community and social connection, legal aid, psychological needs, and medical support.

The study generates descriptive statistics, linear regression analysis and analysis of moderating variables. For the primary research question, multiple linear regression analysis was conducted for socio-demographic variables (gender, age, education level, and marital status) and post-migration variables (time spent in the U.S., employment status, housing status, family separation, and need for an interpreter) for outcome variables of anxiety, depression, and emotional distress. For the secondary research question, the relationship between post-migration factors and mental health outcomes were analyzed with gender, age and work authorization as moderating variables.

Statement of Potential Significance

The current study seeks to benefit theory, knowledge, practice, policy, and future research by providing one of the first studies on the impact of post-migration stressors on mental health outcomes that focuses exclusively on Ethiopian asylum seekers that are obtaining services at a torture treatment center in a metropolitan region of the United States. The current study is also one of only a few studies to examine the impact of post-

migration stressors and not only clearly state the country of origin for participants but also sample an understudied population of Ethiopian asylum seekers in the U.S. This focus can provide more targeted feedback to serving the needs of asylum seekers, who as a population may carry a greater mental health burden than refugees and need to be represented in the literature accordingly (Iverson & Morken, 2004; Kashyap et al., 2019; NCTTP, 2015; Newnham et al., 2019; Nickerson et al., 2019; Toar et al., 2009). The study is the first inquiry into the mental health outcomes associated with post-migration stressors such as length of time in the U.S., housing instability, employment instability, family separation, and English proficiency for a sample of affirmative asylum applicants in the United States. Improved understanding of the needs and experiences of this population can potentially improve clinical outcomes (Urtzan & Wieling, 2018) as well as broader legal protections (Piwowarczyk, 2007), especially as the rights of refugees and asylum seekers have been threatened by a rise in anti-immigrant and anti-refugee sentiment globally (Silove, Ventevogel & Rees, 2017).

Limitations

Participants may have had challenges in understanding constructs of the HSCL-25 or the HSCL-25 may not fully capture cultural idioms of distress as it was originally designed to capture Western understandings of depression, anxiety, and emotional distress. The Amharic translations of the HSCL-25 have also not yet been validated, although validation is currently in progress. Participants may also have experienced fatigue in taking a battery of intake assessments at once, which could impact responses, or participants may not have wanted to disclose symptoms accurately. Another limitation is that as an archival study, the current study utilizes a convenience sample of clients that

presented at the site for an intake for services. As a clinical sample this can limit participation of individuals with barriers to accessing care as well as over-sample individuals who may be experiencing clinically significant levels of distress. Lastly, participation was limited to individuals who completed the HSCL-25, which omits a large portion of the clients seeking services at the site. The HSCL-25 was not administered for individuals if they refused to complete the assessment or if staff determined that the assessment is not clinically appropriate (i.e. if a client was presenting with symptoms of trauma and could be further triggered by the assessment tool or if a client was presenting with urgent post-migration concerns that impaired the ability to concentrate on a psychometric instrument). All of these factors could limit generalizability of the study to a wider population.

Delimitations

Self-reported mental health symptoms and post-migration factors were only considered at intake. This provides a cross-sectional perspective and does not provide a longitudinal view of the development of these factors across time. This delimitation was established as the majority of participants completed mental health assessments at one time interval only. The study also involves multiple iterations of the mental health assessment (i.e. English only, Amharic only, both English and Amharic concurrently, as well as changes made to the translation over time). This delimitation was established based on recommendation from the site program management and reports that site staff were trained and supervised to resolve any discrepancies or confusion clients may have had in understanding items on the HSCL-25 verbally at the time of intake. Lastly, the

study does not control for trauma as the Harvard Trauma Questionnaire was only utilized on a subset of the sample and has been discontinued at the site.

Assumptions

The study assumes that the HSCL-25 is a valid and reliable instrument for measuring depression, anxiety and overall emotional distress among torture survivors and asylum seekers in the study. The study also assumes that survivors could understand the constructs of the HSCL-25 and answered honestly to the best of their ability. It is also assumed that staff accurately entered the data into an online database from the original pencil-paper version provided to clients. Lastly, the study assumes equivalency for comparison between the different versions of the HSCL-25.

Definition of Key Terms

This section will define key terms conceptually and operationally as they are utilized in the current study. The terms*, torture, refugee, asylum seeker,* and *affirmative asylum case* will help contextualize the sample as participants are asylum seekers (i.e. not refugees) who are largely seeking affirmative asylum and are torture survivors enrolled in a U.S. Survivors of Torture Program. The remaining terms are key variables utilized in the study. *Post-migration stressors* are predictor variables and *mental health outcomes* are the outcome variables used in the study.

Torture

Torture is defined by the U.S. federal government as "an act committed by a person acting under the color of law specifically intended to inflict severe physical or mental pain or suffering (other than pain or suffering incidental to lawful sanctions) upon another person within his custody or physical control (18 U.S.C. § 2340)." "Severe

physical or mental pain or suffering" is further defined as "the prolonged mental harm caused by or resulting from— (A) the intentional infliction or threatened infliction of severe physical pain or suffering; (B) the administration or application, or threatened administration or application, of mind-altering substances or other procedures calculated to disrupt profoundly the senses or the personality; (C) the threat of imminent death; or (D) the threat that another person will imminently be subjected to death, severe physical pain or suffering, or the administration or application of mind-altering substances or other procedures calculated to disrupt profoundly the senses or personality (18 U.S.C. § 2340)." These definitions are cited in legislation authorizing the Torture Victims Relief Act of 1998 (TVRA) and utilized by the Office of Refugee Resettlement Services for Survivors of Torture Programs (Office of Refugee Resettlement, n.d.).

Immigration Status

A *refugee* is defined by the 1951 Geneva Convention as an individual with a "well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 2010). In the United States, a refugee is further legally defined as an individual who has arrived to the US as part of the US Refugee Admissions Program (USRAP) based on designated priority categories (Department of Homeland Security, 2019).

An *asylum seeker* is defined by the U.S. Citizenship and Immigration Services (USCIS) as an individual who applies for refugee protection after arrival to the US and must prove fear of persecution consistent with the definition of a refugee stipulated in the

1951 Geneva Convention in a US immigration court (Department of Homeland Security, 2019). An *Affirmative Asylum Case* is a legal designation for applicants that apply for asylum through U.S. Citizenship and Immigration Services (USCIS) in the first year of arrival in the United States. This is contrast to a "Defensive Asylum Case" where an individual applies through an immigration judge once removal proceedings in the United States have already begun (Department of Homeland Security, 2019). According to the "Last In, First Out" Rule, a U.S. immigration policy change that went into effect in January 2018, pending affirmative asylum applications will be scheduled for adjudication, not in the order they were received/filed, but rather starting with newer filings (Corcoran, 2019; USCIS, 2018). There is currently a backlog of 340,810 affirmative asylum cases (out of a total of 476,000 asylum cases) awaiting adjudication of their cases as of October 11, 2019 (USCIS, 2019).

Post-Migration Stressors

Post-Migration Stressors are psychosocial stressors experienced by refugees and asylum seekers after arrival into a country in which they hope to seek protection. For the context of this study and its participants, these stressors are experienced upon entering the United States. A comprehensive review of the literature categorized these stressors across three domains (socioeconomic, social and interpersonal) and those related to the asylum process and immigration policies (Li et al., 2016).

Mental Health Outcomes

Mental health outcomes are operationalized as depression, anxiety and emotional distress assessed on the self-report, 3-factor, Hopkins Symptom Checklist-25 (HSCL-25)**.** The scale for depression has been found to be compatible with the DSM-IV diagnosis of

Major Depressive Disorder (Glaesmer et al., 2013) and is assessed through 15 items that correspond to symptoms experienced over the past two weeks and includes 1) "Feeling low energy, slowed down," 2) "Blaming yourself for things," 3) "Crying easily," 4) "Loss of sexual interest or pleasure," 5) "Poor appetite," 6) "Difficulty falling asleep or staying asleep," 7) "Feeling hopeless about the future," 8) "Feeling blue (sad)," 9) "Feeling lonely," 10) "Thoughts of ending your life," 11) "Feeling of being trapped or caught," 12) "Worrying too much about things," 13) "Feeling no interest in things," 14) "Feeling everything is an effort," and 15) "Feeling worthless." The scale for anxiety has been found to be compatible with criteria for Generalized Anxiety Disorder (Glaesmer et al., 2013) and is assessed through 10 items that correspond to symptoms experienced over the past two weeks and includes 1) "Suddenly scared for no reason," 2) "Feeling fearful," 3) "Faintness, dizziness, or weakness," 4) "Nervousness or shakiness inside," 5) "Heart pounding or racing," 6) "Trembling," 7) "Feeling tense or keyed up," 8) "Headaches," 9) "Spells of terror or panic," and 10) "Feeling restless, cannot sit still". The scale for emotional distress is a mean of the depression and anxiety scales.

Chapter 2: Literature Review

Overview of Refugees and Asylum Seekers

The United Nations High Commission of Refugees (UNHCR) (2019) estimates that there are 70.8 million people forcibly displaced worldwide. Of this number, 25.9 million people are classified as refugees that have crossed an internationally recognized border, 41.3 million people are designated as internally displaced within their country of origin and over 3.5 million people have submitted applications for asylum outside their country of origin. The UNHCR estimates that each day, conflict and persecution forces

37,000 people to flee from their homes; this is approximately equivalent to one person every two seconds (UNHCR, 2019). As the refugee crisis grows, research with displaced populations can inform improved policies and services for this population.

For the context of this study it is critical to differentiate between the legal definition of a "refugee" and "asylum seeker" in order to understand the experiences of participants. The 1951 Geneva Convention forms the basis for the legal definition of a refugee as an individual with a "well-founded fear of being persecuted for reasons of race, religion, nationality, membership of a particular social group or political opinion, is outside the country of his nationality and is unable or, owing to such fear, is unwilling to avail himself of the protection of that country" (UNHCR, 2010). The UNHCR refers refugees to the U.S. Refugee Admissions Program (USRAP) based on designated priority categories. Once a refugee application for resettlement is approved by the United States, the U.S. Department of State coordinates with the International Organization for Migration (IOM) and a U.S. based resettlement agency, or "sponsor," for the refugee and his/her/their legal spouse and unmarried children under the age of 21 to travel to the U.S. Upon arrival, the designated resettlement agency assists refugees and their families with housing, employment, etc. Refugees are granted work authorization upon arrival and within one year are required to apply for a "green card"/legal permanent residency (Department of Homeland Security, 2019).

A key difference between refugees and asylum seekers is that asylum seekers apply for refugee status *after* arrival to the Unites States, which can present additional challenges for this population. A person may seek asylum upon arriving to an official "Port of Entry" or may already have been present in the U.S. at the time of the

application. An asylum seeker must prove fear of persecution consistent with the definition of a refugee stipulated in the 1951 Geneva Convention in order to receive refugee status (and a path to legal permanent residency) and corresponding legal benefits (i.e. permanent work authorization, access to public benefits, etc.) and is referred to as an "asylee" once their claim is legally accepted. Asylum cases are designated as either "affirmative" if an individual applies through U.S. Citizenship and Immigration Services (USCIS) in the first year of arrival in the United States or "defensive" if an individual applies through an immigration judge once removal proceedings in the U.S. have already begun (DHS, 2019). The research study participants are all asylum seekers (the majority of whom are pursuing "affirmative" asylum cases), which greatly inform their perspectives and experiences. The current study is one of the few studies to look exclusively at asylum seekers in the U.S. as studies frequently combine asylum seekers, refugees and other immigrant groups, which can be problematic as these groups can have distinct experiences, stressors, and strengths.

The rights of refugees have come under threat as anti-immigrant and anti-refugee sentiment rises globally (Silove, Ventevogel & Rees, 2017). U.S. refugee data reports a decrease in numbers of refugees resettled across the past several years. From fiscal year 2017 – 2019, measured as October 1st – Sept 31st of each year, the U.S. Department of State, Bureau of Population, Refugees and Migration (2020), reports that 106,207 refugees have been resettled in the United States, representing an average of 35,402 people/year. This is a 53% decrease from fiscal year 2014 – 2016 when 224,914 refugees were resettled, representing an average of 74,971 people/year (DOS, 2020). Each fiscal year, the President of the United States in consultation with Congress, determines a

ceiling for refugee admissions numbers. The trend in declining refugee admissions will continue in Fiscal Year 2020 with a proposed refugee admissions ceiling of up to 18,000 refugees (White House, 2019).

The current study focuses primarily on the needs of asylum seekers. Between FY 2016 – 2018, 85,558 asylum cases (52,919 affirmative asylum cases and 32,639 defensive asylum cases) were granted (DOS, 2020). While the number of refugees entering the U.S. has steadily declined since 2017 with no signs of this trend reversing, asylum seekers continue to wait for adjudication of their cases in the United States. As of October 11, 2019, there was a backlog of 476,000 asylum cases awaiting review, including 340,810 affirmative asylum applicants awaiting adjudication of their cases (USCIS, 2019).

The scheduling of adjudication interviews for affirmative asylum applicants was subject to a recent policy change impacting asylum seekers, including many of the participants of this study. Beginning in January 2018, pending affirmative asylum applications will be scheduled for adjudication, not in the order they were received/filed, but rather starting with newer filings (USCIS, 2018). This rule has been referred to as "Last In, First Out" and has several implications that may add to the stress of the asylum process, and thereby the stress experienced by participants in this study. First, newer asylum applicants have less time to prepare claims and corroborate evidence when they appear before a judge to present their case. Second, asylum applicants who have been waiting for an interview for years have been shifted to the lowest priority of applicants, which adds additional wait time and uncertainty to their case (Corcoran, 2019).

The uncertainty of the asylum process is a unique stressor for participants of the current study. In a study of asylum seekers in New York City, Asgar and Segar (2011) found that uncertainty during the asylum process as participants waited for a determination to be made on their case may contribute to feelings of "resignation" and "fatalism" that can preclude health-seeking behaviors. In a way, the adjudication of their asylum case was imbued with "symbolic value as a potential endpoint to suffering." In a qualitative study of asylum seekers in Sweden, Brekke (2010) found that asylum seekers noted sleep disturbances, physical symptoms, and near catatonic behaviors as a result of the uncertainty and "waiting". In addition, Brekke (2010) found that asylum seekers reported considerable distress due to a perceived lack of control in the situation (i.e. a seemingly random nature to when decisions would be rendered that could be equated with a lack of fairness). A lack of control was found to engender apathy or a "letting go." Brekke described the sensation of being in "limbo", suspended between past and future as "directionless time" which also impaired asylum seekers' ability to develop relationships and engage with social and community supports. Asylum seekers noted sentiments including, "the waiting is like being in the middle of an ocean and not knowing whether you will survive or not. You don't know what your destiny will be. Maybe you can't get out and drown." Another asylum seeker noted, "Even in a prison they operate with a time limit! "This is when you are going to be free", they'll tell you. But here they only tell you to wait, just wait…" As the challenges to the US asylum process continue to mount, more research on the impact of psycho-social or post-migration factors can help inform clinical and policy recommendations to meet the mental health needs of asylum seekers at this challenging time (Urtzan & Wieling, 2018).

The current study examines the experiences of asylum seekers in the United States that were clients of a torture treatment center during a 45-month period between Oct 1, 2015 – June 30, 2019. All participants are in the asylum process (and largely affirmative asylum applicants) and therefore are awaiting adjudication of their claims in order to be granted asylee status; many may be subject to the recent U.S. immigration policy changes such as the "Last In, First Out" rule. Unlike refugees and asylees, asylum seekers are "in limbo" and hold an insecure immigration status as they await adjudication of their claims to determine if they will be permitted to remain in the United States permanently or potentially face deportation to countries where they had faced persecution. Additionally, asylum seekers are not granted the same benefits (i.e. social services) as refugees that enter the United States in partnership with a local sponsor that assists with resettlement upon arrival (DHS, 2019). The added burden of needing to apply for refugee status exacerbated by the lack of secure housing, employment, and other post-migration stressors (Campbell & Steel, 2015; Hereen et al., 2014), contributes to a markedly different experience for asylum seekers than refugees.

Mental Health Concerns and Impact of Torture

By definition, refugees and asylum seekers have a history of persecution and have been forcibly displaced from their homes. Researchers have examined the impact of these experiences on the mental health of this population. In a systematic review of almost 7000 refugees resettled in Western counties, it was found that refugees had a ten time higher rate of Post-traumatic Stress Disorder (PTSD) than the general population (Fazel et al., 2005); in a more recent systematic review with 16,010 refugees, this figure leapt to a fifteen times higher rate of PTSD and a fourteen times higher rate of depression than

the general population (Bogic et al., 2015). In another review of 161 studies with over 81,866 refugees, asylum seekers, and other forced migrants from 40 countries, it was found that exposure to torture and other potentially traumatic events (PTEs) was the greatest risk factor for the development of PTSD and depression. This study also notes a high prevalence of the use of torture among countries where forced migrants originate (Steel et al., 2009). When examining types of torture, Hooberman et al. (2007) found that rape/sexual assault was the only form of torture examined that was positively associated with symptoms of depression and Chu et al. (2013) found that rape/sexual assault was the only form of torture examined that was positively associated with severity of PTSD; this was in contrast to other torture types (witnessing torture of others, torture of family members, physical beating, and deprivation/passive torture) that were not associated with symptoms of depression or severity of PTSD in both studies. In a report compiled by the National Consortium of Torture Treatment Programs in the United States (NCTTP 2015), outcome data on 9,025 torture survivors who received services between fiscal year 2008-2013 revealed that torture survivors who reported experiencing three or four types of torture (compared to one or two types of torture), had significantly higher rates of PTSD and Major Depressive Disorder (MDD).

In studies specific to torture survivors, the Hopkins Symptom Checklist -25 (HSCL-25), the measure used in the current study, has been widely utilized to measure prevalence of clinically significant anxiety and depression. Utilizing the HSCL-25, Song et al. (2018) found a prevalence rate of 83.8% for depression and 81.3% for anxiety among a sample of about 278 asylum seekers and refugees, with about 50% of participants from Iraq, Iran and Eritrea. Leaman and Gee (2012) found a 94.7%

prevalence rate for depression among 131 African torture survivors. Schubert and Punamaki (2011) found a 78.2% prevalence rate for depression and anxiety in a sample of 78 participants from 14 countries in the Middle East, Central Africa, Southern Asia, and Europe. In a sample of 325 refugees and torture survivors from 54 countries (majority from African countries), Keller et al. (2006) found a prevalence rate of 81.1% for anxiety, 84.5% for depression. Tinghog et al. (2017) found a 40.2% prevalence rate of depression (Note. A cut-off score of 1.8 was used instead of 1.75 as in the other studies) and a 31.8% prevalence of anxiety among 1215 Syrian refugees. These studies were conducted around the world and across the US utilizing heterogeneous populations that combined refugees, asylum seekers, and other immigrants. The current study seeks to further explore the mental health of torture survivors but uniquely builds upon this research by focusing solely on a sample of Ethiopian asylum seekers in a particular metropolitan region in the US. This fills a critical gap in the literature that can provide an additional lens into addressing the mental health burden on torture survivors, an imperative for researchers, policy makers, and practitioners.

Background on Ethiopian Refugees & Asylum Seekers

The present study focuses exclusively on Ethiopian asylum seekers in the U.S. Ethiopian refugees and asylum seekers have sought protection in the United States since the start of the U.S. Refugee Admissions Program in 1980 (Migration Policy Institute, 2014). The Ethiopian diaspora community in the United States is the second largest immigrant group from Africa in the U.S. and the mid-Atlantic region, the site of the current research study, is home to the largest concentration of Ethiopians in the country (Ababa, 2018; Mahmoud et al., 2019). Ethiopian human rights abuses including torture

and arbitrary detention under poor conditions have been well documented (Bader, 2013) and recently acknowledged by Ethiopian Prime Minister, Abiye Ahmed (Human Rights Watch, 2018). Research with Ethiopian torture survivors is limited but has documented the mental health impact of torture across ethnically diverse Ethiopian communities (Eisen, 2016; Jaranson et al., 2004; Shannon et al, 2015; Welsh, 2012).

Demographic Context

Gender is a key demographic variable and a frequent subject of inquiry for a variety of reasons in studies of mental health outcomes in diverse populations. Among asylum seekers, female gender may be a unique risk factor as insecure visa status (i.e. temporary visas holders whose immigration status may be subject to termination or asylum seekers whose claims have the potential to be denied in contrast to those with permanent residency or citizenship) may contribute to self-harm and suicide, gender based violence, and challenges when establishing credibility of asylum claims during legal proceedings (Chantler, 2012). Gender is also often examined through the variable of "type of torture" reported by survivors. In a report compiled by the National Consortium of Torture Treatment Programs in the United States, outcome data on 9,025 torture survivors who received services between FY 2008-2013 revealed that 31.1% of women reported rape at intake compared to 8.1% of males. Women who reported rape at intake were also significantly more likely to be diagnosed with Major Depressive Disorder (NCTTP, 2015). In another study of survivors of political torture, men more frequently reported experiencing more types of torture than women and longer time spent in prison (Spiric, 2010).

Female gender predicted emotional distress among "humanitarian immigrants," newly arrived refugees, special immigrant visa holders, and asylees (that received asylum within 18 months of arrival to the U.S.) as measured on the Refugee Health Screener- 15 (Mahmood et al., 2019). Female gender was also a significant predictor of anxiety and depression on the HSCL-25 in various studies that sampled refugees, asylum seekers and torture survivors (Keller et al. 2006; Newnham et al., 2019; Song et al., 2015; Song et al., 2018) and a predictor for depression but not anxiety in another study (Schubert & Punamaki, 2011). In a sample of almost 900 survivors of political violence and torture in New York City, female gender was associated with more severe PTSD when controlling for rape/sexual assault and post-migration factors (Chu et al., 2013). In a meta-analysis including 22,221 refugees, female gender predicted worse mental health outcomes (Porter & Haslam, 2005). However, in other studies of refugees and torture survivors, gender was not a significant predictor variable for PTSD (Carswell et al., 2011; Ibrahim & Hassan, 2017; Leaman & Gee, 2012) or emotional distress (Carswell et al., 2011). In a meta-analysis of 161 studies with 81,866 refugees and other conflict-affected populations, gender was not associated with higher prevalence of PTSD or depression when adjusted for variance in sample size, sampling methods, type of measure, and diagnostic time frame (Steel et al., 2009). Based on these conflicting findings, the current study seeks to better understand the relationship between gender, post-migration stressors and mental health outcomes within a specific sample of asylum seekers that are torture survivors of Ethiopian origin.

Age similarly yields mixed results as a predictor of poorer mental health outcomes. The same meta-analysis of 81,866 refugees found that age also was not

associated with higher prevalence of PTSD or depression when adjusted for variance in sample size, sampling methods, type of measure, and diagnostic time frame (Steel et al., 2009). However, the Porter and Haslam (2005) meta-analysis of 22,221 refugees found that older age predicted worse mental health outcomes. Song et al. (2015) found older age to be a predictor of PTSD and depression and Song et al. (2018) found it to be a predictor of PTSD, depression, and anxiety. Similar to the variable of gender, the current study seeks to examine the relationship between gender, post-migration stressors and mental health outcomes among a unique, under-studied population within the field of refugee research.

Theoretical Basis for Research Design

Theories for Understanding Refugee Mental Health

The refugee experience has been widely conceptualized through the phases of pre-migration, migration, and post-migration. The pre-migration phase is associated with the experience of war, violence and persecution in one's country of origin; the migration phase corresponds to experiences related to "flight" from one's country of origin and time spent displaced abroad; lastly, the post-migration phase refers to experiences related to refugee resettlement. An ecological model of refugee distress posits that each phase of the refugee experience corresponds to distinct stressors that impact mental health (Miller & Rasmussen, 2017). This model builds off of foundational psychosocial models in which an individual's family, community and social contexts are explored to better understand challenges and risk factors presenting across an individual's ecosystem (Bronfenbrenner, 1979). This framework provides guidance for clinicians, programs,

researchers, and policy makers in meeting the complex needs of refugees and asylum seekers (Silove et al., 2017).

Research has examined the importance of a psychosocial perspective as post-migration stressors can be an equal or larger predictor of psychological distress than pre-migration exposure to trauma alone (Carswell, 2007; Carswell, Blackburn, & Barker, 2011; Chu et al., 2013; Hollifield et al., 2018; Li, Liddell, & Nickerson, 2016; Miller & Rasmussen, 2010). The impact of post-migration stressors can have an even larger impact on the psychological health of asylum seekers over refugees (Chu et al., 2013; Toar et al., 2009). In a meta-analysis of over 16,000 refugees, Bogic et al. (2015) found that conditions like PTSD, depression, and anxiety can persist five or more years post-resettlement and that post-migration socio-economic challenges present significant risk factors that consistently predict higher rates of mental health conditions. Research has even shown that in the context of developing countries (i.e. what may be considered as part of the "migration" phase for asylum seekers and refugees in the United States), secondary stressors associated with displacement may have a larger impact on mental health than pre-migration trauma exposure alone. These stressors can include inadequate housing, employment, security, education, healthcare, social support and more (Alfadhli & Drury, 2016). The latter part of this chapter will describe how these secondary stressors can present more of a challenge for asylum seekers than refugees and the importance of studying post-migration factors in the current sample.

While there is ongoing debate on whether clinical interventions should prioritize either ongoing psycho-social post-migration stressors or stressors associated with pre-migration war exposure and cumulative experiences of trauma (Miller and Rasmussen,

2010; Neuner, 2010), torture treatment centers for refugee clients utilize integrated or collaborative treatment interventions that seek to address both (NCTTP, 2015). Research also suggests that rather than a linear, "either/or" model (i.e. either pre-migration or post-migration stressors), a circular model may better explain the link between post-migration living difficulties and anxiety/depression, the outcomes utilized in this current study (Schick et al., 2018). Naturalistic interventions have yielded support for collaborative treatment interventions among samples of torture survivors (Kashyap et al. 2019; Stammel et al., 2017; Whitsett & Sherman, 2017). Although collaborative treatment interventions are promising, there remains a need for more studies to examine the efficacy of these interventions through experimentally designed studies in refugee communities (Esala et al., 2018; Hamid et al., 2019).

The current study builds off of the psychosocial perspective by providing additional understanding of the impact of post-migration stressors on Ethiopian asylum seekers at intake upon receiving services at an integrative torture treatment center that is a member of the National Consortium of Torture Treatment Programs (NCTTP). A better understanding of the impact of post-migration stressors (to a specific, under-researched population of asylum seekers in a U.S. context) can help to inform clinical interventions and policy as it relates to this growing population.

Theories Related to Cross-Cultural Research

The use of clinical mental health assessments raises a number of cross-cultural considerations. Assessments can play a pivotal role in understanding symptoms of distress and assessing treatment outcomes but need to be considered in a cross-cultural context (Wind et al., 2017). A social constructivist framework is critical to addressing

this relational component between a respondent and interviewer when obtaining client data through the use of symptom checklists. Social constructivist frameworks recognize that participants' responses to mental health surveys generate values that need to be understood in context. This context includes the impact of the positioning of the client towards the individual, organizations and society in which the mental health assessments are being disseminated (Miller, Kulkarni & Kushner, 2006). The current study produces client data through symptom checklists and the next chapter will provide a detailed explanation of how mental health assessments were disseminated at the research site to contextualize the findings of the study by describing the relationships between the client and the interviewer and site as a whole.

The current study utilizes an ecological model to understanding refugee mental health concerns. Miller et al. (2006) note that ecological models can be more culturally - responsive by addressing refugee mental health concerns within the framework of their socio-cultural context rather than more bio-medical models that may prioritize Western psychiatric diagnoses of individuals. The current study utilizes a Western instrument, the Hopkins Symptom Checklist-25 (HSCL-25), which measures symptoms aligning with Western psychiatric diagnoses, primarily anxiety and depression. In the Harvard Program of Refugee Trauma's manual for utilization of the HSCL-25 for refugee populations, Mollica et al. (2004) states that the HSCL-25 should not be used as a "survey questionnaire" but rather as an "ethnographic tool" to better understand the psychological and socio-cultural effects of the refugee experience. This is particularly important as mental health distress may present differently cross-culturally among refugees/asylum seekers (Schubert & Punamaki, 2011). The current study outlines how the HSCL-25 is

used as more of an "ethnographic tool" at the research site. Mollica et al. (2004) also notes that the HSCL-25 should not be "hastily translated" but rather outlines a robust community-based methodology for translation of the document. This aligns with theories on mental health assessment cross culturally (de Jong & van Ommeren, 2002) that note how socio-cultural and political contexts are critical in developing content, semantic, concept, criterion and technical equivalence of constructs and variables across cultural and linguistic adaptations of instruments. The current study describes in detail how the HSCL-25 was translated and adapted for use at the research site in line with these theories.

Post-Migration Stressors

The current study explores post-migration or psychosocial stressors on mental health outcomes for asylum seekers. In a review of the literature, Li, Liddell and Nickerson (2016) examined the relationship between post-migration stressors on psychological disorders among refugees and asylum seekers. They categorize these stressors in three categories of socioeconomic, social and interpersonal, and those related to the asylum process and immigration policies. Socioeconomic factors include finances, housing security, and stable employment. Social and interpersonal factors include family separation, social isolation or exclusion, discrimination, loss of social identity, and change in social roles. Asylum process and immigration policy factors include more restrictive policies, mandatory detention, extended processing time, insecure visa status, complex legal procedures, and temporary versus permanent protections. The current study examines stressors including time spent in the U.S. (which may serve as a proxy for time spent under insecure visa status/temporary protections), employment status, housing

status, need for an interpreter, and family separation. The following section will provide an overview of the literature as it relates to the impact of these stressors on refugees and asylum seekers and identify gaps that the current study seeks to fill. A critical point to understanding post-migration stressors is that these stressors often overlap and intersect. While some studies isolate these individual factors as predictors of distress, others examine the collective impact that post migration living difficulties exert on mental health outcomes. This section will start with an overview of studies that aggregate post-migration stressors and follow by highlighting existing research on individual post-migration stressors that will be examined in this research study.

Overall Effects of Post-Migration Stressors

Post-migration stressors may differentially predict mental health outcomes. For example, Schick et al. (2018) found that improvements in post migration living difficulties (PMLD) significantly predicted improvements in anxiety and depression but not PTSD. Research by Bentley et al. (2012) found post-migration difficulties moderated the relationship between exposure to trauma and symptoms of depression. This interaction effect was strongest for individuals that experienced lower levels of pre-migration trauma (as opposed to higher levels of pre-migration trauma). Lastly, Carswell et al. (2011) found that when controlling for trauma, adaptation difficulties (i.e. not being able to work and poverty) accounted for significant variance in PTSD symptoms and loss of culture and support (i.e. loneliness and boredom, and isolation) accounted for significant variance in emotional distress.

The current study seeks to improve upon several of the limitations outlined in these same studies; in particular, the current study seeks to improve upon study sampling

in terms of immigration status and country of origin. As it relates to immigration status, Schick et al. (2018) examines the experiences of 71 refugees and asylum seekers (85.9% reporting torture) that were receiving treatment at an integrated specialized service center in Switzerland. However, individuals with a secure immigration status (i.e. permanent visa, residency or citizenship) are over-represented at 76% of the sample. Only 15.5 % were asylum seekers and 8.5% held a temporary visa- both a relatively smaller portion of the sample. The Carswell et al. (2011) study of 47 refugees, asylum seekers and refused asylum seekers in the United Kingdom similarly over represents participants with a secure immigration status; 64% of the sample are refugees, while only 28% are asylum seekers and 8% are refused asylum seekers (i.e. those who were denied asylum, exhausted appeals, and were eligible for deportation). The current study seeks to sample only asylum seekers in order to examine the impact of post-migration stressors on this relatively understudied population that is too often lumped together with participants that may have very different experiences afforded by a secure immigration status.

In the Bentley et al. (2012) study, the immigration status of participants, 67 Somali refugees and asylees in the United States, is not even clear. The study refers to participants as "Somali refugees" and the demographics are broken down as 25.7% refugees/political asylees, 16.3% permanent residents, 23% U.S. citizens, and 35% respondents declined to respond. It is unclear how many participants that may have declined to respond are asylum seekers or have other non-permanent immigration status. The Bentley et al. (2012) study also limited sampling to a convenience sample of individuals attending community-based events, which may not include those who are not as integrated within the population or whose mental health symptoms may preclude such

participation. Participants in the current study are all clients receiving services at a torture treatment center thus sampling is not dependent upon social participation in community events.

In terms of the country of origin of participants, Bentley et al. (2012) and Schick et al. (2018) both report the country of origin for participants. The Bentley et al. (2012) study samples only those of Somali origin while the Schick et al. (2018) study sample is largely Turkish (mostly Kurdish), Iranian and Sri Lankan. The Carswell et al. (2011) study, however, does not break down the sample among country of origin or ethnicity but rather "Area of Origin" operationalized as either the "Middle East", "Africa", "Europe", "Asia", and "South America". 40% of participants are from "Africa", without naming the specific countries or even regions. The lack of specificity in the Carswell et al. (2010) study collapses the wide differences between communities from across the continent and thus can obfuscate the context of the study and application of its results. The current study clearly outlines the country of origin of participants as Ethiopia and contributes to the literature on post-migration stressors in this asylum-seeking population.

The current study also builds off of the recommendations outlined in these studies. Schick et al. (2018) suggests that future research further explore what specific post migration living difficulties contribute most to distress, a key purpose of this study. The current study also follows through on recommendations by Bentley et al. (2012) that additional research examine the impact of post-migration stressors on symptoms of anxiety and depression among forced migrants and that the impact of post-migration stressors should be examined separately for both anxiety and depression (and not solely as an aggregated value). Lastly, the current study examines the impact of employment

and family separation as key post-migration variables which is in part informed by findings from Bentley et al. (2012) and Carswell et al. (2011) that employment and family separation were among the most frequently endorsed post-migration difficulties for respondents. The following sections will explore individual post-migration variables that will be examined in the current study.

Specific Post-Migration Stressors

This section will examine literature as it relates to the impact of time spent in the US, housing status, employment status, need for an interpreter, and family separation on mental health outcomes. These variables were selected for inquiry as they present prominently in the literature on post-migration stressors and refugee mental health. These variables also correspond to the literature on social determinants of health utilized widely across diverse populations.

Time Spent in the US. Time spent in the United States is a measure of weeks, months and/or years that have lapsed since arrival to the United States. For refugees, time spent in the U.S. begins with the first day of arrival when refugees begin working with a resettlement agency and are assisted with services including housing, employment, and education. Refugees qualify for these resettlement services for up to 8 months so in studies working with refugees, the 8-month mark is frequently used as an indicator of when refugees may see a decline in the amount of assistance/support they had received during resettlement (Ballard-King et al., 2017). For asylum seekers, time spent in the U.S. signifies the amount of time since arrival and thus a measure of the amount of time that has lapsed without a permanent immigration status. For many asylum seekers, it may also roughly represent the amount of time spent in the asylum process, as individuals

must apply within one year of arrival. Various studies have found that longer time spent in the U.S. is a significant factor contributing to poorer mental health outcomes. In a U.S. based study of refugees and asylum seekers largely from Iraq, Iran and Eritrea, Song et al. (2015) found that when controlling for socio-demographics factors, length of time in the U.S was the strongest predictor of clinically significant PTSD and depression. In a follow-up study, Song et al. (2018) found that length of time in the U.S. significantly predicted anxiety, depression and PTSD.

Housing Status. Unstable housing and hazardous living conditions contribute to poorer mental health (Allen et al., 2014). This has also been found to be the case among refugees and asylum seekers as well. Whitsett and Sherman (2017) found that among torture survivors receiving psychiatric treatment, housing conditions significantly predicted symptoms of depression, anxiety and trauma. In an archival, longitudinal data study, Kashyap et al. (2019) sought to understand the impact of post-migration stressors on largely U.S. asylum seekers that were torture survivors across a 6-month treatment window. Stable housing was associated with an increased occurrence of employment; however, improvements in housing did not directly reduce symptoms of depression or PTSD. Rather, improvements in housing served as a significant moderator between decreased chronic pain and decreased PTSD. In a U.S. based study of refugees and asylum seekers largely from Iraq, Iran and Eritrea, Song et al. (2018) found that unstable housing status predicted PTSD, depression and anxiety.

Employment Status. A systematic review of the literature finds that employment and re-employment are associated with lower psychological distress, depression and anxiety when compared to mental health outcomes associated with unemployment and

job loss (Hergenrather et al., 2015). In a refugee and asylum-seeking population, employment challenges were similarly associated with poorer mental health outcomes (Bogic et al., 2015; Carlsson et al., 2006; Johnson & Thomspon, 2008; Laban et al., 2005; Li et al., 2016; Priebe et al. 2013). In a sample of refugee and asylum seekers, poverty and employment were moderate predictors of trauma symptoms (Creswell et al., 2011). However, it is important to note that simply having employment is not necessarily related to better mental health functioning in refugees, raising critical questions also about the type of employment as well (Myhrvold & Smastuen, 2017).

Need for an Interpreter. Need for an interpreter can be used as a proxy for English proficiency, a stressor that has had varied impact on mental health outcomes. Studies have shown that lower English proficiency may predict worse mental health outcomes and when coupled with a lack of professional interpretation, can decrease health care access (Kirymayer et al., 2011; Shishehgar et al., 2015). It is important to keep in mind that need for an interpreter can also reflect lack of interpretation services and utilization by service center as studies have shown an underutilization of interpretation services by health care providers (Hynie et al., 2016; Kale & Syed, 2010). When utilized as a proxy for English fluency, in a sample of approximately 900 immigrant survivors of political violence that were clients at a New York City clinic, Chu et al. (2013) found that at client intake, apart from immigration status, fluency in English was the only other post-migration variable that was a significant predictor of trauma on the Harvard Trauma Questionnaire- 30. The researchers theorized that fluency/proficiency in English, may be a marker for a "greater loss of status" or "unfulfilled expectations," that can account for poorer mental health outcomes as

participants may have been more educated or held a higher socioeconomic status in their country of origin. Studies have shown that among African migrants, unrealistic pre-migration expectations can negatively impact post-migration adjustment in the United States (Covington-Ward, 2017). In a cross-sectional study of 781 clients at an Australian clinic serving refugee and asylum seekers that are survivors of torture and/or trauma, Newnham et al. (2019) similarly found that individuals with higher symptoms of depression and anxiety were less likely to use an interpreter; the study did not discuss this finding but stated that use of interpreters may have been a limitation that had implications on reliability and validity of the measures used.

Family Separation. Family separation is common to the refugee experience and conceptualized as both a pre-migration and post-migration stressor as well as a link between distressing pre and post migration experiences (Miller, et al., 2018; Rousseau et al., 2001). Tay et al. (2015) also examined the role of distress regarding family separation as a mediator between traumatic loss and symptoms of PTSD. When controlling for trauma exposure, Miller et al. (2018) found that family separation explained variance in depression, anxiety, trauma and psychological quality of life among 165 refugee participants from Afghanistan/Persian area, Iraq/Syria, and the Great Lakes Region of Africa residing in Albuquerque, New Mexico. The quantitative data was supplemented with qualitative interviews to describe the ways in family separation serves as a key stressor and themes included fear for family safety, "powerlessness" to help, loss of family as a means to emotionally cope with difficulty, disruption of cultural practices and guilt for coming to the United States. Another mixed-method study of 113 refugees and asylum seekers in Canada found that for the African respondents, the data suggests that

the trauma of family separation is more of a factor than other traumatic experiences (40% of the African sample were torture survivors) on emotional distress. This data was supplemented and explained through qualitative semi-structured interviews and case studies that described how family separation added to the trauma load of participants and how family reunification could help ameliorate the effects of other personal trauma incurred (Rousseau et al., 2001). A qualitative study of Sudanese refugees in Australia further explored the impact of separation, the role of sending money home, and ways in which refugees connected with separated family members (Savic et al., 2013). The current study seeks to examine the role of family separation among torture survivors and asylum seekers in the U.S. and explores if family separation is a predictor of emotional distress among Ethiopian asylum seekers.

Need for the Study

The current study fills several gaps in the literature on post-migration stressors that will be explored in this section. First, the current study examines the experiences of asylum seekers, an understudied population whose experiences are too often conflated with those of refugees or other immigrants. Next, the study seeks to understand the post-migration experiences of torture survivors from Ethiopia that have resettled in an urban metropolitan area in the mid-Atlantic region of the United States, an understudied population in refugee research.

Focus on Asylum Seekers

Despite the differences between refugees and asylum seekers, literature examining the experiences of forced migrants often fuses the experiences of refugees and asylum seekers, referring to them collectively as “refugees,” which collapses the

differences in their experiences. Refugees and asylum seekers in the United States can face different stressors and have markedly different experiences that impact their mental health and wellness. Asylum seekers hold the added burden of needing to apply for refugee status, which can be a long journey riddled with uncertainty and exacerbated by an array of post-migration stressors including lack of secure housing and employment (Campbell & Steel, 2015; Hereen et al., 2014). The current study seeks to contribute to literature that isolates the experiences of asylum seekers (largely "affirmative" asylum applicants) to better understand and address the mental health needs of this unique population. In addition to informing clinical practice, the current study can also have legal implications as Piwowarczyk (2007) argues that the current lack of understanding between the differences among forced migrants that enter into the U.S. can lead to fewer legal protections for individuals who have a right to seek asylum under the United Nations Declaration of Human Rights.

A targeted focus on asylum seekers is also needed as asylum seekers may have a greater mental health burden than refugees and need to be represented in the literature accordingly. The 2015 report compiled by the National Consortium of Torture Treatment Programs (NCTTP) in the United States found that asylum seekers compared to refugees had significantly higher rates of PTSD and Major Depressive Disorder at intake compared to refugees. A study in Norway similarly found that asylum seekers had over a three times higher prevalence of PTSD than refugees in the same sample (Iverson & Morken, 2004). In an archival, longitudinal study of 323 participants, Kashyap et al. (2019) found that across a six-month treatment window, changes to a more stable immigration status was associated with significantly reduced depression symptoms in a

sample of largely U.S. asylum seekers that were torture survivors. A cross-sectional study of 781 clients at an Australian clinic for refugees and asylum seekers also found that those with insecure immigration status (i.e. temporary visa holders, asylum seekers, and those awaiting deportation) reported "high" or "very high" depression/anxiety at a rate of at least five times more than those with stable immigration status (Newnham et al., 2019). In a similar study of 1,085 refugees and asylum seekers in Australia, it was found that not only do those with permanent residency or citizenship have better mental health outcomes related to PTSD, depression and anxiety than those that were asylum seekers or on a temporary visa, but also those with less secure immigration status had more suicidal ideation and suicidal intent (Nickerson et al., 2019). In another cross-sectional study of self-reported health status among refugee and asylum-seeking clients in Ireland, Toar et al. (2009), found that asylum seekers were significantly more likely to report symptoms of PTSD and depression/anxiety than refugees. The presence of chronic disease, high levels of pre-migration stressors and post-migration stressors were predictors of both PTSD and anxiety/depression respectively (measured on the HSCL-25). In the Toar et al. study, residence status (asylum vs refugee status) was found to not be independently associated with PTSD or anxiety/depression symptoms but rather a marker for post-migration factors, a significant explanatory variable; researchers recommended further research to examine the impact of the asylum process on mental health, utilization of mental health services, and the role of post-migration factors. The current research study aims to understand the impact of many of the post-migration factors in these studies on symptoms of anxiety, depression and emotional distress among asylum seekers.

The current study also aims to build off of and improve upon studies that do sample a large proportion of asylum seekers or other immigrants with an insecure immigration status. In a sample of approximately 900 immigrant survivors of political violence and torture seeking services at a New York City clinic, Chu et al. (2013) found that at client intake, lack of legal immigration status was the most significant post-migration variable to predict PTSD symptoms as reflected on the Harvard Trauma Questionnaire - 30. Experiencing rape/sexual assault was found to be nearly equal to lack of legal immigration status in predicting trauma. A gap of this study is that legal immigration status is conceptualized as a dichotomous variable of either "does not have legal status" (n=394) or "has legal status" (n=53). "Has legal status" is further operationalized through only a parenthetical reference of "i.e., asylum, Green Card, visa, etc." and does not provide any further information regarding the classification of "does not have legal status," despite the fact that the majority of study participants were from this demographic. From the discussion it may be inferred that these participants are in the process of political asylum prior to adjudication of their case, but it cannot be known with certainty, as it is not explicitly stated. The current study improves upon the Chu et al. (2013) study by explicitly stating the immigration status of participants. By focusing exclusively on asylum seekers, the current study also has an opportunity to uniquely contribute to literature that focuses on this key demographic. The current study builds off of the Chu et al. (2013) study by examining the impact of post-migration stressors on different outcome variables of anxiety, depression and emotional distress.

Population Specific Needs and Demographic Information

As there are over 70 million people forcibly displaced worldwide, there is a wide diversity among refugees and asylum seekers as well as a wide diversity among settings where refugees and asylum seekers migrate. In a review of the literature on the relationship between post-migration stressors and psychological distress, Li et al. (2016) notes that one of the biggest challenges is the difficulty in generalizing the findings due to heterogeneity of the refugee and asylum seeking population on factors including culture, persecution, traumatic experiences, stressors, ongoing political conditions in country of origin and heterogeneity of resettlement environments on factors including policies, level of development, economies, and more. Put simply, the experiences and needs of a Syrian asylum seeker in a rural European setting may not be equivalent to those of an Ethiopian asylum seeker in an urban United States setting. Shannon et al. (2015) similarly explores the importance of the political environment in the country of origin for contextualizing mental health symptoms for refugees that are survivors of political torture and trauma. A key finding of the study was that to understand the experiences of participants, researchers needed to effectively gauge, "How did what happened to your community create suffering and how do you recognize that political suffering?" This provided space to discuss factors such as the use of government spies in the diaspora, the types of activities for which people were tortured, the current state of the conflict in their home country and community, and lastly what culturally grounded concepts of mental health may be applicable. Porter and Haslam (2005) also found in a meta-analysis that unresolved conflict in the country of origin was associated with poorer mental health outcomes for refugees in post-migration. The current research study

addresses this challenge by focusing on a particular understudied demographic of torture survivors in the United States from Ethiopia, a key demographic in the Shannon et al. 2015 study.

In regard to this challenge of heterogeneity, another limitation of many studies is that they may not properly demarcate the country of origin for participants and qualify them as "African" or "Middle Eastern" despite the vast differences that may exist within these populations. For example, in a study of refugees and asylum seekers conducted by Toar et al. (2009), a majority of study participants were stated to originate from "a number of African countries." In a chart review of asylum seekers obtaining mental health services at a torture/trauma clinic in the United States, Piwowarczyk (2007) notes that 80% of the sample originated from "Africa" but did not further break down the data by specific countries or regions despite the markedly different political, social, and economic contexts that may exist across the continent. Similarly, the Chu et al. (2013) study of survivors of political violence and torture (that largely did not have legal status) provided a breakdown of region as "Africa," "Asia," "Eastern Europe" and "Other Region." Chu et al. (2013) found that "Region of Origin" was not a significant variable associated with PTSD outcomes in any step of the model and noted that future research would examine these "within group" differences. The current study clearly articulates the country or origin as Ethiopia so the findings can be understood within the political and socio-cultural context of that community.

In the research literature on refugee mental health, there can be as much diversity in the countries where refugees migrate to as there is in the diversity in the countries from which they originate. Many studies examining post-migration factors among refugees can

be situated in locations as diverse as the United States, Europe, Australia as well as low and middle-income countries. Each of these settings can provide vastly different environments, with different strengths and challenges for refugees and asylum seekers reflected in their country's policies, level of development and attitudes towards immigrants that may change over time. The current study focuses exclusively on asylum seekers in an urban metropolitan area in the mid-Atlantic region of the United States obtaining services at a torture treatment center.

To date, there has been little research on the demographic of asylum seekers largely from Ethiopia. Mahmoud et al. (2019) conducted a secondary analysis of data from the Refugee Health Screener- 15 (RHS-15) administered to over 4,000 refugees, asylees, and Special Immigrant Visa Holders in Maryland. Although about 10% of participants were from Ethiopia, the study did not include asylum seekers but rather asylees that had been granted asylum within 18 months of entering into the United States. Researchers noted that asylees included in the study were largely derivative asylees (defined as asylum seekers that are joining a family member who had already been resettled and may have had the support of an existing social support system) and had significantly less severe mental health symptoms than other refugee groups in the study. The current study is examining a more vulnerable population that is still in the asylum process. Furthermore, almost all participants in the current study are seeking "affirmative" asylum in contrast to "defensive" asylum, as discussed earlier in this chapter. This focus can provide a basis for even more targeted research into the asylum-seeking population in the U.S.

Two doctoral dissertations have examined a sample of Ethiopian asylum seekers in the mid-Atlantic region of the United States that were obtaining services at a torture treatment center that closed in 2015. Upon closure of the center, torture survivors seeking services were referred to the site of the current study (The Center for Victims of Torture, n.d.). Eisen (2016) examined the impact of changes in post-migration variables including employment status, housing status and immigration status on the treatment of PTSD and depression on a sample of 78 participants, the majority of whom were Ethiopian (50%) and Cameroonian (28%). The study found that changes in housing and employment status were not associated with a change in symptoms of depression measured on the HSCL-25. The study found that receiving asylum was associated with a reduction of depression symptoms; the reduction in symptoms was greater when asylum was received earlier and 35% of the sample received asylum during the study window. Eisen (2016) concludes that continued research is necessary to understand the challenges of the asylum process. The current study builds upon this research with a more recent sample and adds post-migration variables of family separation, a key factor in the asylum process.

In another doctoral dissertation, Welsh (2012) examined a sample of 292 participants, the majority of whom were also Ethiopian (39%) and Cameroonian (33%) that obtained services between 2003 – 2009 at the same site as Eisen (2016) and determined that school/work involvement, English proficiency, and family separation did not significantly impact anxiety and depression measured on the HSCL-25. The study recommends researchers continue to explore cultural and country of origin differences among refugees as well as more understanding of the impact of the asylum process on mental health. The current study furthers this research by adding the variable of housing.

The current study also improves upon a limitation of the Welsh (2012) study that conflates the outcomes of anxiety and depression into one factor instead of separating out the two outcomes and examining how post-migration factors may impact anxiety and depression separately, as other research studies have recommended (Bentley et al. 2012). The current study also measures family separation as separation from a spouse whereas Welsh (2012) measures family separation as a global question of "Are you separated from your family?" which can be inclusive of extended and wider kinship ties and "Are you separated from your children?" but does not explicitly ask about separation from a spouse, which the current research study does.

Lastly, the current study examines a more recent sample that is subject to newer policy changes impacting refugees and asylum seekers from 2016-2019. Welsh (2012) examined a sample seeking services between 2003 – 2009. Eisen (2016) does not provide a timeframe for when the sample obtained services and notes that the sample was comprised of available hard copies of client files (omitting clients whose information had been entered into the electronic database) that had at least two separate data points, suggesting that data points could have been obtained from any point in the agency's 20 year history before closing in 2015.

In summary, prior research examining demographic information has been mixed across diverse samples of refugees, asylum seekers and other populations displaced by conflict and persecution. The current study explores socio-demographic variables to provide descriptive statistical information on the sample, examines how socio-demographic variables alone may predict anxiety, depression, and emotional distress, and

lastly controls for socio-demographic variables in order to assess how post-migration variables may predict emotional distress above and beyond socio-demographic factors.

Chapter 3: Methods

This chapter will provide an overview of the study, participants, instruments, operational definitions and research questions and hypotheses. The current study is a cross-sectional, archival study analyzing a client data set from an integrated torture treatment center in an urban metropolitan area in the mid-Atlantic region of the United States. The center is a survivor-led organization that supports torture survivors through an integrated approach providing services for community and social connection, legal aid, psychological needs, and medical support. The purpose of the study is two-fold. The study first examines the relationship between client socio-demographics and post-migration stressors on anxiety, depression, and emotional distress among torture survivors that present for an intake session at the center. Next, the study examines the impact of post-migration stressors as predictors of anxiety, depression, and emotional distress among torture survivors at intake, when controlling for socio-demographic factors.

Primary Research Question and Hypotheses

RQ: What post-migration stressors (time spent in the U.S., employment status, housing status, family separation, and need for an interpreter) when controlling for socio-demographic variables (gender, age, education level, and marital status) predict severity of mental health outcomes? Mental health outcomes are operationally defined as anxiety, depression and emotional distress as measured on the Hopkins Symptom Checklist -25 (HSCL-25).

H1: Greater length of time in the U.S. will predict more severe mental health outcomes. This is based on studies that have found that increased length of time in the U.S. predicted worse mental health outcomes (Song et al., 2015; Song et al., 2018). In this population, time in the U.S. also serves as a proxy for time spent with unstable or non-permanent immigration status or time spent in the asylum process which have been found to be stressors for asylum seekers (Li et al, 2016).

H2: Greater instability with employment status will predict more severe mental health outcomes. This is based on studies that found unstable employment to be associated with worse mental health outcomes (Bogic et al., 2015; Carlsson et al., 2006; Johnson & Thomspon, 2008; Laban et al., 2005; Li et al., 2016; Priebe et al. 2013).

H3: Greater instability with housing status will predict more severe mental health outcomes. This is based on studies that found that unstable housing was associated with worse mental health outcomes (Kashyap et al., 2019; Song et al., 2018; Whitsett & Sherman, 2017).

H4: Family separation will predict more severe mental health outcomes. This is based on studies that have found that family separation was associated with worse mental health outcomes (Miller et al., 2018; Rousseau et al., 2001; Savic et al., 2013; Tay et al., 2015).

H5: Need for an interpreter will predict less severe mental health outcomes. In this study, need for an interpreter is used as a proxy for more limited English proficiency. Research focusing on asylum seekers and those with unstable immigration status has found that greater English proficiency may predict worse mental health outcomes (Chu et al., 2013) despite studies that limited English proficiency has been shown to predict worse mental

health outcomes in some refugee and immigrant groups (Kirymayer et al. 2011; Shishehgar et al., 2015;).

Secondary Research Question & Hypothesis

RQ: Does age, gender or work authorization moderate the relationship between post-migration stressors and more severe mental health outcomes? Mental health outcomes are operationally defined as anxiety, depression and emotional distress as measured on the Hopkins Symptom Checklist -25 (HSCL-25).

H1: Older age and female gender will strengthen the relationship between post-migration stressors and more severe mental health outcomes. This is based on studies that have found that female gender was associated with worse mental health outcomes (Chu et al., 2013; Keller et al. 2006; Mahmood et al., 2019; Newnham et al., 2019; Porter & Haslam, 2005; Schubert & Punamaki, 2011; Song et al., 2015; Song et al., 2018) as well as studies that have found that older age was associated with worse mental health outcomes (Porter & Haslam, 2005; Song et al., 2015; Song et al., 2018). Lack of work authorization will strengthen the relationship between post-migration stressors and more severe mental health outcomes based on studies that found employment challenges were associated with worse mental health outcomes (Bogic et al., 2015; Carlsson et al., 2006; Johnson & Thomspon, 2008; Laban et al., 2005; Li et al., 2016; Priebe et al. 2013).

Research Site

This section will provide an overview of the research site including the referral process for participants. As mental health assessments can be impacted by dynamics between the interviewer and the respondent (Miller, Kulkarni, & Kushner, 2006), this

section will provide more insight into the context of participant's relationship and experiences with the research site.

Participant Services

The research site's services fall under four categories – Social Services, Health & Psychological Wellness, Legal Services, and Advocacy & Outreach, and are all offered free of charge to clients. Clients may also be provided with travel stipends to defray the cost of commuting to services from within the region. Social Services include intensive case management services to assist clients with accessing a range of services (in-house and community based) that include psychological, social, legal, and medical services. Program activities include life skill workshops, English conversation classes, career development services and a drop-in center for community support, access to computers, and a library. Health and Psychological Wellness includes individual and group therapy, couples counseling, psychiatric care, supportive group activities, and massage therapy. Program activities include medical and psychological forensic evaluations, and a range of health and wellness support groups. Legal Services includes legal representation for asylum cases, application for work authorization cards, and legal workshops and clinics. Program activities include legal orientations, medical and psychological forensic evaluations, and training and skills development for lawyers through the Pro Bono Asylum Program (PBAP). Lastly, Advocacy and Outreach services focuses on influencing policies related to the abolition of torture and increasing support for survivors. Activities include educational conferences, advocacy with the U.S. federal government, and a program that trains survivors in advocacy. Participants in the current

study have access to all site programming but data on participation was not collected for this study.

Referral Process

Clients can be referred to the research site through a variety of channels. Clients are often referred through a friend, family member, neighbor or a community member. As a survivor-led organization, the center most frequently receives referrals though other torture survivors. A lawyer, medical provider, or other social service agency may also refer clients, although this is less common. Clients may also come across services through a web search. In 2019, staff also started conducting outreach sessions within the community to advertise their services. For the 172 clients that met inclusion criteria for the current study, the referral source is as follows: 51.2% were referred by a friend, 11.0% were referred by a lawyer, 7.0% were referred by another center client, 4.1% were referred by family, 3.5% were referred by a website, 2.3% were referred by a medical provider, .6% were self-referred, and .6% were referred by a neighbor. 2.3% responded "other" and 17.4% of values were missing.

Once an individual learns about services, the prospective client will either call or walk-in to speak to a staff member about eligibility and enrollment. Regardless, if an individual calls or walks in, they will be immediately connected to a member of the social services team as the first official point of contact. Even if a prospective client does not express interest in case management or counseling services (for example, an individual may only be interested in obtaining legal services), a member of the social service team remains the first point of contact and is responsible for setting up a full intake appointment. This member of the social service team provides prospective clients with a

brief overview of the organization and notes that the center serves torture survivors (thereby providing the first informal screening for the eligibility requirement of being a torture survivor prior to a more formal eligibility screening during the intake process). This brief overview also includes listing the services that are offered and outlining the intake process. For prospective clients that walk in, a folder of community resources is also provided for sources of additional assistance. Each prospective client is also notified that each week, there is a one-hour information session that answers frequently asked questions about services, enrollment and information/updates about the asylum process.

Participants

Participants in this study are adult, Ethiopian torture survivors in the process of seeking political asylum in the United States that have completed the Hopkins Symptom Checklist-25 (HSCL-25) as part of the intake process between October 2015 – July 2019 at an integrated torture treatment center in an urban metropolitan area in the mid-Atlantic region of the United States. As part of the center's program eligibility requirements, all participants are over the age of 18 and have self-reported experiencing torture related to persecution as a result of race (including ethnicity), political opinion, membership in a particular social group, nationality, religion, and/or social activism that is consistent with the U.S legal definition of torture (18 U.S.C. § 2340). Clients who are not asylum seekers (i.e. those that are refugees, asylees, legal permanent residents, etc.) were excluded from this study. Individuals that did not complete an HSCL-25 were also excluded from the study. A client may not have completed an HSCL-25 if they refused to complete the assessment or if staff determined that the assessment was not clinically appropriate. Completion may not be clinically indicated if a client is presenting with

trauma symptoms such as dissociation and would be further triggered by the assessment tool. The HSCL-25 may also not be clinically appropriate if a client is presenting with urgent post-migration concerns (i.e. homelessness or lack of legal representation for an impending court date) and reports an inability to concentrate on a psychometric instrument. Attrition was not measured for this study since it is an archival study.

Table 1

Participants Meeting Inclusion Criteria for the Study

Criteria	Number of Participants Removed	Total Participants Remaining
Individuals included for completing an intake during the study timeframe Oct 1, 2015 – June 30, 2019		472
Individuals excluded for not meeting inclusion criteria as age 18+	1	471
Individuals excluded for not meeting inclusion criteria of immigration status as an asylum seeker	22	449
Individuals excluded based on missing outcome data	219	230
Individuals excluded based on Country of Origin outside of Ethiopia	58	172

Note: Individuals that did not meet inclusion criteria of immigration status as an asylum seeker were comprised of 7 asylees (i.e. those who were granted asylum), 2 U.S. citizens, 1 Lawful permanent resident (i.e. "green card" holder), 1 Convention Against Torture Relief, 7 were listed as "other," and values were missing for 4 clients.

Of the 449 individuals that met inclusion criteria including date of intake, age, and immigration status, 219 individuals were excluded due to missing outcome data. A logistical regression analysis was conducted to compare the socio-demographic and post-migration variables for the 219 individuals that did not complete the HSCL-25 to the 230 individuals that did complete the HSCL-25 and thus were included in the present study. There were no significant differences between the two groups across variables of country of origin, age at intake, marital status, years of education prior to arrival, time spent in the U.S., family separation, and need for an interpreter. At a 95% confidence interval ($p<.05$), participants that completed the HSCL-25 were more likely to be male ($p = .040$), less likely to have work authorization ($p = .019$), and less likely to have stable housing ($p = .024$).

Participant Characteristics

This section will provide a summary of the reason for persecution and socio-demographic and post-migration variables of the 172 Ethiopian clients that met inclusion criteria for the study. Participants largely identify as Orthodox Christian (74.4%), followed by those that identify as Protestant/Evangelical Christian (14.0%). The sample is 73.8% male and 26.2% female. The average age at intake is 35.52 years (SD = 7.57). Participants are largely married (62.2%) or single (30.2%) with the remainder divorced (5.2%) or separated (.6%). Prior to coming to the United States, level of education was largely 13-16 years (45.3%), more than 16 years (32.6%), and 9-12 years (16.9%). Of the participants in the sample, 22.7% reported persecution due to race/ethnicity, 5.8% reported persecution on the basis of nationality, 83.1% reported persecution on the basis of political opinion, 2.3% reported persecution on the basis of religion, 5.2% reported

persecution on the basis of social group (i.e. gender, sexual orientation, etc.), and 27.9% reported persecution based on social activism. Participants could endorse more than one type of reason for persecution. During intake, staff do not explicitly inquire about membership to a particular racial or ethnic group, in apart to avoid seeming "interrogative" of potentially charged information, but do collect information on primary language. In Ethiopia, primary language is intimately tied to ethnicity (Cohen, 2000). Participants in the study most frequently reported Amharic as the primary language (90.1%), distantly followed by Oromo (5.2%) and Tigrinya (2.3%).

Study participants reported a range of post-migration factors. In terms of time spent in the U.S. prior to intake, the mean was 17.55 months (SD = 26.39); this can also be represented as 37.8% of participants spent 6 months to a year, 28.5% of participants spent 1 to 2 years, and 15.7% of participants spent under 6 months. Employment status ranged largely from "no work authorization" (40.7%) to "Employed with work authorization (PT/FT)" (44.8%) to "unemployed, work authorized, and seeking employment" (11.0%). Housing status was largely "stable" at 59.9% of the sample with 9.9% reporting "unstable" housing and .6% reporting homelessness. 77.3% of participants did not need an interpreter while 16.3% did need an interpreter for services. For the 107 participants who were married, 63.6% of spouses were residing outside of the U.S. Lastly, immigration status is already limited to asylum seekers but can be further categorized through the yes/no question, "Did you arrive in the U.S. with a visa?" The answer to this question can be used as a proxy to deduce if the asylum seeker is filing an affirmative or defensive application (Bowmani, 2020). The participants of this study are largely affirmative asylum seekers with 81.4% reporting that they arrived to the U.S. on a

visa while 1.2% reported that they did not arrive to the U.S. on a visa and data is missing for 17.4% of the sample.

Table 2a

Participant Characteristics for Categorical Variables

Variable	Category	n (%)
Gender	Male	127 (73.8%)
	Female	45 (26.2%)
Years of Education Prior to Arrival	13-16 years	78 (45.3%)
	More than 16 years	56 (32.6%)
	9-12 years	29 (16.9%)
	5-8 years	4 (2.3%)
	Missing Value	4 (2.3%)
	1-4 years	1 (.6%)
Marital Status	Married	107 (62.2%)
	Single	52 (30.2%)
	Divorced	9 (5.2%)
	Missing Value	3 (1.7%)
	Separated	1 (.6%)
Primary Language	Amharic	155 (90.1%)
	Oromo	9 (5.2%)
	Tigrinya	4 (2.3%)
	English	3 (1.7%)
	Other	1 (.6%)
Arrived to U.S. on a Visa	Yes	140 (81.4%)
	Missing Value	30 (17.4%)
	No	2 (1.2%)
Employment Status	Employed with work authorization (PT/FT)	77 (44.77%)
	No work authorization	70 (40.70%)
	Unemployed, work authorized, & seeking employment	9 (11.04%)
	Missing Value	4 (2.3%)
		2 (.12%)

	Other	
Housing Status	Stable	137 (79.7%)
	Unstable (Risk of losing housing)	17 (9.9%)
	Missing Value	17 (9.9%)
	Homeless	1 (.6%)
Need for an Interpreter	No	133 (77.3%)
	Yes	28 (16.3%)
	Missing	11 (6.4%)
If married, is spouse located in U.S.?	No	68 (39.5%)
	Yes	19 (11.0%)
	Missing (either client is not married or missing value)	85 (49.4%)

Note: The missing values for the question, "If married, is spouse located in the U.S.?," 20 values were missing while 65 were n/a as the participants were not married.

Table 2b

Participant Characteristics for Continuous Variables

Variable	*M*	*SD*
Age	35.52 years	7.568 years
Time in the U.S.	17.55 months	26.39 months

Power Analysis

In a power analysis conducted in G*Power for a multiple regression study with nine predictor variables, a sample size of 114 is needed for an alpha of .05, power of .80 and a medium effect size of f2 =.015 (Faul et al., 2009).

Human Participants and Ethical Concerns

The study is exempt from IRB as it is an archival study of program data that has been de-identified for the PI. Each participant is identified with a unique, numerical identifier. The research site is a HIPAA compliant social service agency that accordingly has safeguarded client information through secure databases and training for staff on HIPAA compliance. The Notice of Privacy Practices stipulates use of client data for research purposes as follows- "[The center] may use and disclose PHI for research purposes. Personal data will be adequately encoded to ensure your privacy and anonymity." The signed client consent form further details the use of the client health record for research and describes the process of de-identifying client information.

Procedures

Study Design

The study design is influenced by archival analysis in order to understand the profile of Ethiopian asylum seekers who are torture survivors that present for an intake at an integrated social service center. Data collection and procedures were completed by staff as part of routine clinic tasks. Relevant data was shared with the PI of this study after the removal of identifying information of clients.

Data Collection Procedures

The client intake form and the Hopkins Symptom Checklist -25 (HSCL-25) are completed across a multi-session intake process. The following section will provide an overview, detailed procedures, and information regarding confidentiality.

Overview. Intake interviews are conducted over two separate appointments with the participant spaced about one week apart. If a language interpreter is needed, staff will

utilize an in-person, trained medical interpreter. Intake interviews are conducted by a member of the Social Services team that includes the social services program manager, case managers, and graduate interns that are advanced students in a Masters in Social Work Program. Training and supervision of case managers conducting intake interviews is one mechanism to minimize variability between interviewers. Training for the social service team includes 1-2 weeks of a department training that includes topics such as an overview of the center's model of care, trauma-informed and strengths-based theories, and application to case scenarios. Staff is required to shadow at least 2-3 intake interviews from advanced staff. Next, staff will conduct at least 2-3 intake interviews while being shadowed by an advanced staff member. Staff receive a minimum of 3 hours of group supervision and 1 hour of individual supervision a week to discuss ratings during intake interviews. At any point during an intake interview, a staff member can also step out to consult with a supervisor or senior staff member.

Process. On day one, clients complete an intake form, a semi-structured interview to establish program eligibility and complete paperwork including an informed consent, a client agreement, and a receipt of the Notification of Privacy Practice. The intake form includes demographic data, immigration status, employment status, and areas where client is seeking support. The form is completed by the client and discussed with the interviewer to ensure accurate completion. Potential misunderstandings can be addressed at this time. For example, if a client notes marital status as "Separated," the interviewer will confirm if the client is indeed "separated" from a spouse and not merely geographically removed due to migration. Eligibility for services is established by determining if a client is a torture survivor under U.S. federal law (18 U.S.C. § 2340).

This is ascertained through a semi-structured interview protocol rather than a checklist format in order to build trust, rapport and safety for the client. If an interviewer is unsure if a client qualifies for services, the interviewer will consult with senior Social Service staff. Lastly, clients are asked to sign an informed consent, a client agreement, Receipt of Notice of Privacy Practices, and a Release of Information Form.

On Day 2, clients complete the Hopkins Symptom Checklist -25 (HSCL-25) and the interviewer follows a semi-structured interview protocol to populate a "Wellness Assessment." This includes discussion of legal status, food/material needs, transportation, housing/household functioning in the U.S., Community Safety, Access to Resources/Healthcare/Insurance, Physical/Mental Healthcare/Medications/Substance Use, Employment/Income, Education/Vocational Training, Support System Abroad and in the U.S., Community Involvement/Social Activities/Spirituality, Parenting Skills/Childcare for Children in the U.S., and Hobbies/Interests/Other. Previously, clients also completed the Harvard Trauma Questionnaire (HTQ-30) and the World Health Organization Quality of Life Survey (WHO-QOL). In 2019, the research site decided to prioritize usage of the HSCL-25 at intake and use the HTQ-30 and WHO-QOL on an as needed basis because of client reports of repetition across the measures, instrument fatigue for the client, and clinician report of an exceedingly large amount of time needed to administer all assessments at the expense of providing direct services.

Confidentiality

Participants in this study are clients that have enrolled for services at an integrated torture treatment center and are presenting for an initial intake interview. A HIPAA compliant client database compiles information from the intake interview as well as case

notes from any subsequent appointments and contact. For the purposes of this study, a de-identified data set was created for the Primary Investigator (PI) that omits identifying information and each client was identified with a unique, numerical identifier.

Measures

Client Intake Form

The client intake form collects client contact information, socio-demographic data, post-migration factors impacting psychosocial wellbeing, and relevant program data. The form begins with collection of contact information, referral source, and emergency contact information. Next, the form lists marital status (with name and location of spouse/partner if applicable), and children's names, ages and gender. Other socio – demographic information includes Date of Birth, country of origin, gender, religion, and ethnicity (optional). The intake form includes languages spoken and need for an interpreter. The form then lists legal information such as visa upon entry, if the client was detained upon entry, if the client has an attorney, and where the client is in the asylum process. The form then lists years of education and employment status. The form concludes with a section of other providers/agencies where a client is currently receiving services and what services they would like to receive.

Hopkins Symptom Checklist-25 (HSCL-25)

Parloff, Kelman, and Frank developed the Hopkins Symptom Checklist (HSCL) in the 1950's as a self-report, symptom inventory for clinical use (Mollica et al., 1987). The modified HSCL-25 is a self-report measure of symptoms of anxiety (10 items) and depression (15 items) experienced over the past week. The two scores can also be combined for a third factor to measure overall "emotional distress." Responses are

measured across a Likert scale of 1 to 4 ranging from “not at all”, “a little bit”, “quite a bit”, to “extremely”. The HSCL-25 demonstrates high reliability and validity. Internal consistency ranges from .84 for depression to .86 for anxiety. Test-retest reliability ranges from .75 to .81 and Crombach’s alpha coefficients range from .85 to .89 (Derogatis, 1974). The depression scale has been found to be compatible with DSM-IV diagnosis of Major Depressive Disorder (MDD) and to a lesser degree, the anxiety scale has been compatible with Generalized Anxiety Disorder (GAD) criteria (Glaesmer et al., 2013).

In 1983, the Indochinese Psychiatric Clinic, the clinical program of the Harvard Program in Refugee Trauma, was awarded a grant from the U.S. Office of Refugee Resettlement to develop validated versions of the HSCL-25 that could be used to reflect symptoms of anxiety and depression in linguistically and culturally appropriate ways among refugees from Cambodia, Laos, and Vietnam, a growing population in the United States (Mollica et al., 1987). The instruments were designed as cost-effective, relatively simple and brief tools for use in screening, clinical assessment, and for research in refugee populations that presented in primary care centers, clinics specializing in the treatment of refugee populations, and other community settings (Mollica et al., 2004).

The HSCL-25 has been widely translated and utilized with various refugee populations and demonstrated strong psychometric properties cross-culturally (Kleijn et al., 2001). In a study of 231 forced migrants (refugees, asylum seekers, refused asylees) presenting at an integrated service center in Oslo, Lavik et al. (1999) found substantial validity of the HSCL-25 in detecting symptoms of anxiety/depression among a diverse sample. Wind et al. (2017) further examined construct validity in a study of 1,256 refugee

individuals across five linguistic groups residing in the Netherlands. The study concluded that refugee groups interpreted the instrument in similar ways, indicating effective application across this population and cross-cultural comparison across refugee groups. The study further concludes that local idioms of distress may not interfere with the use of the HSCL-25 but note the need to ideally understand local idioms of distress to understand the overlap with DSM categories of distress and to help contextualize the findings of the instrument. Local idioms of distress can provide the cultural context for symptomology and treatment of pathology (de Jong, 2002; Rogler, 1989).

The items on each scale are averaged and a score of 1.75 is recommended as a cut-off score for clinically significant anxiety or depression, respectively (Jakobsen et al., 2011). Mollica et al. (2004) suggest individually norming the cut-off score for each cultural/linguistic group and that various humanitarian settings (i.e. refugee camps) may implement more stringent cut-off scores in order to triage clients for limited counseling services.

Cross-cultural Adaptations. The Harvard Program in Refugee Trauma outlines a rigorous protocol for adapting the HSCL-25 for different refugee populations that eschews mere rote linguistic translation, and rather fosters culturally grounded adaptations in collaboration with community members. Central to this process is the concept of a "mini-ethnography," or review and process to understand idioms of distress and the worldviews of different cultures. Another critical component is that of translation, back-translation, and consensus. This entails translating the instrument into the desired language and then a blind back-translation by a separate person into the original English. The versions are compared, and discrepancies are discussed with community members

who can speak to local idioms of distress and relevance to Western mental health concepts. The instrument has been adapted in multiple languages for refugee communities (Kleijn et al., 2001; Mollica et al., 1987;) and widely used in studies specific to ethnically diverse torture survivors (Keller et al., 2006; Leaman & Gee, 2012; Schubert & Punamaki, 2011; Song et al., 2018; Tinghog et al., 2017).

Usage at Research Site. A validated HSCL-25 does not exist for Amharic-speakers (i.e. study participants from Ethiopia). The research site utilizes a version that had been developed by a separate community organization from 2016-2018 that has since shut down. In 2017, the research site was awarded a grant from the SPSSI Applied Social Issues Internship to refine the Amharic version of the HSCL-25. In accordance with the procedures set out by the Harvard Trauma Program, a modified instrument was developed as part of a four stage process: (1) translation-back translation, (2) focus group review, (3) revision and further focus group review, and (4) finalization and reflection. The process, procedures, outcomes, and future directions were published in a 2018 report. See appendix for a chart detailing modified items. The modified HSCL-25 was utilized from November 2018 onwards. The current study examines scores from all HSCL-25 versions based on the recommendation of the site program management and reports that site staff were trained and supervised to resolve any discrepancies or confusion clients may have in understanding items on the HSCL-25 verbally at the time of intake. For the 172 Ethiopian asylum seekers included in the current study, 107 individuals (62.21%) used the “Eng/Am/Fr” version, 35 individuals (20.35%) used the “English/Fr” version, 21 individuals (12.21%) used the “Amharic” version, 6 individuals used the “English” version and 3 individuals (3.49%) used the “Eng/Tig/Sp” version. Only 3 individuals

(3.49%) in the study were provided with an Amharic version after changes were made to the translation in November 2018. A one-way ANOVA determined that the language version of the HSCL-25 did not lead to a significant difference in HSCL-25 scores for overall emotional distress ($p = .599$), anxiety ($p = .948$), and depression ($p = .532$).

For research and reporting purposes, the research site utilizes the recommended cut-off score of 1.75 to indicate clinically significant anxiety, depression and emotional distress. However, for clinical services, the HSCL-25 is not utilized as part of a screening protocol that filters clients into different treatment pathways or modalities nor is it used as a diagnostic tool that matches patient symptomology to Western diagnoses of psychopathology. Rather, direct service staff are trained within a social constructivist framework in which the HSCL-25 is part of a client intake process that seeks to foster dialogue with clients to better understand how clients conceptualize their distress, impaired functioning, and treatment priorities within their psychosocial context (Miller et al., 2006).

Predictor Variables

Socio – demographic Variables as Covariates

Socio-demographic information will describe the sample and contextualize the findings; they will also be examined as predictor variables for anxiety, depression, and emotional distress and as control variables when post-migration variables are examined as predictors of anxiety, depression, and emotional distress. Socio-demographic variables are obtained from the Client Intake Form.

Variables utilized as predictors include gender, age, educational level, and marital status. Gender is coded as either “Male,” “Female,” “Transgender Female Identifying,”

"Transgender Male Identifying," or "Other/Unknown." Participants in this study endorsed only "Male" or "Female" and was thus coded as a dichotomous variable. Age for eligible participants is coded as a continuous variable in years. Education level is defined as years of education prior to arrival and denoted as less than 1 year, 1-4 years, 5-8 years, 9-12 years, 13-16 years, and 16+ years. For analysis in this study, education level was coded as a dichotomous variable of greater than 16 years of education. Marital Status is denoted as Single, Married Separated, Divorced, Widowed, Single Parent, and Living With Partner. For analysis in this study, marital status was coded as a dichotomous variable of "married" and "not married."

Post- migration Variables

Post-migration variables were examined as predictor variables for anxiety, depression, and emotional distress (Block 2) again when controlling for socio-demographic variables (Block 1). Post-migration variables were obtained from the Client Intake Form. Time spent in the U.S. is defined as the time from date of entry to intake date and is a continuous variable in months. Family separation is denoted as an open response to the question, "Location of spouse/partner" and coded by staff into the database as a yes/no response to the question, "If married, is spouse located in the U.S.?" Employment Status is assessed by two yes/no questions on the intake form, "do you have work authorization?" and, "are you currently employed?" and then coded by staff into the database under a dropdown menu of employment descriptors that include "Unemployed, work authorized, and seeking employment," "Unemployed and not seeking employment (e.g., students, elderly, etc.)," "Other," "No work authorization," and 'Employed with work authorization (PT/FT)." For analysis in this study, employment was coded as a

dichotomous variable of those that have work authorization and those that do not have work authorization. Housing status is denoted as "Stable," "Unstable (Risk of losing housing)" or "Homeless" and for analysis in this study, was coded as a dichotomous variable of "stable" and "Unstable or Homeless." Need for interpretation is denoted as a yes/no question of "Is an interpreter needed?" This variable may be a proxy for English language proficiency.

Table 3

Summary Table of Variable Coding

Type	Variable	Codes
Socio – demographic	Gender	Female 0 = No; 1 = Yes
Socio – demographic	Age	Continuous variable in years from date of birth to date of intake
Socio – demographic	Education Level	0 = Equal to or less than 16 years of education 1= More than 16 years of education
Socio – demographic	Marital Status	0 = Not Married 1 = Married
Post- migration	Time spent in the U.S.	Continuous variable of time in months from date of entry to intake date
Post- migration	Family Separation	"If married, is spouse located in the U.S.?" 0 = No; 1=Yes
Post- migration	Employment Status	"Do you have work authorization?" 0 = No; 1=Yes

Post- migration	Housing Status	0 = Unstable Housing (Risk of losing housing) or Homeless 1 = Stable Housing
Post- migration	Need for Interpretation	"Is an interpreter needed?" 0 = No; 1=Yes

Criterion Variables

Criterion variables were determined by scores on the HSCL-25 for anxiety, depression, and emotional distress. Scores ranged from 1 to 4 in severity with 1.75 being the cut-off for clinically significant symptoms. See Table 4 for questions used to determine severity of symptoms over the past week.

Table 4

Criterion Variables

Variables	*Symptoms Assessed*
Anxiety	1) Suddenly scared for no reason 2) Feeling fearful 3) Faintness, dizziness, or weakness 4) Nervousness or shakiness inside 5) Heart pounding or racing 6) Trembling 7) Feeling tense or keyed up 8) Headaches 9) Spells of terror or panic 10) Feeling restless, cannot sit still
Depression	1) Feeling low energy, slowed down 2) Blaming yourself for things 3) Crying easily 4) Loss of sexual interest or pleasure 5) Poor appetite 6) Difficulty falling asleep or staying asleep 7) Feeling hopeless about the future 8) Feeling blue (sad)

	9) Feeling lonely 10) Thoughts of ending your life 11) Feeling of being trapped or caught 12) Worrying too much about things 13) Feeling no interest in things 14) Feeling everything is an effort 15) Feeling worthless
Emotional Distress	Mean of above constructs

Statistical Analysis

First, descriptive statistics were generated to characterize the sample by socio-demographics, post-migration experiences, and pre-migration type of persecution. Counts and percentages are provided for categorical variables. For the primary research question, multiple linear regression analysis was conducted for control variables of socio-demographic variables (gender, age, education level, and marital status) entered in the first block and post-migration variables (time spent in the U.S., employment status, housing status, family separation, and use of an interpreter) entered as the second block. The criterion variables of anxiety, depression, and emotional distress were derived from the HSCL-25. For the secondary research question, the relationship between post-migration factors and mental health outcomes was analyzed with gender, age, and work authorization as moderating variables using the Hayes (2018) PROCESS macro. All data was analyzed using the Statistical Package for Social Sciences (SPSS) version 26.

Chapter 4: Results

Descriptive Statistics

For the 172 participants that met inclusion criteria for the study, mental health outcomes were measured on the Hopkins Symptom Checklist – 25 (HSCL-25). At intake,

the average score was 2.24 on the anxiety scale, 2.35 on the depression scale, and 2.27 overall for the combined factor of emotional distress. The majority of participants in this study demonstrated clinically significant levels of anxiety, depression, and emotional distress with a prevalence rate of 70% for anxiety, 77% for depression, and 73% for emotional distress when using the recommended cut-off score of 1.75 (Jakobsen et al., 2011).

Table 5

Descriptive Statistics of Outcome Variables

Variables	*N*	Range	*M*	*SD*	Prevalence
Anxiety	172	1.00-4.00	2.24	.76	70%
Depression	172	1.00-4.00	2.35	.74	77%
Emotional Distress	172	1.00-4.00	2.27	.73	73%

Assumptions Testing

Hierarchical linear regression was conducted to determine the predictive power of post-migration stressors, above and beyond socio-demographic variables, on mental health outcomes at intake. Prior to analysis, data was tested for assumptions of normality, linearity, homoscedasticity, and absence of multicollinearity. Normality was met through Predicted Probability (P-P) plots for each dependent variable demonstrating normal distribution of residuals. Linearity and homoscedasticity were met through scatterplots for each dependent variable sufficiently demonstrating equal distribution of residuals. Absence of multicollinearity was tested through calculation of Variance Inflation Factor (VIF) values that ranged from 1.072 – 1.333, thereby meeting the assumption of low

intercorrelation between predictor variables (Lomax & Hahs-Vaughn, 2012). In summary, all assumptions for linear regression were met.

Research Question 1

What post-migration stressors (time spent in the U.S., employment status, housing status, family separation, and need for an interpreter) predict severity of mental health outcomes when controlling for socio-demographic variables?

It was hypothesized that greater length of time in the U.S., greater instability with employment status, greater instability with housing status, family separation and not having a need for an interpreter would predict more severe mental health outcomes when controlling for socio-demographic variables. The results of the hierarchical linear regression suggest that none of the predictor variables significantly predict severity of mental health outcomes of anxiety, depression, or emotional distress in this sample.

Table 6

Socio-demographic Variables, Post- Migration Variables, and HSCL-25 Scores: Pearson Correlations

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Gender	1.00	-	-	-	-	-	-	-	-	-	-	-
2. Age	-.18*	1.00	-	-	-	-	-	-	-	-	-	-
3. Education Level	-.08	.15*	1.00	-	-	-	-	-	-	-	-	-
4. Marital Status	-.27**	.28**	.06	1.00	-	-	-	-	-	-	-	-
5. Time in U.S.	.21**	.12	-.15*	-.19*	1.00	-	-	-	-	-	-	-
6. Family Separation	.13	.06	-.01	.28**	-.06	1.00	-	-	-	-	-	-
7. Employment Status	.04	-.00	-.05	.00	.34**	.04	1.00	-	-	-	-	-
8. Housing Status	-.16*	-.06	.04	.02	-.01	-.05	-.12	1.00	-	-	-	-
9. Interpretation	.20**	.10	-.24**	.05	.05	-.01	.13	-.17*	1.00	-	-	-
10. Anxiety	.08	.02	.06	.06	-.05	-.06	-.07	-.07	.05	1.00	-	-
11. Depression	.10	.12	.04	-.02	.11	-.10	-.07	-.12	.03	.88*	1.00	-
12. Emotional Distress	.09	.07	.04	-.00	.03	-.09	-.09	-.10	.04	.96**	.97**	1.00

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

Table 7

Results from Hierarchical Multiple Regression Predicting Anxiety

	Block 1			Block 2		
Predictor Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	.183	.138	.106	.202	.152	.117
Age	.011	.156	.006	.004	.165	.002
Education Level	.093	.126	.058	.097	.133	.060
Marital Status	.131	.128	.084	.172	.139	.110
Time in U.S.	-	-	-	.000	.001	-.034
Family Separation	-	-	-	-.256	.200	-.106
Employment Status	-	-	-	-.107	.129	-.070
Housing Status	-	-	-	-.128	.150	-.068
Interpretation	-	-	-	.078	.173	.038
R^2 Change		.017			.023	
F for change in R^2		.701			.768	

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

Table 8

Results from Hierarchical Multiple Regression Predicting Depression

	Block 1			Block 2		
Predictor Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	.195	.134	.116	.174	.145	.103
Age	.265	.152	.141	.189	.158	.101
Education Level	.049	.122	.031	.078	.127	.050
Marital Status	-.044	.124	-.029	.061	.133	.040
Time in U.S.	-	-	-	.002	.001	.130
Family Separation	-	-	-	-.293	.191	-.124
Employment Status	-	-	-	-.107	.123	-.130
Housing Status	-	-	-	-.220	.144	-.120
Interpretation	-	-	-	-.004	.165	-.002
R^2 Change		.030			.023	
F for change in R^2		1.272			.768	

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

Table 9

Results from Hierarchical Multiple Regression Predicting Emotional Distress

	Block 1			Block 2		
Predictor Variable	*B*	*SE B*	*β*	*B*	*SE B*	*β*
Gender	.185	.132	.112	.188	.144	.114
Age	.158	.149	.086	.119	.157	.065
Education Level	.055	.120	.035	.067	.126	.043
Marital Status	.003	.123	.002	.078	.132	.052
Time in U.S.	-	-	-	.001	.001	.045
Family Separation	-	-	-	-.281	.190	-.122
Employment Status	-	-	-	-.175	.122	-.120
Housing Status	-	-	-	-.185	.143	-.103
Interpretation	-	-	-	.021	.164	.011
R^2 Change		.018			.034	
F for change in R^2		.769			1.151	

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

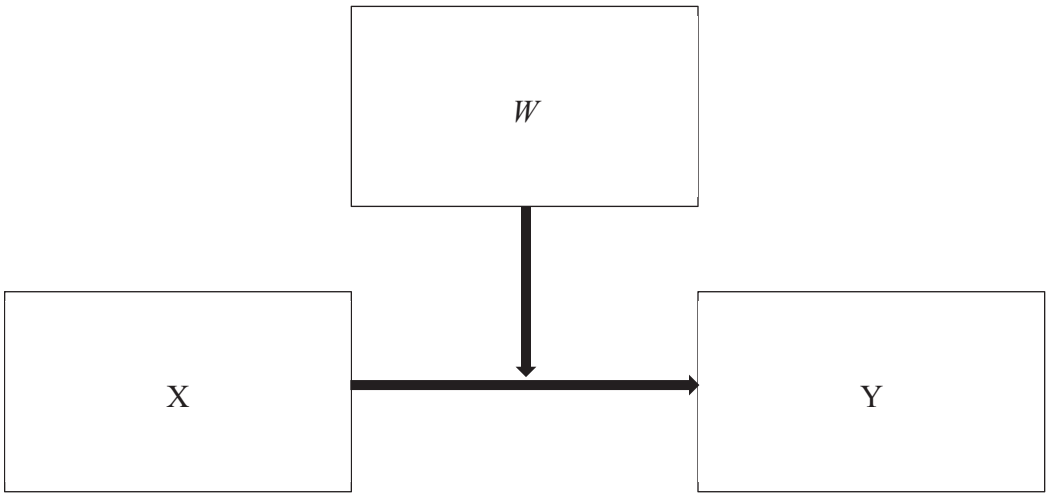
Research Question 2

Does age, gender or work authorization moderate the relationship between post-migration stressors and more severe mental health outcomes?

It was hypothesized that older age, female gender, and lack of work authorization would strengthen the relationship between post-migration stressors and more severe mental health outcomes. Moderation analysis was conducted using Hayes (2018) macro. For the analysis, Hayes (2018) Model 1 was used to see if an interaction between the moderator, 'W,' and the predictor variable, 'X,' may significantly impact the outcome variable, 'Y' (Hayes, 2018). All moderating analysis were conducted with 5000 bias-corrected bootstrap samples at a 95% confidence interval.

Figure 1

Hayes (2018) PROCESS Model 1



In this study, age did not significantly moderate the relationship between any post-migration stressors (time spent in the U.S., employment status, housing status, family separation, and need for an interpreter) and mental health outcomes (across anxiety, depression, and the combined factor of emotional distress). Similarly, having work authorization did not moderate the relationship between post-migration stressors (time spent in the U.S., housing status, family separation, and need for an interpreter) and mental health outcomes (across anxiety, depression, and the combined factor of emotional distress). Gender was found to moderate the relationship between employment status and depression ($F(3,168) = 2.92$, $p = .004$, $R^2 = .0667$, $B = .7727$, $SE = .2646$, 95% CI [.2504, 1.2950]) as well as the relationship between employment status and emotional distress ($F(3,168) = 2.59$, $p = .011$, $R^2 = .0602$, $B = .6862$, $SE = .2654$, 95% CI [.1622, 1.2102]). Gender, however, did not moderate the relationship between employment status and anxiety ($F(3,168) = 1.8224$, $p = .070$, $R^2 = ..0344$, $B = .5291$, $SE = .2903$, 95% CI [-.0441, 1.1022]) or any other post-migration factors and mental health outcomes. In an analysis of gender as a moderator, the interaction of male gender and not having work authorization predicted more severe depression and emotional distress, but not anxiety. The interaction effect of gender and work authorization explained 5.1% of the variance in severity of depression and 4.2% of the variance in severity of emotional distress. In order to contextualize the findings on the interaction of gender and employment, it is necessary to provide a break - down of employment and work authorization across gender. Table 10a and Table 10b show that female participants were more likely to be employed (51% vs 44%) and men were more likely to not have work authorization (42% vs 36%); male participants were more likely to have more than 16 years of education (35% vs 27%).

Figure 2

Moderation Effect of Gender x Work Authorization on Depression

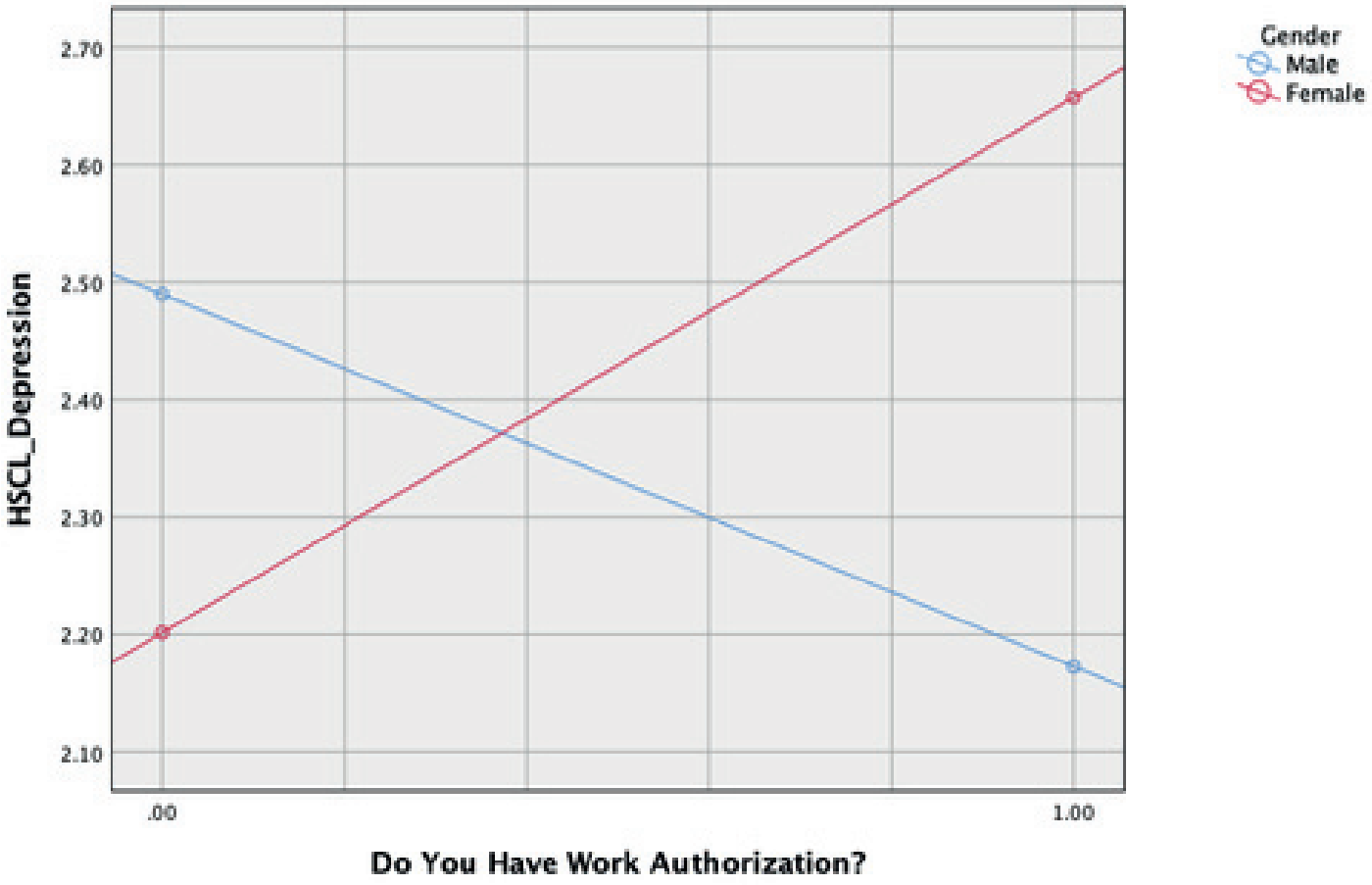


Figure 3

Moderation Effect of Gender x Work Authorization on Emotional Distress

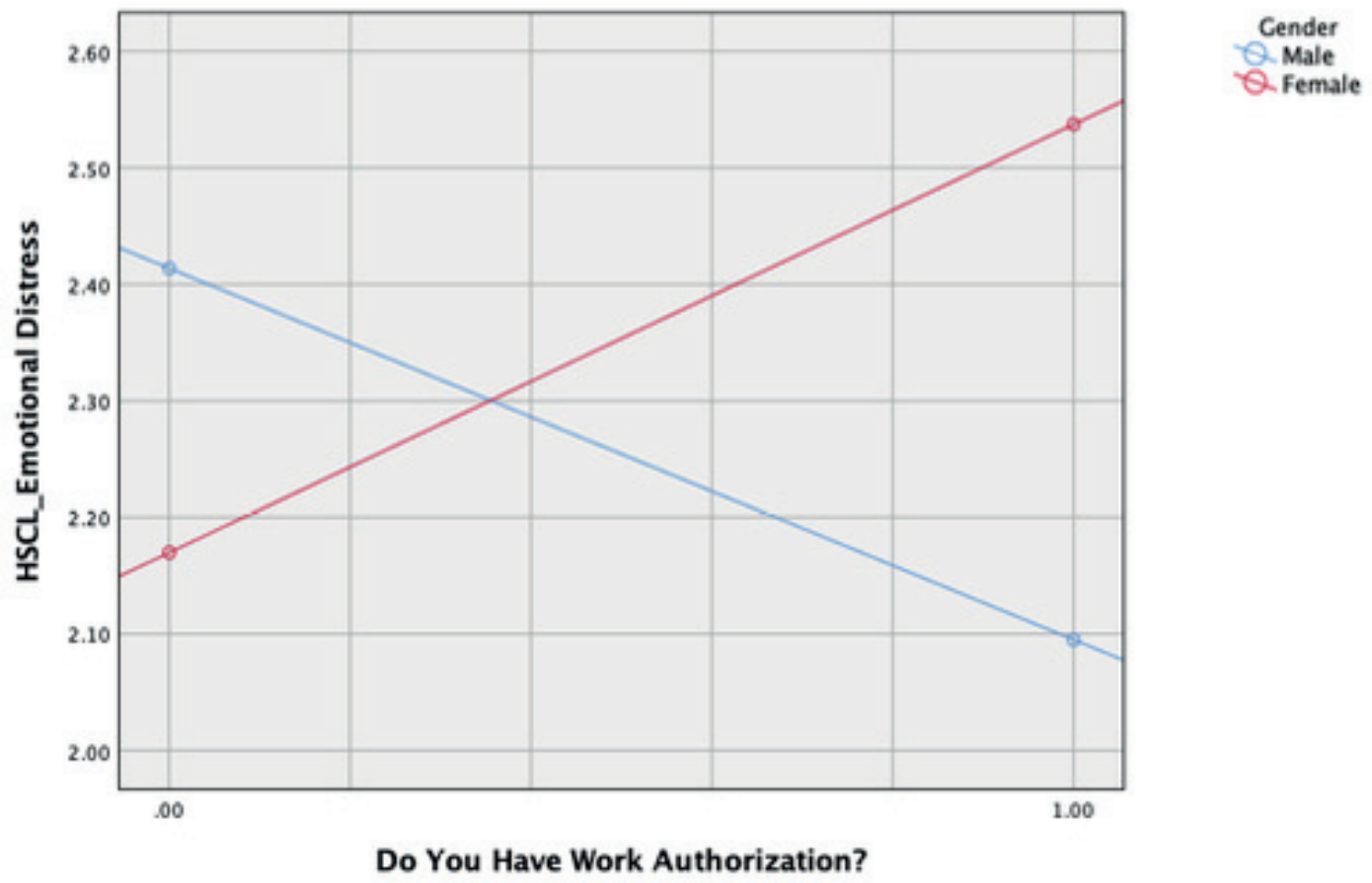


Table 10a

Gender Differences in Employment

	Female	Male
Employed with work authorization (PT/FT)	23 (51%)	56 (44%)
No work authorization	16 (36%)	53 (42%)
Unemployed, work authorized, & seeking employment	4 (.09%)	15 (12%)

Table 10b

Gender Differences in Education

	Female	Male
More than 16 years	12 (27%)	44 (35%)
13-16 years	19 (42%)	61 (48%)
9-12 years	13 (29%)	15 (12%)
< 9 years	-	5 (.04%)

Supplemental Analysis

In addition to the three moderator variables tested in the second research question, two additional variables (marital status and time in the U.S.) were tested for moderation effects between post-migration variables and mental health outcomes using the same Hayes (2018) PROCESS macro and model 1. Marital status did not significantly moderate the relationship between any post-migration stressors (time spent in the U.S., employment status, housing status, family separation, and need for an interpreter) and mental health outcomes (across anxiety, depression, and the combined factor of emotional distress). Similarly, time in the U.S. did not significantly moderate the relationship between any post-migration stressors (time spent in the U.S., employment

status, housing status, family separation, and need for an interpreter) and mental health outcomes (across anxiety, depression, and the combined factor of emotional distress).

Table 11

Summary Table of Moderating Variables on Post-Migration Variables

	Time in the U.S.			Housing Instability			Employment Instability			Need for Interpreter			Family Separation		
	1	2	3	1	2	3	1	2	3	1	2	3	1	2	3
Age	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*
Gender	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*	*ns*	**	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*
Work Authorization	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	-	-	-	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*
Marital Status	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	-	-	-
Time in the U.S.	-	-	-	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*	*ns*

* $p < .05$; ** $p < .01$ 1 = Emotional Distress; 2 = Anxiety; 3 = Depression

Chapter 5: Discussion

The study examined the impact of post-migration variables when controlling for socio-demographic variables as predictors of mental health outcomes in a sample of Ethiopian asylum seekers obtaining services at an integrated torture treatment center. The predictor variables were informed by literature on frequently examined post-migration stressors among refugees and asylum seekers. The study sample demonstrated, on average, clinically significant levels of anxiety, depression and emotional distress measured on the Hopkins Symptom Checklist- 25 (HSCL-25). At intake, there was a prevalence rate of 70% for anxiety, 77% for depression, and 73% for emotional distress. This is consistent with other studies with torture survivors finding similarly high rates of depression, anxiety and emotional distress measured using the HSCL-25 with diverse refugees and asylum seekers (Keller et al., 2006; Leaman & Gee, 2012; Schubert & Punamaki, 2011; Song et al., 2018; Tinghog et al., 2017). The study found that none of the socio-demographic variables or post-migration variables used in the hierarchical linear regression predicted worse mental health outcomes. However, an examination of potential moderating variables found that gender moderated the relationship between employment instability and mental health outcomes. This chapter will discuss these findings, clinical and policy implications, limitations of the findings, and directions for future research.

Research Question 1

When controlling for socio-demographic factors (age, gender, marital status, and level of education prior to arrival), post-migration factors (length of time in the U.S., housing instability, employment instability, family separation, and need for an

interpreter) did not significantly predict depression, anxiety, and emotional distress. While there has been limited research with this population, these findings are consistent with two prior dissertations sampling Ethiopian asylum seekers. In a sample including 39 Ethiopian torture survivors among 78 total participants from African countries, Eisen (2016) found that country of origin, age, gender, marital status, time in the U.S., English proficiency, employment status, and housing status were unrelated to depression symptoms at intake. Furthermore, changes in housing status and employment status did not significantly change symptoms of depression over time. Welsh (2012) similarly found that level of education, school or work engagement, English proficiency, having family in the US, and separation from children did not predict emotional distress among the 113 Ethiopian asylum seekers sampled out of a total of 292 participants almost entirely from the African continent. The results of the present study were largely similar to these two previous studies despite several differences in study design. The present study analyzed a larger and more recent sample size of Ethiopian asylum seekers, slightly modified predictor variables (either through addition of variables or operationally defining some of the variables differently), and tested against additional outcome variables on the HSCL-25 (i.e. analyzing outcome variables of depression, anxiety, and emotional distress as three separate factors).

Research Question 2

Although the socio-demographic and post-migration variables failed to significantly predict worse mental health outcomes, the interaction of gender and employment instability significantly predicted severity of depression and emotional distress. Male participants had worse mental health outcomes when they did not have

work authorization (compared to males that did have work authorization). This was contrasted by female participants who had worse mental health outcomes when they did have work authorization (compared to females that did not have work authorization). This is consistent with studies that have found that employment challenges were associated with worse mental health outcomes (Bogic et al., 2015; Carlsson et al., 2006; Johnson & Thomspon, 2008; Laban et al., 2005; Li et al., 2016; Priebe et al. 2013). The findings from this study suggest that men and women encountered different employment challenges, but challenges, nonetheless.

Discussion of Post-Migration Factors

The remainder of the chapter will integrate the findings from the two research questions, the hierarchical linear regression analysis and the analysis of the moderating variables. Each section will explore the analysis within the context of each post-migration variable in the current study including length of time in the U.S., housing instability, employment instability, family separation and need for an interpreter.

Time Spent in the US

In this study, length of time in the U.S. did not significantly predict mental health outcomes. It was hypothesized that a greater length of time in the U.S. would predict more severe mental health outcomes based on studies that have found that increased length of time in the U.S. predicted worse mental health outcomes among torture survivors in a mixed sample of asylum seekers and refugees (Song et al., 2015; Song et al., 2018). Findings of the supplementary analysis indicate that length of time in the U.S. also failed to significantly moderate the relationship between post-migration variables (housing instability, employment instability, family separation, and need for an

interpreter) and mental health outcomes. Similarly, age, gender, work authorization, and marital status did not significantly moderate the relationship between time in the U.S. and mental health outcomes. There are several potential conclusions that can be drawn.

It is possible that length of time may be a stronger predictor of worse mental health outcomes among refugees rather than asylum seekers. The Song et al. (2015; 2018) studies largely sampled refugees and other forced migrants with a stable immigration status as asylum seekers accounted only for about 15% of the sample. The Song et al. (2015) study also reported that among participants, 156 individuals (56%) presented for an intake within 1 year of arrival to the US and that 122 (44%) individuals presented for an intake after 1 year of arrival to the US. Those that arrived after one year and had worse mental health outcomes were on average, older, more likely to be female, and more likely to be an asylum seeker or asylee. This is in contrast to the doctoral dissertations by Eisen (2016) and Welsh (2012) that sampled asylum seekers and found that length of time in the U.S. did not predict mental health outcomes. These studies report an average amount of time in the US as 2.16 years (*SD* = 1.9) and 1.76 years (*SD* = 1.8), respectively, before appearing for an intake. Whitsett and Sherman (2017) found that in a sample of 105 asylum seekers (50% Ethiopian), the average amount of time in the US was 1.83 years (*SD* = 1.5). For the current study, the average amount of time before an intake was 1.46 years (*SD* = 1.9). This suggests that in addition to length of time not being a predictor of mental health outcomes among asylum seekers like it may be for refugees, asylum seekers may also present later for an intake when compared to refugees.

There are several reasons why these differences between refugees and asylum seekers may exist. For refugees, it has been theorized that mental health symptoms may worsen over time as many resettlement support services cease after the first few months of arrival (Ballard-King et al., 2017). It is also theorized that refugees may experience a "honeymoon" phase of resettlement upon arrival that has prompted clinical recommendations not to test for symptoms of distress too early upon arrival due to the potential for false positives or false negatives as refugees begin to adjust to their new environment (Hilado, 2018, p.236). Research studies have also developed distinct cut-off points to measure time in the U.S. to account for this "honeymoon" period among refugees (Ballard-King et al., 2018; Uribe Guajardo et al., 2016; Song et al., 2015). It is unclear if asylum seekers experience a similar "honeymoon" period upon arrival to the US as they do not qualify for the resettlement services provided to refugees, and rather are met with the arduous task of successfully completing the asylum process. In discussing the relationship between increased length of time in the US and worsening mental health outcomes, Song et al. (2018) suggests that refugees may delay treatment until after the "honeymoon" period has lapsed and that clinical symptoms may become more pronounced which accounts for greater acuity of mental health symptoms over time. An analogous "honeymoon," or period of potentially decreased clinical symptoms of distress, may not be present for asylum seekers and rather there may be other reasons why asylum seekers do not initiate services earlier or as early as refugees. These reasons can include the prioritization of more immediate needs like housing, employment, etc. as well as a mistrust of authority figures and organizations that could lead asylum seekers to view health care providers with the same mistrust that they may view immigration

officials and legal bodies (Asgar & Segar, 2011). Therefore, in an asylum-seeking population, time in the U.S. may not predict worse mental health outcomes because symptoms of distress may persist throughout an asylum seeker's stay in the U.S. and may not be modulated by time. These finds suggest that clinicians and other providers should conduct outreach with asylum-seeking populations earlier and work to mitigate the barriers that exist for asylum seekers in obtaining integrated services.

The current study seeks to also examine the variable, time in the US., as a proxy for time spent with unstable or non-permanent immigration status or time spent in the asylum process, a key stressor for asylum seekers (Li et al, 2016). Participants in this study largely arrived to the US with a visa, which is indicative of a temporary, non-permanent immigration status and high likelihood that participants were affirmative asylum applicants. US immigration law I.N.A. §208(a)(2)(B) stipulates that individuals are to apply for affirmative asylum within one year of arrival to the US with some, limited exceptions. Therefore, the amount of time spent in the asylum process is roughly analogous with the amount of time spent in the US. The study findings in regard to the lack of predictive power of time in the US on mental health outcomes suggest that the challenges of the asylum process may not follow a time-dependent pattern. For example, although research has found that the "uncertainty" of the asylum process can lead to debilitating mental and physical symptoms of distress (Asgar & Segar, 2011; Brekke, 2010), it is unclear how or if this uncertainty fluctuates over time. Rather, the "uncertainty" may be persistent throughout the process. The findings of the present study are consistent with theories that the uncertainty and waiting for a determination to be made on one's case is akin to being in "limbo" or suspended between past and future as

"directionless time" (Brekke, 2010). Ostensibly, if time feels "suspended" for an asylum seeker, it would seem reasonable that mental health stressors do not follow a linear trajectory. The clinical implications of this finding are that it is important to attend to the needs of asylum seekers throughout their time in the U.S. and asylum seekers may benefit from additional supports throughout the asylum process including upon arrival.

An additional clinical and policy recommendation is that it is important to attend to stressors related to the asylum process apart from time spent waiting for adjudication of one's case. Research has found that asylum seekers have worse mental health outcomes than refugees with stable immigration status (Iverson & Morken, 2004; Kashyap et al., 2019; NCTTP, 2015; Newnham et al., 2019; Nickerson et al., 2019; Toar et al., 2009). In a longitudinal study of 323 participants that were largely U.S. asylum seekers and torture survivors, Kashyap et al. (2019) found that across a six-month treatment window, changes to a more stable immigration status were associated with significantly reduced symptoms of depression. Similarly, Eisen (2016) found that in a sample of largely Ethiopian asylum seekers and torture survivors, the only post-migration variable that led to significant changes in symptoms of depression was receiving asylum. Interestingly, the effect was most pronounced in those that were granted asylum in a shorter duration of time. In other words, a longer wait time before receiving asylum corresponded to less of an improvement in symptoms of depression. Such findings raise critical questions about the factors inherent within the asylum process that may lead to worse mental health outcomes, above and beyond time spent in the US. A twenty-year review of twenty-three studies from 1988-2007 of 7,294 non-detained, adult asylum seekers in Western countries found that the asylum procedure was "inherently damaging

to mental health." The review noted stressors that may persist throughout one's duration of time in the asylum process such as fears of deportation or being returned to one's country of origin, delays in processing asylum applications, difficulties of visiting one's country of origin, asylum procedure stressors, an inability to plan for the future, difficulty in obtaining refugee status and the re-traumatization inherent within the asylum process (Ryan et al., 2009). These stressors may provide entry points by which to address wider mental health needs above and beyond time spent in the asylum process especially as recent policy changes make the asylum process more challenging. (Corcoran, 2019; USCIS, 2018).

More research is also needed to examine if a particular cut-off point may exist for the worsening of mental health outcomes based on time in the US for asylum seekers. For studies with large samples of refugees, one year has been used as a cut-off for group comparisons (Song et al., 2018) and studies have used 8 months as a cut-off to signify the end of receiving formal refugee settlement services (Ballard – King et al., 2018). Presently, it is unclear what a suitable cut-off period in research should be for asylum seekers, especially given that asylum seekers may present for services later than refugees. It is also estimated that on average, asylum seekers spend about 2 years in the asylum process based off federal immigration statistics as of July 2018 (National Immigration Forum, 2019). In an archival study of recently arrived refugees and recent asylees (i.e. asylum seekers that were recently granted asylum) in Maryland, asylees could only be included in the study if they received asylum within 18 months to account for variation in time spent in the asylum process and to create consistency with refugees in the study who arrived to the U.S. within the past 90 days (Mahmoud et al., 2019). The determination of

18 months was partly based on the aforementioned federal immigration statistics of average time spent in the asylum process. More research is needed to determine what cut-off points should be used for research and thus to inform clinical and policy recommendations for the treatment of time in the US for diverse asylum seekers.

Housing Instability

In this study, housing instability did not significantly predict mental health outcomes. It was hypothesized that greater instability with housing status would predict more severe mental health outcomes based on studies that found that unstable housing was associated with worse mental health outcomes (Kashyap et al., 2019; Song et al., 2018; Whitsett & Sherman, 2017). Furthermore, housing instability failed to predict variance in mental health outcomes even in the presence of potentially moderating variables such as age, gender, having work authorization, marital status or time in the US.

The study findings are consistent with the results of the doctoral dissertation by Eisen (2016) that found that at intake, housing instability was similarly not associated with symptoms of depression nor were changes in housing status associated with a change in severity of depression. Longitudinal studies by Whitsett and Sherman (2017) and Kashyap et al. (2019) found that housing instability only played a role in mental health outcomes across a treatment window. The present study did not assess the role of housing instability over the course of treatment, but rather only at intake. One of the issues complicating comparisons between studies is the subjective nature of differentiating between "stable" and "unstable" housing conditions. Also, while someone may endorse having "stable" housing, housing may still present challenges including cost, privacy, neighborhood characteristics, access to transportation, social factors, etc.

Analysis of housing is further complicated by the fact that some studies may not report how many participants endorse stable housing such as the Eisen (2016) and Kashyap et al. (2019) studies. Although the Whitsett and Sherman (2017) study and Song et al. (2018) study provide descriptive statistics on housing with 29% and 78% of participants reporting stable housing, respectively, neither provide further breakdown along ethnicity or immigration status, where there can be considerable variance. The vast majority (approximately 80%) of participants in the current study were stably housed.

Housing instability has been found to contribute to worse mental health outcomes as unstable housing can be associated with unsafe environments or one in which there is little control over one's surroundings (Evans, 2003). Given the large presence of an Ethiopian community and diaspora in the region where the research was conducted, it is possible that even those with unstable housing may have still felt a sense of safety and control if they felt that they could turn to others in the community for material support such as housing if needed. The support or proximity to a wider community may have countered the otherwise deleterious effects of unstable housing.

Employment Instability

In the current study, employment instability in and of itself did not significantly predict mental health outcomes. It was hypothesized that greater instability with employment would predict more severe mental health outcomes based on studies that found that unstable employment was associated with worse mental health outcomes (Bogic et al., 2015; Carlsson et al., 2006; Johnson & Thomspon, 2008; Laban et al., 2005; Li et al., 2016; Priebe et al. 2013). In the Eisen (2016) and Welsh (2012) doctoral dissertations, employment did not predict worse mental health outcomes and changes in

employment status were not associated with changes in severity of depression (Eisen 2016). In the present study, employment instability was measured as either having work authorization or not having work authorization. In the second research question, it was found that the interaction of not having work authorization and identifying as male and having work authorization and identifying as female significantly predicted depression ($p = .004$) and emotional distress ($p = .011$).

The interaction effect for men is consistent with studies that have found that economic opportunities, including work authorization, are moderators of better mental health outcomes (Porter & Haslam, 2005) and that not having work authorization can present many challenges to asylum seekers (Ryan et al., 2009). Furthermore, a meta-analysis of 22,221 refugees globally found that economic opportunities, including work authorization, played a moderating role in better mental health outcomes (Porter & Haslam, 2005). Although, this was found to be the case for male participants, it was not the case for female participants who had worse mental health outcomes when reporting work authorization. It is important to note that although the interaction of employment and gender was significant in predicting variance of mental health outcomes, even when men had work authorization and when women did not have work authorization (i.e. when men and women respectively had better mental health outcomes), HSCL-25 scores were still above the threshold for clinical significance. There are a number of conclusions that can be drawn from these findings.

For many asylum seekers, the employment process can exacerbate a "shrunken social status," that may disproportionally affect male Ethiopian asylum seekers over their female counterparts. In a qualitative study of Ethiopian asylum seekers in the UK, one

male respondent noted, “Back home I was a university lecturer […] in this country, however, I am nothing, I am nothing at all (Papadopoulos et al., 2004).” This “shrunken social status” may be further intensified by a lack of work authorization which can prohibit employment or force asylum seekers to seek less stable, intermittent work that is “off the books,” or completed without official work authorization. Male asylum seekers who may bear the brunt of providing for immediate and extended family may be particularly impacted by a lack of work authorization which may contribute to higher depression and emotional distress.

Although research has found that female gender is associated with worse mental health outcomes in displaced populations (Chu et al., 2013; Keller et al. 2006; Mahmood et al., 2019; Newnham et al., 2019; Porter & Haslam, 2005; Schubert & Punamaki, 2011; Song et al., 2015; Song et al., 2018), the interaction effect of female gender and having work authorization being associated with worse mental health outcomes is not consistent with the albeit limited research in this area. Papadopoulos et al. (2004) found that Ethiopian asylum seekers in the U.K. reported better mental health outcomes than their male counterparts when employed due to expanded opportunities that may not have been available to women in Ethiopia. In the current study, the association between female gender and having work authorization may be explained by the fact that women were more likely to be employed (51% of women were employed versus 44% of men were employed with work authorization). For those that were employed, data was aggregated for those with part-time and full-time positions so it is likely that even individuals who were employed may still have been unable to afford basic living expenses, which may be associated with worse mental health outcomes. Employment (part-time or full-time) may

also have been associated with more hazardous or challenging employment conditions. It is possible that Ethiopian women may have had to seek less skilled labor than their male counterparts since fewer women reported completing more than 16 years of education (27% vs 35%). Based on these findings, providers should address the ways in which having work authorization may differentially impact mental health outcomes across gender.

It is also important to remember that although having work authorization accounted for worse mental health outcomes in women than in men, both men and women still exhibited clinically significant symptoms of depression and emotional distress when they had work authorization. There are a number of reasons why asylum seekers overall may struggle with employment instability. Given the high level of education and English proficiency among this sample, work authorization may introduce new stressors. While some refugees may struggle with finding skilled employment due to language skills (Bogic et al., 2012), being overqualified for a position can also be challenging when one's professional credentials from abroad are not recognized (Chen et al., 2010). In a recent qualitative dissertation among torture survivors in the mid-Atlantic region including Ethiopian asylum seekers, a number of respondents reported challenges with even being hired when prospective employers saw them as over-qualified for certain positions (O'conner, 2020). Asylum seekers also noted the added difficulty in obtaining employment due to racism and discrimination that they encountered (O'conner, 2020.; Papadopoulos et al., 2004). Based on these findings, providers should keep in mind that work authorization alone may not confer positive mental health benefits in and of itself. Rather, policies and practices should also be aimed at helping asylum seekers find

appropriate employment that can meet their financial and psycho-social needs, while addressing how these needs may differ across gender.

Family Separation

In this study, family separation did not significantly predict mental health outcomes even in the presence of potential moderating variables such as age, gender, having work authorization, educational level or time in the U.S. It was hypothesized that family separation would predict more severe mental health outcomes based on studies that found that family separation was associated with worse mental health outcomes (Miller et al., 2018; Rousseau et al., 2001; Savic et al., 2013; Tay et al., 2015). In the present study, family separation was operationalized through the question, "Is your spouse in the U.S.?" and was examined on the dependent variable for anxiety, depression and emotional distress as separate constructs. The Welsh (2012) dissertation operationalized family separation through the questions, "Do you have family in the U.S.?" and "Are you separated from your children," which similarly did not predict mental health outcomes of emotional distress in its Ethiopian sample. There are two potential explanations for why family separation did not predict worse mental health outcomes. First, the present study defines family separation only as separation from a spouse. It is possible that respondents may have suffered from separation from children, parents or extended family even if they were not separated from a spouse. Second, it is unclear if the separated spouse is in a place of relative safety. Given the challenges with the asylum process, caring for a spouse could present additional stressors during post-migration when contending with compounding factors such as housing instability, employment instability and immigration instability. Qualitative inquiry can help to

explain these results and better understand the ways in which family separation or reunion may contribute to distress, given the challenges inherent in the asylum process. For example, a phenomenological study of Ethiopian asylum seekers may investigate how participants have experienced family separation and reunion and identify the particular contexts or situations (across pre-migration, migration and post-migration) that most impacted participants' experience of family separation.

Need for an Interpreter

In this study, need for an interpreter, a proxy for English proficiency, did not significantly predict mental health outcomes. It was hypothesized that need for an interpreter would predict less severe mental health outcomes based on studies with asylum seekers and those with unstable immigration status that found that greater English proficiency may predict worse mental health outcomes due to this perceived loss of status or "unfulfilled expectations" (Chu et al., 2013). The findings are consistent with the doctoral dissertation by Welsh (2012) that also found that English proficiency was not a predictor of mental health outcomes in an Ethiopian sample. It is possible that in this sample, individuals who had lower English proficiency may not have experienced as much hardship due to language because of the close proximity to such a large Ethiopian community. The presence of the large diaspora community may have buffered against challenges associated with limited English proficiency such as limited social or occupational opportunities.

Implications

The present study has a number of implications for counselor education and counselor training. It is important for trainees to understand the mental health burden

experienced by refugees and asylum seekers, the differences between and within different cultural or ethnic groups, and the unique stressors across pre-migration, migration and post-migration. For many trainees, the shift to addressing post-migration or psycho-social stressors can be challenging, especially when it reveals the shortcomings or failings of our own policies, systems, and institutions. Understanding the post-migration landscape and working through any misconceptions about client needs and the services/support that clients can safely access is a critical prerequisite to working with this population. This knowledge provides a critical foundation for then learning about different treatment modalities, assessment tools and overall best practices. Throughout this process, counselors should continuously reflect upon their power/positionality and work within a survivor-led framework to mitigate the potential harm that can be caused by voyeurism or saviorism on the part of the counselor or counseling program.

The present study also has a number of policy implications. Most importantly, the study reveals a high prevalence rate for symptoms of depression, anxiety, and emotional distress for Ethiopian torture survivors currently in the U.S. asylum process. The severity of symptoms was not dependent on any one socio-demographic or psycho-social factor suggesting widespread distress throughout the sample that presented for services at the research site. It is incumbent upon policy makers to improve the asylum process and conditions for asylum seekers to improve mental health outcomes for this population. It is worth noting that while the study found that post-migration factors did not predict severity of mental health symptoms, the participants reported significant mental health concerns. Even when considering the significant interaction effect between gender and work authorization, it is noteworthy that the average score on the HSCL-25 surpassed the

threshold for clinical significance across all four possible permutations – males with work authorization, males without work authorization, females with work authorization, and females without work authorization. Policy makers should therefore address strategies for how employment, beyond mere presence of work authorization, can by and large be significantly improved. Policy makers should also work to address the impact of other post-migration factors while bearing in mind that significant improvements in mental health may not be possible until the stressors inherent within the asylum process itself are remedied. Improving the asylum process and living conditions for individuals without a stable immigration status is a mental health imperative.

Limitations

The present study did not assess for pre-migration trauma which may have exerted an influence on mental health outcomes. As noted earlier, theories of refugee mental health have often pitted the etiology of post-migration distress in two camps, distress resulting from pre-migration trauma (also referred to as the war-exposure model) or distress related to psycho-social, post-migration variables. The present study focused on the latter due to research that post-migration stressors could explain variance in mental health outcomes above and beyond pre-migration trauma (Chu et al., 2013; Porter & Haslam, 2005), the urgency of post-migration stressors for asylum seekers (Miller & Rasmussen, 2010), and due to incomplete data on pre-migration trauma for the study sample. However, Eisen (2016) found that experiencing multiple traumatic events or experiencing sexual trauma did not predict depression in a similar sample and the Welsh (2012) study found that history of sexual torture, cruel, inhumane, and degrading treatment (CIDT), death threats, or experiencing multiple methods of torture did not

significantly predict anxiety and depression. Welsh (2012) did, however, find that experiencing "family torture" predicted anxiety and depression among Ethiopian asylum seekers. Future studies may benefit from exploring the role of torture and trauma in this population.

The present study did not assess for the type of services that clients were obtaining at the research site which could have enhanced the study and helped to explain some of the findings. For example, there may have been some services that necessitated interpretation. Similarly, understanding where individuals may have been in the legal asylum process could shed more light on to the role of time in the U.S. on mental health outcomes. Generalizability of the study among Ethiopian asylum seekers in the U.S. is also limited as the sample is largely male.

The use of the HSCL-25, a Western instrument, that was utilized across multiple translations, is another important limitation. The Amharic translation of the HSCL-25 utilized in this study is currently in the process of validation. The HSCL-25 was also not tested for reliability in this study. Generalizability of the study may also be further impacted by the fact that the HSCL-25 was not administered to all clients that presented for an intake during the study window. The HSCL-25 was not administered for individuals if they refused to complete the assessment or if staff determined that the assessment is not clinically appropriate (i.e. if a client was presenting with symptoms of trauma and could be further triggered by the assessment tool or if a client was presenting with urgent post-migration concerns that impaired the ability to concentrate on a psychometric instrument).

The use of archival, cross-sectional data is another limitation. Archival data presented challenges when selecting variables as it was not possible for the researcher to make adjustments to how original questions were phrased to respondents nor how responses were entered by research site staff. For example, the variable, "number of children," could not be utilized in this study due to missing or unclear responses. A longitudinal data set could have provided an additional lens to understand changes in mental health symptoms over time.

Future Research

There are a number of avenues for potential research. While the present study was cross-sectional in design, a follow-up longitudinal study can examine the role of post-migration variables on treatment outcomes or engagement with services across a treatment window. A follow-up qualitative study may shed light onto the role that post-migration factors have on the lives of participants beyond mental health outcomes of depression, anxiety and emotional distress measured on the HSCL-25. For example, how might different post-migration stressors present unique challenges or facilitate adaptive coping skills and strengths in the daily lives of clients? Qualitative inquiry that is accompanied by a review of legal case notes may also address additional post-migration variables that are endemic to the asylum-seeking process that was not assessed in this study such as the factors outlined in the Ryan et al. (2009) review (i.e. fears of deportation or being returned to one's country of origin, delays in processing asylum applications, difficulties of visiting one's country of origin, asylum procedure stressors, an inability to plan for the future, difficulty in obtaining refugee status and the re-traumatization inherent within the asylum process). Future studies should also continue to

explore the mental health outcomes for affirmative asylum applicants as well as expand to those of defensive asylum applicants as well, testing for similarities and differences in these groups. Qualitative inquiry may also be used to develop a greater understanding of the interaction effect of gender and work authorization using an ethnographic approach. A phenomenological approach may also be helpful in understanding the impact of family separation and reunion.

It may also be helpful to explore additional variables that can help explain the variance in mental health outcomes among this population. Research should examine the role of social connectedness among Ethiopian asylum seekers, especially those that live in close proximity to large diaspora communities. Social connectedness may provide avenues for support and buffer against many of the challenges associated with the asylum process (O'Conner, 2020). Conversely, rather than provide a potential protective factor by buffering against social isolation, proximity to a large diaspora community could present a stressor in terms of feelings of shame or dependence on community members in post-migration (Urtzan & Wieling, 2018). For example, it may be helpful to understand how proximity to a large diaspora community could provide housing and employment support as well as buffer against some of the barriers that limited English proficiency may otherwise pose. At the same time, how might the proximity of a large diaspora community exacerbate the perceived fall in social status especially for more educated participants who may be struggling with post-migration stressors?

Future studies can also integrate additional variables for inquiry from clinician-administered post-migration assessments such as the Survivor of Torture Psychosocial Well-being Index (SOT-PWI) that evaluates psycho-social environmental domains in the

life of a torture survivor including Legal (Immigration), Housing, Physical Health Needs, Mental Health Needs, Access to Community Resources, and Support System in the US. The scale was developed to capture post-migration stressors and aid in the assessment and treatment of torture survivors that present at an integrated torture center for services (Hodges-Wu and Zajicek-Farber, 2017). The tool utilizes a Likert scale between 1-4 to denote levels of "In Crisis (1)," "Vulnerable (2)," Stable (3)," "Safe (4)" with a description of each level for each category. For example, Housing is measured as "In Crisis (1)" for a client who "is homeless; reports housing conditions to be unsafe or unsanitary; describes living situation that presents immediate danger to self or family." "Vulnerable (2)" is for a client that "reports housing is available but undesirable or short-term; feels uncomfortable with current living situation; is being exploited in exchange for room and board." "Stable (3)" is for a client who "reports housing or living situation is tolerable; housing is temporary bit safe and predictable, provides a service in exchange for room and board." "Safe (4)" is for a client who "reports housing is safe stable, and long-term; has resources or means to maintain housing." This research would further clinical practice and counselor education to better serve the needs of asylum seekers in the US, an under-served and under-studied population that is growing in the US and worldwide. Recommendations to improve clinical outcomes for this population serve to grow the field of refugee and immigrant mental health worldwide.

Lastly, future research can also integrate additional scales to measure concepts such as hope or resiliency. Future studies may also benefit from more culturally-grounded inquiry as Western instruments may lead respondents to conform their experiences to Western constructs of distress.

Conclusions

This research study explored the role of post-migration factors on an understudied clinical sample of Ethiopian asylum seekers and torture survivors in an urban, mid-Atlantic region. The study is one of the first to focus exclusively on Ethiopian affirmative asylum applicants in the U.S. and can provide a springboard for further inquiry into the inherent stressors of the asylum process. Although the overall hierarchal linear regression model did not significantly predict mental health outcomes, the study uniquely provides more insight into the experiences of asylum seekers, especially in terms of potential moderating effects between gender and employment that significantly explained variance in mental health outcomes. More research is needed to understand the gendered impact of employment among asylum seekers. More targeted research is also needed that generally focuses on the unique experiences and mental health outcomes of asylum seekers. Historically, the experiences of asylum seekers have been integrated within the wider research on refugee mental health, which collapses the unique differences between these two groups which can impact clinical and policy recommendations. Lastly, this study supports the inquiry into individual displaced communities by country of origin while separating mental health outcome variables of anxiety, depression, and emotional distress on the HSCL-25. Future research should continue to examine the needs of torture survivors so clinicians, researchers and policy makers can better serve this population, while simultaneously working towards a world in which torture no longer exists.

References

Ababa, A. (2018). *Mapping of Ethiopian diasporas residing in the United States of America*. International Organization of Migration. https://ethiopia.iom.int/sites/default/files/document/Final%20Mapping%20of%20Ethiopian.pdf

Alfadhli, K., & Drury, J. (2016). Psychosocial support among refugees of conflict in developing countries: a critical literature review. *Intervention*, *14*(2), 128–141.

Allen, J., Balfou, R., Bell, R., & Marmot, M. (2014). Social determinants of mental health. *Int Rev Psychiatry.* 60, 501- 524

Asgary, R., & Segar, N. (2011). Barriers to health care access among refugee asylum seekers. *Journal of Health Care for the Poor and Underserved*, *22*(2), 506–522. https://doi.org/10.1353/hpu.2011.0047

Bader, L. (2013) *"They want a confession": torture and ill-treatment in Ethiopia's Maekelawi police station.* Human Rights Watch. https://www.hrw.org/sites/default/files/reports/ethiopia1013_ForUpload_0.pdf

Ballard-Kang, J. L., Lawson, T. R., & Evans, J. (2018). Reaching out for help: An analysis of the differences between refugees who accept and those who decline community mental health services. *Journal of Immigrant and Minority Health*, *20*(2), 345–350. https://doi.org/10.1007/s10903-017-0612-6

Bentley, J. A., Thoburn, J. W., Stewart, D. G., & Boynton, L. D. (2012). Post-migration stress as a moderator between traumatic exposure and self-reported mental health symptoms in a sample of Somali refugees. *Journal of Loss and Trauma*, *17*(5), 452–469. https://doi.org/10.1080/15325024.2012.665008

Bogic, M., Njoku, A., & Priebe, S. (2015). Long-term mental health of war-refugees: A systematic literature review. *BMC International Health and Human Rights*, *15*(1). https://doi.org/10.1186/s12914-015-0064-9

Bowmani, Z. (2020). Queer refuge: The impacts of homoantagonism and racism in U.S. asylum law. *The Georgetown Journal of Gender and the Law*, *18* (1–41).

Brekke, J.P. (2010). Life on hold: The impact of time on young asylum seekers waiting for a decision. *Diskurs Kindh – Jugendforsch,*5 (159-167).

Bronfenbrenner, U. (1979). *The ecology of human behavior.* Cambridge, MA: Harvard University Press.

Campbell, E.J., & Steel, E.J. (2015). Mental distress and human rights of asylum seekers. *Journal of Public Mental Health, 14,* 43-55. Doi:10.1108/JPMH-06-2013-0040

Carlsson, J.M., Olsen, D., Mortensen, E.L., & Kastrup, M. (2006). Mental health and health-related quality of life: A 10-year follow-up of tortured refugees. *Journal of Nervous and Mental Disease, 194,* 725-731. Doi:10.1097/01.nmd.0000243079.52138.b7

Carswell, K., Blackburn, P., & Barker, C. (2011). The relationship between trauma, post-migration problems and the psychological well-being of refugees and asylum seekers. *International Journal of Social Psychiatry*, *57*(2), 107–119. https://doi.org/10.1177/0020764008105699

Carswell, K. (2007). *The impact of pre and post-migration stressors on the psychological wellbeing of refugees*. (592668) [Doctoral dissertation, University of London]. Proquest.

The Center for Victims of Torture. (n.d.) *ASTT Closure.* HealTorture.org.

https://healtorture.org/content/astt-closure

Chantler, K. (2012). Gender, asylum seekers and mental distress: Challenges for mental health social work. *British Journal of Social Work*, *42*(2), 318–334. https://doi.org/10.1093/bjsw/bcr062

Chen, C., Smith, P., & Mustard, C. (2010). The prevalence of over-qualification and its association with health status among occupationally active immigrants to China. *Ethn Health, 15*(6), 601-619

Chu, T., Keller, A. S., & Rasmussen, A. (2013). Effects of post-migration factors on PTSD outcomes among immigrant survivors of political violence. *Journal of Immigrant and Minority Health*, *15*(5), 890–897. https://doi.org/10.1007/s10903-012-9696-1

Corcoran, E. (2019). The construction of the ultimate other: Nationalism and manifestations of misogyny and patriarch U.S. immigration law and policy. *Georgetown Journal of Gender and the Law*, *20*(3), 541-576.

Covington-Ward, Y. (2017). "Back home, people say America is heaven": Pre-migration expectations and post-migration adjustment for Liberians in Pittsburgh. *Journal of International Migration and Integration*, *18*(4), 1013–1032. https://doi.org/10.1007/s12134-017-0511-7

de Jong,, J.T. (2002). A public health framework to translate risk factors related to political violence and war into multi-level preventive interventions. *Social Science & Medicine, 70,* 71-79.

de Jong, J., & van Ommeren, M. (2002). Toward a culture-informed epidemiology: Combining qualitative and quantitative research in trans- cultural contexts.

Transcultural Psychiatry, *39*, 422–433.

Department of Homeland Security. (2019). *Annual flow report: Refugees and asylees 2017.* *https://www.dhs.gov/sites/default/files/publications/Refugees_Asylees_2017.pdf*

Department of State. (2020). *Refugee admissions report FY2020_01_31.* *https://www.wrapsnet.org/admissions-and-arrivals/*

Derogatis, L.R., Lipman, R.S., Rickels, K., Uhlenhuth, E.H., & Covi, L. (1974). The Hopkins symptom checklist (HSCL): A self-report symptom inventory. *Behavioral Science. 19*(1), 1-15.

Eisen, E.M. (2016). *The impact of post-migration factors on PTSD and depressive symptoms among asylum seekers in the United States* (10146382) [Doctoral dissertation, George Washington University]. Proquest.

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

Evans, G.W. (2003). The built environment and mental health. *Journal of Urban Health, 80,* 536-555. doi:10.1093/jurban/jtg063

Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39, 175–191.

Fazel, M., Wheeler, J., & Danesh, J. (2005). Prevalence of serious mental disorder in 7000 refugees resettled in western countries: A systematic review. *Lancet*, *365*(9467), 1309–1314. https://doi.org/10.1016/S0140-6736(05)61027-6

Glaesmer, H., Braehler, E., Grande, G., Hinz, A., Petermann, F., & Romppel, M. (2013). The German version of the Hopkins Symptom Checklist (HSCL-25) – factorial structure, psychometric properties, and population-based norms. *Comprehensive Psychiatry*, 55(2), 396–403. doi:10.1016/j/comppsych.2013.08.020

Hamid, A., Patel, N., & De C Williams, A. C. (2019). Psychological, social, and welfare interventions for torture survivors: A systematic review and meta-analysis of randomised controlled trials. *PLoS Medicine*, *16*(9) https://doi.org/10.1371/journal.pmed.1002919

Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd Ed.). New York, NY: Guilford Press.

Heeren, M., Wittmann, L., Ehlert, U., Schnyder, U., Maier, T., & Müller, J. (2014). Psychopathology and resident status - Comparing asylum seekers, refugees, illegal migrants, labor migrants, and residents. *Comprehensive Psychiatry*. https://doi.org/10.1016/j.comppsych.2014.02.003

Hergenrather, K.C., Zeglin, R.J., McGuire-Kuletz, M., & Rhodes, S.D. (2015). Employment as a social determinant of health: A review of longitudinal studies exploring the relationship between employment status and mental health. *Rehabilitation Research, Policy, and Education, 29*(3), 261 – 290. http://dx.doi.org/10.1891/2168-6653.29.3.261

Hilado, A. (2018). Organizational practice In Hilado, A. & Lundy, M. (Ed.), *Models for practice with immigrants and refugees: Collaboration, cultural awareness, and integrative theory* (226-253). Los Angeles, CA: Sage.

Hodges-Wu, J., & Zajicek-Farber, M. (2017). Addressing the needs of survivors of

torture: A pilot test of the psychosocial well-being index. *Journal of Immigrant and Refugee Studies*, *15*(1), 71–89. https://doi.org/10.1080/15562948.2016.1171941

Hollifield, M., Warner, T. D., Krakow, B., & Westermeyer, J. (2018). *Clinical Medicine Mental Health Effects of Stress over the Life Span of Refugees*. https://doi.org/10.3390/jcm7020025

Hooberman, J.B., Rosenfeld, B., Llewa, D., Rasmussen, A., & Keller, A. (2007). Classifying the torture experiences of refugees living in the United States. *Journal of Interpersonal Violence.* 22(1), 108-23

Human Rights Watch. (2018). *Ethiopia: Events of 2018.* https://www.hrw.org/world-report/2019/country-chapters/ethiopia#

Hynie, M. (2018). The social determinants of refugee mental health in the post-migration context: A critical review. In *Canadian Journal of Psychiatry*, *63*(5), 297–303. SAGE Publications Inc. https://doi.org/10.1177/0706743717746666

Ibrahim, H., & Hassan, C.Q. (2017). Post-traumatic stress disorder symptoms resulting from torture and other traumatic events among Syrian Kurdish refugees in Kurdistan region Iraq. *Front. Psychology, 8.*

Iverson, V. C. & Morken, G. (2004) Differences in acute psychiatric admission between asylum-seekers and refugees. *Nordic Journal of Psychiatry, 58*, 465–70.

Jakobsen, M., Thoresen, S., & Johansen, L. E. E. (2011). The validity of screening for post-traumatic stress disorder and other mental health problems among asylum seekers from different countries. *Journal of Refugee Studies*, *24*(1), 171–186. https://doi.org/10.1093/jrs/feq053

Jaranson, J. M., J. Butcher, et al. (2004). Somali and Oromo refugees: correlates of torture and trauma history, *American Journal of Public Health*, *94*(4), 591-598.

Kale, E., & Syed, H.R. (2010). Language barriers and the use of interpreters in the public health services. A questionnaire-based survey. *Pat Educ Counsel*, *81*(2), 187-191.

Kashyap, S., Page, A. C., & Joscelyne, A. (2019). Post-migration treatment targets associated with reductions in depression and PTSD among survivors of torture seeking asylum in the USA. *Psychiatry Research*, *271*, 565–572. https://doi.org/10.1016/j.psychres.2018.12.047

Keller, A., Lhewa, D., Rosenfeld, B., Sachs, E., Aladjem, A., Cohen, I., Smith, H., & Porterfield, K. (2006). Traumatic experiences and psychological distress in an urban refugee population seeking treatment services. *Journal of Nervous and Mental Disease*, *194*(3), 188–194. https://doi.org/10.1097/01.nmd.0000202494.75723.83

Kirmayer, L.J., Narasiah, L., Munoz, M., Rashid, M., Ryder, A.G., Guzder, J., Hassan, G., Rousseau, C., & Pottie, K. (2011). Common mental health problems in immigrants and refugees: General approach in primary care. *CMAJ*, *183*, E959–E967.

Kleijn W.C., Hovens J.E., & Rodenburg J.J. (2001). Posttraumatic stress symptoms in refugees: Assessments with the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist-25 in different languages. *Psychol Rep*. 88(2), 527–532.

Laban, C.J., Gernaat, H.B., Komproe, I.H., van der Tweel, I. & De Jong, J.T. V.M. (2005). Postmigration living problems and common psychiatric disorders in Iraqi asylum seekers in the Netherlands. *Journal of Nervous and Mental Diseases*, 193,

825–832.

Lavik, N. J., Laake, P., Hauff, E., & Solberg, Ø. (1999). *The use of self-reports in psychiatric studies of traumatized refugees: Validation and analysis of HSCL-25*.

Leaman, S. C., & Gee, C. B. (2012). Religious coping and risk factors for psychological distress among African torture survivors. *Psychological Trauma: Theory, Research, Practice, and Policy*, *4*(5), 457–465. https://doi.org/10.1037/a0026622

Li, S. S. Y., Liddell, B. J., & Nickerson, A. (2016). The relationship between post-migration stress and psychological disorders in refugees and asylum seekers. In *Current Psychiatry Reports*, *18*(9). Current Medicine Group LLC 1. https://doi.org/10.1007/s11920-016-0723-0

Lomax, R. G. & Hahs-Vaughn, D. L. (2013). *An introduction to statistical concepts* (3rd Ed.). United Kingdom: Taylor & Francis.

Mahmood, A. A., Shah, D. D., Michlig, G. J., Hughes, M. E., & Bass, J. K. (2019). Assessing predictors of emotional distress by immigrant type: An exploration of adult refugees, asylees, and SIV holders in Maryland. *Journal of Immigrant and Minority Health*. https://doi.org/10.1007/s10903-019-00917-2

Member Centers of the National Consortium of Torture Treatment Programs (NCTTP). (2015). Descriptive, inferential, functional outcome data on 9,025 torture survivors over six years in the United States. *Torture, 25*(2), 34-60

Myhrvold, T., & Småstuen, M.C. (2017). The mental healthcare needs of undocumented migrants: an exploratory analysis of psychological distress and living conditions among undocumented migrants in Norway. *Journal of Clinical Nursing*, *26*, 825–839

Migration Policy Institute. (2014). *The Ethiopian diaspora in the United States.* www.migrationpolicy.org/about/copyright-policy

Miller, K. E., Kulkarni, M., & Kushner, H. (2006). Beyond trauma-focused psychiatric epidemiology: Bridging research and practice with war-affected populations. In *American Journal of Orthopsychiatry* (Vol. 76, Issue 4, pp. 409–422). https://doi.org/10.1037/0002-9432.76.4.409

Miller, K. E., & Rasmussen, A. (2010). Mental health and armed conflict: The importance of distinguishing between war exposure and other sources of adversity: A response to Neuner. In *Social Science and Medicine* (Vol. 71, Issue 8, pp. 1385–1389). https://doi.org/10.1016/j.socscimed.2010.07.020

Miller, K. E., & Rasmussen, A. (2017). The mental health of civilians displaced by armed conflict: An ecological model of refugee distress. *Epidemiology and Psychiatric Sciences*, *26*(2), 129–138. https://doi.org/10.1017/S2045796016000172

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

Mollica, R.F., Wyshak, G., de Marneffe, D., Khuon, F., & Lavelle, J. (1987). Indochinese versions of the Hopkins Symptom Checklist-25: a screening instrument for the psychiatric care of refugees. *American Journal of Psychiatry*, 144 (4), 497-500.

Mollica, R. F., McDonald, L. S., Massagli, M. P., & Silove, D. M. (2004). *Measuring trauma, measuring torture: Instructions and Guidance on the utilization of the Harvard Program in Refugee Trauma's Versions of The Hopkins Symptom*

Checklist-25 (HSCL-25) & The Harvard Trauma Questionnaire (HTQ). Cambridge, MA.

National Immigration Forum. (2019). *Fact sheet: U.S. asylum process.* https://immigrationforum.org/article/fact-sheet-u-s-asylum-process/

Newnham, E. A., Pearman, A., Olinga-Shannon, S., & Nickerson, A. (2019). The mental health effects of visa insecurity for refugees and people seeking asylum: a latent class analysis. *International Journal of Public Health*, *64*(5), 763–772. https://doi.org/10.1007/s00038-019-01249-6

Neuner, F. (2010). Assisting war-torn populations - Should we prioritize reducing daily stressors to improve mental health? Comment on Miller and Rasmussen (2010). In *Social Science and Medicine*, 71(8), 1381–1384 https://doi.org/10.1016/j.socscimed.2010.06.030

Nickerson, A., Byrow, Y., O'Donnell, M., Mau, V., McMahon, T., Pajak, R., Li, S., Hamilton, A., Minihan, S., Liu, C., Bryant, R. A., Berle, D., & Liddell, B. J. (2019). The association between visa insecurity and mental health, disability and social engagement in refugees living in Australia. *European Journal of Psychotraumatology*, *10*(1). https://doi.org/10.1080/20008198.2019.1688129

Office of Refugee Resettlement. (n.d.) *Services for survivors of torture.* https://www.acf.hhs.gov/orr/programs/survivors-of-torture

O'Connor, S. (2020). *Corrective political experiences? A grounded theory model of the psychological impacts of public testimony for survivors of torture* [Doctoral dissertation, University of Maryland, College Park].

Papadopoulos, I., Lees, S., Lay, M., & Gebrehiwot, A. (2004). Ethiopian refugees in the

UK: Migration, adaptation and settlement experiences and their relevance to health. *Ethnicity and Health*, *9*(1), 55–73. https://doi.org/10.1080/1355785042000202745

Piwowarczyk, L. (2007). Asylum seekers seeking mental health services in the United States: Clinical and legal implications. *Journal of Nervous and Mental Disease*, *195*(9), 715–722. https://doi.org/10.1097/NMD.0b013e318142ca0b

Porter, M., & Haslam, N. (2005). Predisplacement and postdisplacement factors associated with mental health of refugees and internally displaced persons a meta-analysis, *JAMA, 94*(5). https://doi.org/10.1001/jama.294.5.602

Priebe, S., Gavrilovic, J.J., Bremner, S., Ajdukovic, D., Franciskovic, T., & Galeazzi, G.M., (2013). Psychological symptoms as long-term consequences of war experiences. *Psychopathology, 46,* 45-54.

Rogler, L. H. (1989). The meaning of culturally sensitive research in mental health. *American Journal of Psychiatry*, 146, 296–303.

Rousseau, C., Mekki-Berrada, A., & Moreau, S. (2001). Trauma and extended separation from family among Latin America and African refugees in Montreal. *Psychiatry, 64*(1), 40-59 doi:10.1521/psyc.64.1.40.18238

Ryan, D., Kelly, F. & Kelly, B. (2009). Mental health among persons awaiting an asylum outcome in Western countries: A literature review. *International Journal of Mental Health, 38,* 88–111.

Savic, M., Chur-Hansen, A., Mahmood, M. A., & Moore, V. (2013). Separation from family and its impact on the mental health of Sudanese refugees in Australia: A qualitative study. *Australian and New Zealand Journal of Public Health*, *37*(4),

383–388. https://doi.org/10.1111/1753-6405.12088

Schick, M., Morina, N., Mistridis, P., Schnyder, U., Bryant, R. A., & Nickerson, A. (2018). Changes in post-migration living difficulties predict treatment outcome in traumatized refugees. *Frontiers in Psychiatry*, *9*(OCT). https://doi.org/10.3389/fpsyt.2018.00476

Schubert, C. C., & Punamäki, R. L. (2011). Mental health among torture survivors: Cultural background, refugee status and gender. *Nordic Journal of Psychiatry*, *65*(3), 175–182. https://doi.org/10.3109/08039488.2010.514943

Shannon, P. J., Wieling, E., McCleary, J. S., & Becher, E. (2015). Exploring the mental health effects of political trauma with newly arrived refugees. *Qualitative Health Research*, *25*(4), 443–457. https://doi.org/10.1177/1049732314549475

Shishehgar, S., Gholizadeh, L., DiGiacomo, M., Davidson, P.M. (2015). The impact of migration on the health status of Iranians: An integrative literature review. *BMC Int Health Hum Rights*, *15(*20).

Silove, D., Ventevogel, P., & Rees, S. (2017). The contemporary refugee crisis: An overview of mental health challenges, *World Psychology, 16*(130-139).

Song, S. J., Kaplan, C., Tol, W. A., Subica, A., & de Jong, J. (2015). Psychological distress in torture survivors: pre- and post-migration risk factors in a US sample. *Social Psychiatry and Psychiatric Epidemiology*, *50*(4), 549–560. https://doi.org/10.1007/s00127-014-0982-1

Song, S. J., Subica, A., Kaplan, C., Tol, W., & De Jong, J. (2018). Predicting the mental health and functioning of torture survivors. *Journal of Nervous and Mental Disease*, *206*(1), 33–39. https://doi.org/10.1097/NMD.0000000000000678

Spiric, Z., Opacic, G., Samardzic, R., Knezevic, G., Mandic-Gajic, G. &Todorovic, M. (2010). Gender differences in victims of war torture: Types of torture and psychological consequences. *Vojnosanit Pregl, 67*(5), 411-418

Stammel, N., Knaevelsrud, C., Schock, K., Walther, L. C. S., Wenk-Ansohn, M., & Böttche, M. (2017). Multidisciplinary treatment for traumatized refugees in a naturalistic setting: symptom courses and predictors. *European Journal of Psychotraumatology*, *8*(sup2), 1377552. https://doi.org/10.1080/20008198.2017.1377552

Steel, Z., Chey, T., Silove, D., Marnane, C., Bryant, R. A., & van Ommeren, M. (2009). Association of torture and other potentially traumatic events with mental health outcomes among populations exposed to mass conflict and displacement: a systematic review and meta-analysis. JAMA, 302(5), 537-549.

Tay, A. K., Rees, S., Chen, J., Kareth, M., & Silove, D. (2015). Pathways involving traumatic losses, worry about family, adult separation anxiety and posttraumatic stress symptoms amongst refugees from West Papua. *Journal of Anxiety Disorders*, *35*, 1–8. https://doi.org/10.1016/j.janxdis.2015.07.001

Tinghog, P., Malm, A., Arwidson, C., Sigvardsdotter, E., Lundin, A., & Saboonchi, F. (2017). Prevalence of mental ill health, traumas and postmigration stress among refugees from Syria resettled in Sweden after 2011: A population-based survey. *BMJ Open, 7.*

Toar, M., O'Brien, K. K., & Fahey, T. (2009). Comparison of self-reported health & healthcare utilisation between asylum seekers and refugees: An observational study. *BMC Public Health*. https://doi.org/10.1186/1471-2458-9-214

United Nations High Commission of Refugees. (2010). *Convention and protocol relating to the status of refugees. https://www.unhcr.org/en-us/3b66c2aa10*

United Nations High Commission of Refugees. (2019, June 19). *Figures at a glance. https://www.unhcr.org/en-us/figures-at-a-glance.html*

Uribe Guajardo, M.G., Slewa-Younan, S., Smith, Ma, Eagar, S., & Stone, G. (2016). Psychological distress is influenced by length of stay in resettled Iraqi refugees in Australia. *International Journal of Mental Health Symptoms*, *10*(4). DOI: 10.1186/s13033-016-0036-z

Utržan, D. S., & Wieling, E. A. (2018). A Phenomenological Study on the Experience of Syrian Asylum-Seekers and Refugees in the United States. *Family Process*. https://doi.org/10.1111/famp.12408

United States Citizenship and Immigration Services. (2018, January 26). *Affirmative asylum interview scheduling. https://www.uscis.gov/affirmative-asylum-scheduling*

U.S. Citizenship and Immigrating Services. (2019). *Implementing bilateral and multilateral asylum cooperative agreements under the immigration and nationality act.* Federal register. https://www.federalregister.gov/documents/2019/11/19/2019-25137/implementing-bilateral-and-multilateral-asylum-cooperative-agreements-under-the-immigration-and

Welsh, E. (2012). *Predictors of Mental Health and Treatment Engagement.* (3539315) [Doctoral Dissertation, University of Maryland, Baltimore County]. UMI Dissertation Publishing.

Wind, T. R., van der Aa, N., de la Rie, S., & Knipscheer, J. (2017). The assessment of psychopathology among traumatized refugees: measurement invariance of the Harvard Trauma Questionnaire and the Hopkins Symptom Checklist-25 across five linguistic groups. *European Journal of Psychotraumatology*, *8*(sup2), 1321357. https://doi.org/10.1080/20008198.2017.1321357

The White House. (2019, November 1). *Presidential memoranda: Presidential determination on Refugee Admissions for fiscal year 2020. https://www.whitehouse.gov/presidential-actions/presidential-determination-refugee-admissions-fiscal-year-2020/*

Whitsett, D., & Sherman, M. F. (2017). Do resettlement variables predict psychiatric treatment outcomes in a sample of asylum-seeking survivors of torture? *International Journal of Social Psychiatry*, *63*(8), 674–685. https://doi.org/10.1177/0020764017727022