An Examination of the Relationship between Acculturation Level and PTSD 
among Central American Immigrants in the United States

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Sarita Marie Sankey

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This dissertation titled
An Examination of the Relationship between Acculturation Level and PTSD
among Central American Immigrants in the United States

by
SARITA MARIE SANKEY

has been approved for
the Department of Counseling and Higher Education
and the College of Education by

____________________________________
Mona Robinson
Assistant Professor of Counseling and Higher Education

____________________________________
Renée A. Middleton
Dean, College of Education
ABSTRACT

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An Examination of the Relationship between Acculturation Level and PTSD among Central American Immigrants in the United States (165 pp.)

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The purpose of this study was to examine the relationship between acculturation level and posttraumatic stress disorder (PTSD) prevalence in Central American immigrants in the United States. Central American immigrants represent a population that is a part of the Latino/Hispanic Diaspora in the United States. By the year 2050 the United States population will experience a great change in the ethnic/racial demographics and most will be former minorities comprising over 45% racial minorities (U.S. Census, 2005). Thus, it becomes more important for counselor educators and other helping professionals to understand how to adequately assess the “Latino” and be culturally sensitive — especially since Central American immigrants come from diverse backgrounds, and although they may be labeled “Hispanic,” there is diversity within groups of ethnic minorities.

This dissertation examined the research hypotheses: There is a relationship between acculturation level and PTSD among Central American immigrants in the United States. In addition, there are predictive relationships among the demographic variables. The null hypotheses presented are: There is no relationship between acculturation level and PTSD among Central American immigrants in the United States and additionally, there are no predictive relationships among the demographic variables. A Pearson correlation design was done to assess statistical significance (both positive and
negative), and to examine if there was a relationship between acculturation level and PTSD. The alpha level was set at a significance level of .05. A standard Multiple Regression design was utilized to assess predictive relationships among the demographic variables with PTSD severity: migration reason, age, gender, migration year, and marital status. The sample represented an $n = 63$ out of 100 participants who volunteered to participate in the study.

The results show that there was a relationship between acculturation level and PTSD among Central American immigrants. Several instruments were utilized for this dissertation research to assess both acculturation level and prevalence or lack of PTSD severity. The AMAS-ZABB (Abbreviated Multidimensional Acculturation Scale) and the PCL-C (Posttraumatic Stress Disorder Checklist for Civilians) were utilized in this study.

The results showed a positive correlation between acculturation level (U.S. identity, $r = .289$), Latino identity ($r = .281$), and PTSD. At an alpha level of $\alpha .01$, age was positively correlated ($r = .684$) and acculturation level (English language) was negatively correlated with PTSD ($r = -.465$). Multiple $R$ for regression was statistically significant when examining the demographic variables of age, acculturation level (English Language) and migration reason. The results were also statistically significant in predicting PTSD severity.

Approved: _____________________________________________________________

Mona Robinson
Assistant Professor of Counseling and Higher Education
DEDICATION

To the Central American community in the Washington, D.C., metro area, and my late grandparents: L.C. Sankey, Ernestine Carter and Margaret L. Sankey.

“As another has well said, to handicap a student by teaching him that his black face is a curse & that his struggle to change his condition is hopeless is the worst sort of lynching” (Carter G. Woodson).

“No hay mal que por bien no venga” (Boricua Proverb)
ACKNOWLEDGMENTS

I want to first thank God because without my belief in a higher power, this accomplishment would not be possible, I have realized my purpose in life. I also dedicate this dissertation not only to the Central American population in the Washington, D.C., metro area, but also to my grandparents who have died: L.C. Sankey (1995), Ernestine F. Carter (2006), and Margaret L. Sankey (2007). There were times that I thought I could not finish this, but I remember my grandparents who inspired me to get an education. I wish they were here to see this, but I know that their spirit lives within me.

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CHAPTER 1: INTRODUCTION

The following introduction seeks to present the rationale for the research, the background of the study, the statement of the problem, research hypotheses, significance, the limitations and delimitations, as well as the definition of terms in the study. The purpose of this study was to examine the relationship between acculturation level and Posttraumatic Stress Disorder (PTSD) among Central American immigrants in the United States.

By the year 2050, the population of the United States is projected to consist of 53% of ethnic and racial minorities (U.S Census Bureau, 2005). Comparably, this figure includes minority groups such as African-Americans, Asian Americans and Latinos (Hispanics). Latinos have currently surpassed African-Americans as the largest minority population in the United States, with over 40 million people (U.S. Census Bureau, 2005). Latinos are an ethnically diverse population, and can be of any race. Many Latinos are of African heritage, indigenous, and have European roots. The three largest Latino groups in the United States are Mexicans, Puerto Ricans and Cubans. As the changing demographics of the United States continue to become increasingly multicultural, understanding the cultural groups that continue to populate America’s many cities will become important, especially for counselors and counselor educators.

The Hispanic population in the United States continues to grow. Likewise, Latino groups have grown steadily, such as those from Central America (El Salvador, Guatemala and Nicaragua) and those Latinos from the Dominican Republic. According to the U.S Census (2005) the Salvadoran population has reached 1.2 million in the United States,
with many Salvadorans (*salvadoreños*) residing primarily in the city of Los Angeles, the Washington, D.C., metropolitan area, and the city of Houston, Texas. Salvadoran immigrants are among the top 10 foreign-born nationalities in the United States (Malone, Kaari, Baluja, and Davis, 2003). Hence, counselors working with Latinos will need to be cognizant of the historical and cultural norms of this ethnic group, as well as the diversity within this broadly defined population. In regards to mental health, it is important to be aware of cultural norms as well as the role of acculturation with Latinos, particularly immigrants. The cultural norms include: *familismo* (importance of family), *respeto* (respect), *personilismo* (importance of interpersonal relationships and friendships), *dignidad* (dignity), and refers to the innate worth and integrity of all people. In addition cultural norms encompass machismo (the male role in the family, and being head of household) and marianismo (the female role in the family and the comparison to the Virgin Mary) (Santiago-Rivera, Arredondo and Gallardo-Cooper, 2003).

The Washington, D.C., metro area’s Latino population continues to grow, and according to the District’s 2002 Census this is primarily due to immigration (D.C. Office of Latino Affairs, 2002). The Latino population represents close to 13% of the residents of Washington, D.C. Over one-third of the District’s Latinos identified their country of origin as being in Central America; while the vast majority migrated from El Salvador. This pattern is in contrast to the rest of the Latino population in the U.S., which is mainly of Mexican, Puerto Rican, or Cuban ancestry. The District of Columbia’s Office of Latino Affairs estimates that a proportion of the immigrant community that is undocumented ranges from 5% to 15% (D.C. Office of Latino Affairs, 2002).
Because the Latino population in the United States represents a diverse group, the experience of Central American immigrants residing in the United States is vastly different than the experiences of other Latino groups, such as Puerto Ricans or Mexicans. For example, Puerto Ricans, unlike other Latino groups that may have immigrated to the United States and are United States citizens because of the 1917 Jones Act. According to this statute, Puerto Rico was ceded to the United States after the Spanish-American War. The island of Puerto Rico is a self-governing territory under the government of the United States of America. Whereas, Mexican immigrants have continued to migrate to the United States for economic reasons in contrast to Central American immigrants. Many are clustered in several states in the United States (including Texas, Arizona, New Mexico, and California) that were once a part of Mexico (Sue & Sue, 2007).

On the other hand, other countries that are part of Central America (such as Belize, Panama or Costa Rica) were not chosen for this study as there are no language (English not Spanish is the national language in Belize) barriers and few cultural differences. There were also no civil wars or significant political conflict in those countries. This is not to say that Central Americans are indeed homogenous, but when examining Central America, El Salvador, Guatemala and Nicaragua although having different histories, experienced a common theme of civil war, and some Latinos from those particular countries experienced premigration trauma (Asner-Self & Marotta, 2005). Consequently, for counselors working with Central American immigrants, understanding the dynamics of immigration will become more essential not only due to the changing demographics of the United States, but because most immigrants from
Central America are in the United States because they often had to escape the ravages of political upheaval and civil war (Asner-Self & Marotta, 2005). The acculturation process of immigrants who have resided in the United States for several years as compared to newly arrived immigrants will become important for counselors to understand in order to successfully perform their duties. According to Social Science Research Council (1956) stated:

Acculturative change may be the consequence of direct transmission; it may be derived from non-cultural causes, such as ecological or demographic modifications induced by an impinging culture; it may be delayed, as with internal adjustments following upon the acceptance of alien traits or patterns; or it may be a reactive adaptation of traditional modes of life. Its dynamics can be seen as the selective adaptation of value systems, the processes of integration and differentiation, the generation of developmental sequences, and the operation of role determinants and personality factors (Social Science Research Council, 1954, p. 974).

Therefore it is imperative for counselors and counselor educators to become culturally competent as an integral element in facilitating a bridge with the Latino community. A culturally competent counselor uses strategies and techniques that are consistent with the life experiences and cultural values of clients. To implement these strategies and techniques, this type of professional must have awareness and knowledge related to issues of cultural diversity (Roysircar, Arredondo, Fuertes, Ponterotto, & Toporek, 2003).
Multicultural Counseling can be defined as broadening the perspective of the helping relationship (Sue & Sue, 2005). The individualistic approach is balanced with a collectivistic reality embedded in our families, significant others, our communities and culture. As the counselor working with a client is not perceived as solely an individual matter, but as an individual who is a product of his or her social and cultural context (Sue & Sue, 2005). As a result, systemic influences are seen as equally important as individual ones. A wide range of social variables are taken into consideration such as: gender, race, ethnicity, sexual orientation, religion, age, and disability (Sue & Sue, 2005).

In addition to multicultural counseling, the multicultural counseling competencies examine the following when working with diverse populations: knowledge, skills and awareness. Pederson, Draguns, Lonner, and Trimble (2002) believe that multicultural counseling competencies provide a framework for counselors, and that they should have knowledge about the histories of cultures other than their own, knowledge of the language and slang of other cultures, and the ability (skills) to recognize direct and indirect communication styles. In addition, becoming aware of one’s own culture is the third component of counselor awareness.

Acculturation and Central American Immigrants

Acculturation describes the process of adaptation or assimilation by an ethnic or racial group to a host culture and can occur in sedentary or migrant individuals. Acculturation not only occurs voluntarily among immigrants, but involuntarily among indigenous people and refugees (Berry, 1980). For example, in the U.S., the host or
dominant culture is Anglo-American. Acculturation has its foundation in the field of anthropology, but in recent years has been applied to the field of both counseling and psychology. Redfield, Linton and Herskovits (1936) have stated that: “Acculturation comprehends those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original culture patterns of either or both groups” (p. 149).

Acculturation outcomes have been described as varieties of adaptation representing separation or traditionality, marginalization, integration or biculturality, and assimilation in terms of culture identification and/or relationships with other groups (Berry, 1980; Dana, 1992). Berry (2003) states,

Separation occurs when individuals place a value on holding on to their original culture and at the same time wish to avoid interacting with others, whereas marginalization occurs when there is little interest in cultural maintenance and little interest in having relationships with others (p. 32).

Boski (2008) states that: “Integration consists of declared preferences for merging one’s life and for being functional in several domains of two cultural worlds identified by country/national labels” (p. 143). Assimilation can be defined as a person or group who reject their culture of origin, and adopts the dominant culture (American Culture). For example, a person from Central America that is assimilated will reject cultural values of that ethnic group, and would value American values only and would prefer to speak in English only. Acculturation level can be defined as the acculturation process occurring at two different levels among individuals from a different culture than the dominant culture.
According to Cuellar (2000), the first level is at the macro level, and involves the acculturation processes modifying cultural factors such as food, music, and language. The second level, is at the micro level, and is more cognitive and psychological in nature, and involves factors such as perception, beliefs, values, and behaviors. The behavioral level includes foods, customs, and cultural expressions such as music. The affective level includes any emotional ties to culture and tradition. The cognitive level involves beliefs about fundamental values, gender roles, and attitudes (Cuellar et al, 1995).

Gender Issues in Counseling Latino Populations

Central Americans are forced to assume differing roles upon entering into U.S. society. Central American women are often the first to obtain jobs, because they are more open to performing menial tasks, or because of the availability of jobs that are seen as more appropriate for females (Hernandez, 2005). Traditional family roles and gender roles could be compromised because of both the immigration and acculturation process due to the clash of differing Latino and American values. In Latino culture, roles are more strictly defined compared to American culture, whereas women are more likely to be head of household, and have advanced in higher education in record numbers (Hernandez, 2005). However, Latinos that follow traditional family roles would find some conflict in American culture and society’s definition of roles of women and men. In addition, the political, geographic, social, economic, and racial other diversity of Hispanic and Latino Americans extends to culture, as well (Sue & Sue, 2007). Several cultural features tend to unite Latinos and Hispanics from these diverse backgrounds.
American culture is more of an individualistic society, whereas Latino culture is more of a collectivist society (Sue & Sue, 2005). For example, one study conducted with a sample of Mexicans, Cubans, and Central Americans found that the importance of familial obligations and family (*familismo*). Referents decreased as acculturation increased, although perceived support from family was unaffected by acculturation level, generation status, place of birth, and place where individuals were raised (Sabogal et al., 1987).

**Historical Overview of Latinos and Mental Health Issues**

Central Americans from El Salvador, Guatemala, and Nicaragua fled their countries of origin due to intense civil and political wars in the 1980s and early 1990s. Thus, upon arrival on the shores of the United States, particularly in greater numbers in the Washington, D.C., metro area, manifestations of posttraumatic stress disorder (PTSD) as well as other mental health disorders were prevalent with the Central American immigrants (Santiago-Rivera, Arredondo, and Gallardo-Cooper, 2003). Mental health disorders in conjunction to PTSD, higher rates of depression and anxiety have reported in this population. Some of this has been attributed to Central Americans immigrants that have immigrated to the United States due to Civil War in their country of origin.

The concepts of acculturation and PTSD become pivotal to understanding the experiences of Central American immigrants. Mental health counselors may play an instrumental role in helping Latinos become integrated into American society by encouraging maintenance of ties with their cultural heritage as they learn to effectively
adapt to a new culture. Counselors may become cultural guides as Latinos attempt to decipher cultural concepts and assimilate to the cultural practices of the host country (Miranda & Umhoefer, 1998). It will be important for counselors to not only be culturally competent, but also culturally sensitive to the clients who come from a culture different than their own.

Acculturation affects individuals’ mental health and their relations to others (Berry, 1980). The Acculturation level could affect individuals’ relations to others; for example if an individual is in the separation stage they are unlikely to have interactions with others from the dominant group, but rather interact with those from their own ethnic group. Thus, psychological acculturation refers to change in individuals’ psychocultural orientations that develop from involvement and interaction within new cultural systems (Tropp, Erkut, Coll, Alarcon, & Garcia, 1999). Not only behavior, but also attitudes and values are changed because of the psychological acculturation process. To study individuals’ cultural orientations, measures of acculturation have traditionally focused on individuals’ behaviors and behavioral preferences and have relied on language use and other behaviors as indicators of acculturation (Marin, Sabogal, Marin, Otero-Sabogal, and Perez-Stable, 1987). Immigrants bring with them their unique cultural heritage, which is quite different from the American culture. Acculturating individuals may also feel pulled between traditional values, norms, and customs and those in the new society or host country (Hovey, 1999).

In addition, when examining aspects of trauma and PTSD, the Central American population (specifically in the countries of El Salvador, Guatemala, and Nicaragua)
experienced significant traumatic events in the early 1970’s to 1990’s (Santiago-Rivera, Arredondo and Gallardo-Cooper, 2003). Posttraumatic Stress Disorder can be summarized as a mental disorder that stems from experiencing a traumatic event (such as experience of torture, kidnapping, rape/assault or natural disaster). Such traumatic events can be witnessed or experienced. The traumatic event can exacerbate symptoms of hypervigilance, hyperaltderness, and feelings of death (DSM-IV, 2000).

Posttraumatic Stress Disorder

PTSD (Posttraumatic Stress Disorder) can be defined as an anxiety disorder that can develop after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened. Traumatic events that may trigger PTSD include violent assaults, natural or human-caused disasters, accidents, or military combat (NIMH, 2009).

Mental health professionals utilize the DSM-IV (Diagnostic and Statistical Manual of Mental Health) to diagnose such disorders as PTSD and other disorders that may affect clients. According to the DSM-IV (2000), posttraumatic stress disorder can be characterized as:

The person has been exposed to a traumatic event in which both of the following were present: The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, or the person’s response involved intense fear, helplessness or horror (p. 467).

In addition, according to the DSM-IV (2000) there are specific criteria that must
be met in order for a client to be diagnosed with PTSD. The traumatic event is persistently reexperienced in one (or more) of the following ways (DSM-IV, 2000):

  Recurrent and intrusive distressing recollections of the event, this including thoughts, images or perceptions. There can also be recurrent distressing dreams regarding the traumatic event. The person can act or feel as if the traumatic event were recurring (includes reliving the experience, hallucinations, and dissociative flashback episodes that can happen on awakening or when under the influence (drugs or alcohol). Also a person can experience intense psychological distress at exposure to internal or external triggers that symbolize or resemble an aspect of the traumatic event.

In regards to Central Americans and manifestations of PTSD, in this particular population, PTSD was found at higher rates when examining Central American Immigrants. Cervantes, et. al (1989) found that international migration greatly impacted increased levels of psychological disturbance. Fifty-two percent of Central Americans immigrants that migrated the United States as result of war or political unrest reported symptoms that met the criteria for PTSD. This was in great contrast to the Central American immigrants who migrated for other reasons such as better opportunities or economic reasons.

  Summerfield & Toser (1991) found that Central Americans from Nicaragua that had been living in a war-zone, (the majority of the women and nearly half the men) reported episodes of nervousness and panic, as well as depressed mood. Nearly 25% of the men in the sample and 50% of the women had a PTSD diagnosis. Hence, it is critical
to examine culture and PTSD (Posttraumatic Stress Disorder). Culture can be defined as values, beliefs, norms, behaviors, and symbols, which are learned (Eshun & Gurung, 2009). Culture can influence mental health and cope with symptoms of mental illness. Castillo (1997) identified ways in which culture can influence mental health, in those individuals’ personal experiences, how an individual expresses his or her experiences, or symptoms within that individuals cultural context, and cultural norms.

Background of the Study

Research is greatly lacking in regards to the relationship between acculturation level and Posttraumatic Stress Disorder among Central American immigrants. There is considerable research that has been conducted with other Latino groups in the United States (Mexicans, Puerto Ricans, and Cubans) (Santiago-Rivera et al., 2003). However, for counselors counseling the Central American population, understanding the worldview and acculturation process of Central Americans—especially due to cultural differences—is essential. There are distinct differences if one is Mexican, Puerto Rican, or if one considers his or her ethnic label as “Salvadoran,” although in the United States these cultural groups would be identified as “Latinos” or “Hispanics.” Although many do not define themselves as Hispanic but rather prefer to be called by their country of origin, such as Puerto Rican, Dominican, Cuban, and Mexican (Santiago-Rivera et al., 2003).

Due to the lack of research regarding Central American groups, and the fact that the change in demographics in the United States will continue, it will become even more important for counselors and other service providers to better understand how to serve the
Latino/Hispanic population (U.S. Census Bureau, 2005). As such, this dissertation examined the relationship between acculturation level and PTSD among Central American immigrants in the United States.

Statement of the Problem

An examination of both acculturation level and PTSD prevalence among Central American immigrants is also lacking. Central American immigrants who come to the United States from El Salvador, Guatemala, and Nicaragua have distinctive differences when compared to other Latino groups in the U.S. Other Latino groups that have come to the United States may have not experienced war or exposure to political strife in their country of origin.

Therefore, the following research questions were examined:

1. Is there a relationship between acculturation level and PTSD among Central American immigrants in the U.S.?
2. What combination of demographic variables (i.e., age, marital status, gender, migration year, migration reason) best predicts PTSD severity in Central American immigrants?

Research Hypothesis

This study addressed the research questions presented, and the following hypothesis: There is a relationship between acculturation level and PTSD among Central American immigrants in the U.S. The null hypothesis was: There is no relationship
between acculturation level and PTSD among Central American immigrants in the U.S. Central American immigrants that are more acculturated will differ on PTSD prevalence (or manifestations) when compared to less acculturated Central American immigrants. The independent variable for the first research question is acculturation level, and the dependent variable is PTSD. The second research hypothesis is: there are predictive relationships among the demographic variables. The null hypothesis states that there are no predictive relationships among the demographic variables. The dependent variable was, PTSD, and the independent variables were: age, marital status, gender, migration year, and migration reason and acculturation level.

The hypothesis was supported by research that had been conducted with this understudied population, and based in the literature regarding both acculturation and PTSD. Research has consistently found correlations between levels of identity formation and indicators of mental health (Davis, Breman, Anderson, and Tramil, 1983; Prager, 1983; Sterling and Van Horn, 1989). Additionally, biculturalism has been found to correlate significantly with higher levels of global self-worth (Birman, 1998) and adjustment (Szapocnik, Kurtines, and Fernandez, 1980).

Regarding the research hypothesis and the research questions posed in this study, there is a paucity of research with the Central American immigrant population. However, when examining acculturation levels and other Latino groups, research has focused on those of Mexican, Cuban and Puerto Rican ancestry. Searle and Ward (1990) have suggested that the study of acculturation and mental health necessitated the evaluation of “psychological well-being and satisfaction in a new cultural context, and the ability to
‘fit-in’ or negotiate interactive aspects of the host culture” (p. 449). Lang, Munoz, Bernal, and Sorenson (1982) found that bicultural Latinos reported higher rates of psychological adjustment when compared to those in the low or high acculturation stages. A person is considered bicultural when they have a tendency toward traditional Latin American value orientation, yet are capable of engaging in behaviors associated with success in the United States.

Significance

This study is significant to not only the counseling profession, but could be utilized in additional helping professions such as social work, psychology and public health. Additionally, this study could greatly benefit counselor educators that are formulating curriculum for counseling students to become more culturally competent. Cervantes, Salgado de Snyder, and Padilla (1989) stated that “[e]xposure to war contributes to the level of acculturation stress: Central Americans have much higher levels of Posttraumatic Stress disorder (PTSD) and depression than do Mexican immigrants.” The Central American population, although understudied, could spark both future and further research.

Central Americans, specifically in the Washington, D.C., metro area, are increasing in population growth. During the time I taught English classes in the state of Virginia during my dissertation research, the majority of the ESL students were from Central America, representing primarily El Salvador, Guatemala, and Nicaragua. Most of the students in the English classes spoke Spanish as their first language, and the Spanish
language was usually the most comfortable way for them to communicate instead of English. Language barriers could become problematic for Latinos navigating American society. Language problems can occur when Central American immigrants seek services while residing in the United States where English is the dominant language (Santiago et al, 2003). Padilla, Cervantes, Maldonado, and Garcia (1988) concluded that some stressors for Central American and Mexican immigrants were lack of knowledge of the English language; employment issues; insufficient money for food, rent, and clothing; undocumented status; lack of transportation and child care; discrimination; and conflict of value system such as finding a more liberal lifestyle in the U.S.

Assessment and therapy with Central American families in the United States require an understanding of their status as political refugees (Arredondo, Orejuela, and Moore, 1989; Valch, 2003). Therapists should be alert to the complex psychosocial stress that many Central American families have experienced before, during, and after migration (Hernandez, 2005). As the changing demographics in the United States becomes culturally diverse, counselors, students, and others in the community will continue to interact with acculturating individuals or immigrants that have both a unique and distinct history.

Limitations and Delimitations of the Study

The delimitations in the study are that the population chosen for this study was focused on specific areas in Central America. Specifically, the population included participants who are from countries that have experienced past civil wars and political as
well as economic upheaval: El Salvador, Guatemala, and Nicaragua. However, all three countries have different cultures despite their having experienced civil war and political upheaval. The Central American population is quite diverse and each country has a distinctive history.

Participants of this study were chosen by volunteering to take part in the study. Thus, random selection or random assignment was not done as participants were taken from a sample of those that chose to volunteer (that were attending ESL classes at a Virginia School and in Washington, D.C., at the Central American Resource Center); however, undocumented residents may have been uncomfortable participating because of their status or because of the nature of the subject manner (PTSD and questions regarding trauma history). Disclosing personal matters at times can cause a level of mistrust, especially if the person has not fostered a close, trusting relationship.

The sample of the population does not represent the Central American immigrant population in the Washington, D.C., metro area or the larger Central American immigrant population in the United States. Therefore, a larger sample size could be beneficial to the study and future research.

However, there are delimitations for this study—such as choosing specific countries with similar histories, limiting the population to Central American immigrants as well as choosing a specific city (Washington, D.C.) that has a large population and concentration of persons from the Central American region—that affect the generalizability of the study.
Summary

This chapter sought to introduce rationale for the research, the background of the study, the statement of the problem, research hypotheses, significance, the limitations and delimitations, as well as the definition of terms in the study. Additionally, the study sought to serve as a foundation for counselors and counselor educators in counseling Central American immigrants. In the subsequent chapters the following will be reviewed: Chapter 2 will provide a literature review, Chapter 3 will provide the methodology for the study, Chapter 4 will present the results from the study, and Chapter 5 will be the discussion including summary of findings, study limitations and recommendations for future research.

Definition of Terms

1. Acculturation—Acculturation could be defined as those phenomena that result when members of different autonomous cultural groups come into continuous firsthand contact, with subsequent changes in the original cultural patterns and customs of either or both groups, e.g., language, values, lifestyle, attitudes, and identity (Redfield, Lipton, & Herskovits, 1936).

2. Acculturation Level- Acculturation level can be defined as the acculturation process occurring at two different levels among individuals. The first level is at the macro level, and involves the acculturation processes modifying cultural factors such as food, music, and language. The second level, is at the micro level, and is more cognitive and psychological in nature, and involves factors such as
perception, beliefs, values, and behaviors (Cuellar, 2000; Cuellar et al., 1995).

3. Assimilation—Assimilation is in essence a total rejection of one’s culture of origin, and the adoption of the dominant society’s cultural values and norms.

4. Bicultural—A bicultural individual retains their culture of origin as well as adapts to the culture of the dominant society in which they live; in essence the individual can navigate between two distinct cultures.

5. Central Americans—Central Americans represent individuals from Central America, which consists of countries including El Salvador, Guatemala, and Nicaragua.

6. *Familismo*—This is a Latino/Hispanic concept describing the cultural values of loyalty and dependence of the family unit. The importance of family is important in the Hispanic/Latino culture.

7. Hispanic—The concept of *Hispanic* was developed by the U.S. government to label the growing influx of immigrants from Central America, Mexico, Cuba, Puerto Rico, and South America. The term *Hispanic* does not describe a race, but represents the country of Spain, as most of those who identify with this label come from countries that Spain both colonized and contributed to its racial make-up (Falconi & Mazzoti, 2007).

8. Immigrant—An immigrant is a person that migrates to another country to reside.

9. Integration—A form of adaptation in which the individual attempts to retain the culture of origin as well as adopt aspects of the dominant culture.

10. Latino—*Latino* can characterize a person of Spanish descent or who is from...
various countries in Latin America (primarily those that were colonized by the Spanish). Hispanics and Latinos classify themselves in one of the specific Spanish, Hispanic, or Latino categories listed it on the U.S Census: Mexican, Mexican American, Puerto Rican, and Cuban, as well as those who classify themselves as “other Spanish/Hispanic or Latino” (Falconi & Mazzoti, 2007).

11. Marginalization—A form of adaptation in which the individual does not retain the culture of origin or have a positive relationship with dominant culture, thus rejecting both cultures.

12. Posttraumatic Stress Disorder (PTSD)—PTSD is an anxiety disorder that can develop after exposure to a terrifying event or ordeal in which grave physical harm occurred or was threatened. Traumatic events that may trigger PTSD include violent assaults, natural or human-caused disasters, accidents, or military combat (NIMH, 2008).

13. Refugee—A refugee could be defined as a person or persons who flee their country of origin due to political conflicts, membership in a social group, or political opinion (Marotta, 2003).

14. Salvadoreños—Salvadoreños is the cultural/ethnic label for those who are from the country of El Salvador.

15. Separation—A form of adaptation in which the individual rejects the dominant culture, but retains the culture of origin.
CHAPTER 2: LITERATURE REVIEW

The review of literature provides both an introduction of the literature and a critical review of relevant literature as it relates to this study on Central American immigrants. The following will be discussed in this chapter: The history of Central American immigrants, as it is essential to understand the historical context of the Central American population, and Central American demographics as they relate to the Washington, D.C., metro area. Also the literature review will serve as a basis to examine the relationships between acculturation and acculturative stress, acculturation level and mental health, ethnic minorities (including Central Americans) and PTSD prevalence. In addition, most of the studies have not addressed the Central American immigrant adult, focusing instead on either U.S.-born people of Mexican, Cuban, and Puerto Rican descent (Asner, 1999). Most literature on psychological adjustment concentrates on depression and anxiety. Posttraumatic stress has been studied more heavily in other Latino groups, but there are several regarding Central American immigrants. The literature review will seek to examine all pertinent literature regarding Central American immigrants, and the relationship between acculturation level and PTSD prevalence.

History of Central Americans

Central America is considered to encompass the following countries: Guatemala, Costa Rica, Nicaragua, Honduras, El Salvador, and Panama. These countries were part of the Spanish conquest; however, there is considerable heterogeneity in culture and language among the people of this region (Santiago-Rivera et al., 2003).
The Spanish conquest refers to colonization by Spaniards in the New World, Latin America. The Spanish conquest was the colonization of the Americas by the Spanish. During this conquest, it included the exploration, settlement and political rule over such countries as: parts of what is now the United States of America, Mexico, Central America, most of South America and parts of the Caribbean. Migration to the United States has occurred for some time, especially due to geographical proximity. Nicaragua, Guatemala, and El Salvador entered the 1970s with numerous common problems, including a greater concentration of wealth, increased rural and urban lower-class unemployment, and decreased agricultural self-sufficiency among large segments of the rural poor that was more prominent in those three countries (Hernandez, 2005). The rapid accumulation of wealth by the upper middle classes in the three countries increased the growth of the upper and middle classes and improved their standard of living, causing a dramatic rise in socioeconomic inequality that stimulated class conflict and widespread protests throughout the region (Booth & Walker, 1993).

With the aid of the United States, the governments in these countries responded to the massive rebellions by continued use of military force and violence to subdue the protests. Subjected to repression and the governments’ refusal to carry out political and economic reforms, the aggrieved began to organize, mobilize economic resources from poor and wealthy opposition leaders, and engage armed resistance (Booth & Walker, 1993). The conflicts in these three countries in particular continued for two decades (1970-1990).
Thus, civil wars in El Salvador, Guatemala, and Nicaragua forced many to flee to the United States or stay in Mexico, often risking their lives to get out of their country of origin. Individuals fled torture, imprisonment, impoverished living situations, and other life-threatening conditions, leading many to develop and manifest symptoms of PTSD (Santiago-Rivera et al., 2003). Physical and psychological torture, intimidation, mass killings, and other persecution of individuals, families, and communities left many with profound psychological and physical wounds (Booth & Walker, 1993; Garcia & Rodriguez, 1989). Central American immigrants who fled to the United States had fewer skills for employment and were largely uneducated and from rural areas of their countries of origin. In Figure 1, the map of Central America is displayed.
During the civil wars, living conditions continued to worsen for the poor. Thousands were killed (over 70,000 in El Salvador), or kidnapped. Record numbers of refugees escaped to the United States. From the early 1970s throughout the late 1980s more than 1 million Salvadorans, Nicaraguans, and Guatemalans entered the United States (Arredondo, Orjuela, & Moore, 1989). However, many are undocumented and are not considered political refugees but are seen as illegal aliens who came to the United States for economic gain (Hernandez, 2005). Illegal immigrants did not have the benefit
of the Refugee Act, which provides political asylum to individuals who flee their homeland because of fear or political and social persecution (Drachman, 1995). Therefore, there are many living in the shadows of American society, and are consequently lacking adequate documentation to be in the U.S.

A Guatemalan refugee, who lost most of her family when they were murdered by a militia government, gives a personal account in her memoir.

To leave one’s country in search of refuge, to save one’s family, one’s community, meant facing the unknown, and not knowing what would happen tomorrow or whether the place one had chosen as temporary refuge would open its doors and warmly welcome those fleeing terror and death (Menchú Tum, 1987, pg. 5).

According the D.C. Office on Latino Affairs (2002), as of July 2003, there were approximately 53,289 Latinos in the District of Columbia; most were from the Central American region, primarily El Salvador. This does not include the surrounding areas of Montgomery County and Prince Georges’ County in Maryland and Fairfax and Arlington counties in Virginia. The Latino population in the D.C./MD/VA corridor continues to grow, and certain enclaves in the D.C. area ((Mt. Pleasant, Langley Park, MD, and Arlington, VA) have attracted the Central American population

**Critical Review of Relevant Literature**

*Berry’s Model of Acculturation*

Berry (1980) concluded that acculturation is an ongoing, dynamic process by
which individuals or groups of people from two distinct cultures come into long-term contact and results in a fundamental change in both attitudes and behaviors toward one another (Rogler, Cortes, & Malgady, 1991).

Earlier research on acculturation was solely based on the idea that individuals through acculturation will relinquish their cultures of origin as they acculturate to new cultures (Gordon, 1964). The process of assimilation comes to the forefront, and the culture of origin is not maintained. However, Berry (1980) along with his colleagues proposed the existence of acculturation strategies, which have been previously coined *modes of acculturation*, *varieties of acculturation*, or *acculturation attitudes*. There were four strategies that were formed, which is based on maintenance of one’s culture and one’s contact with the mainstream (dominant) group in the new society. Those high in contact with the new society and low maintenance of their own culture are regarded as *assimilated*, those high in both cultures as *integrated (bicultural)*, those low in contact as *separated*, and those low in both cultures as *marginalized* (Matsudaira, 2006). These strategies have continued to be utilized in the study of acculturation with cultures across the United States and abroad. Acculturation is understood to be a far more complex phenomenon and to yield several different possible outcomes for an individual, including the possibility of biculturalism (Asner, 1999).
In addition Berry’s Model of Acculturation is displayed in Figure 2, which also shows cultural maintenance and contact-participation specifically corresponding to Central American immigrants (Latino vs. U.S/American culture), and the four categories of Acculturation.

According to Berry (1980) the view of acculturation is dependent also on the nature of the acculturating group; for example, Central American immigrants can range from those who consider themselves refugees (involuntary) versus Central American immigrants who have voluntarily relocated to the United States. Asner (1999) expressed that the acculturating group refers to the degree of voluntariness in migration, the traditional cultural movement history, and the assumed permanence of contact. In the traditional sense, American society has perpetuated the melting pot idea, and assimilation has been the norm for several generations; however, as the study of acculturation continues to broaden, it could be proposed that American society will possibly shift its idea of solely assimilating immigrant populations.
Padilla & Perez (2003) expanded on Berry’s model of acculturation, and concentrated on social stigma due to the acculturation process. In addition, Padilla & Perez (2003) examined how individuals (particularly immigrants) cope with social stigma of being different because of factors such as skin color, language, ethnic background, and so forth. Race, ethnicity, religion, language, and/or dress often distinguish many immigrants from the prevailing American culture.

**Acculturative Stress**

Acculturative stress is another concept associated with refugee and immigrant psychosocial adjustment. Acculturative stress is a combination of ameliorating effects of environmental, familial, demographics, and other factors (Miranda & Mathaney, 2000). This type of stress is unique as it is a type of distress that can result when adjusting to a new country. All of this entangles aspects of changing one’s identity, values, behaviors, cognitions, attitudes, and affect (Berry, 1980).

The level of acculturative stress is different for each acculturating individual, and can vary considerably from a small amount to the point that it can dismantle one’s ability to be productive in their own life (Berry et al., 1987). The model of acculturative stress identifies several social and psychological factors, which can account for whether a person experiences low or high levels of acculturative stress. Berry et al. (1987) found several factors that would influence levels of acculturative stress: social support found in the new community or the lack thereof; socioeconomic status (SES) (which encompasses education and employment status); and premigration variables in how individuals adapt.
to and cope with a new environment (self-esteem, psychiatric status, and coping ability).

Central American immigrants may consider themselves to be refugees, thus making the acculturation process both stressful and difficult. The acculturation process is quite complex, a multigenerational process in which constant negotiation between the culture of origin and the new culture forces the family to reshape values, behaviors, belief systems, relational patterns, and attitudes (Hernandez, 2005; Rogler, 1994). Because some Central American immigrants consider themselves refugees, they are in a sense part of a temporary group and thus may be less inclined to become an integral part of the host country, compared to immigrants who voluntarily choose to reside in the host country (United States).

Hovey (1999) conducted a study with 78 immigrants (64 females and 14 males) from Central America in the Los Angeles area. This study examined the psychosocial predictors of acculturative stress in Central American Immigrants. The study concluded that several factors contributed to the participant’s level of acculturative stress, including family dysfunction, nonmarried status, ineffective social support, infrequent church attendance, and lack of agreement with the decision to migrate. The study determined that specific and relevant counseling methods should be adopted to assist in assessing acculturating individuals, especially among the Central American immigrant population.

**Acculturation Level and Mental Health**

Most of the early studies in acculturation among Latinos in the United States first considered only a one-dimensional (one-way) versus a bidimensional acculturation
process among immigrants (Rogler, et al, 1991). Currently, most acculturation theories continue to be more multidimensional (integration or bicultural), and focus less on the acculturative process being one-dimensional. The resulting confusion over conclusions that can be drawn regarding the interplay of acculturation and mental health stems from the variably investigative findings of positive, negative, and even curvilinear relationships (Garcia & Marotta, 1998). With regards to acculturation level, language has been the most studied domain.

Birman (1998) stated that conceptualizing the construct of acculturation as a bidimensional process in which people may develop, behaviorally and psychologically, within their own culture and within a second culture simultaneously may clarify its interplay with the measures of mental health. Miranda & Umhoefer (1998) conducted a study with 282 randomly selected Latinos in the United States to examine the difference in social interest and depression between Latinos in dissimilar acculturation stages (levels). Social interest and depression were studied to conceptualize the effects of acculturation on mental health. Results of the study found that there were significant differences in depression and social interest among Latinos who were low in acculturation, bicultural, or high in acculturation. Bicultural Latinos obtained significantly lower scores on depression and higher scores on social interest when compared to other participants who were considered “high” or “low” in acculturation.

The major strength of Miranda & Umhoefer’s study (1998) was its use of the following instruments to examine both social interest and depression: Beck Depression Inventory (BDI), as well as the Hispanic Acculturation Scale (1991). Both of these
instruments have been widely used and are considered both valid and reliable (Kendall, Hollon, and Beck, 1987; Marin et al., 1987).

Birman (1998) studied Central American youth’s biculturalism and found that the more bicultural they were, the more likely they had a positive, global self-worth. Thus, acculturation levels have been researched in regards to how this could help or hinder mental health or adjustment. Low acculturation has been associated with reduced social support, isolation, lack of functional and adaptive coping skills, and unfamiliarity with the new sociocultural environment (Miranda & Umhoefer, 1998). Concurring with this, Rogler et al. (1991) in an earlier study found that numerous negative mental health symptoms were frequently manifested by immigrants who were low in acculturation, were recently uprooted from traditional supportive interpersonal networks, did not have sufficient time to reconstruct such networks in the host society and lacked instrumental skills such as knowledge of the host language. Some Central Americans do consider themselves to be political refugees; refugee access to social support and services, including education, health care, and housing, is limited and may have an adverse affect on mental health (Berry, 1980).

Griffith (1983) used language as a measure of acculturation and found that individuals who exclusively relied on the Spanish language, deemed low in acculturation, obtained higher scores on many negative psychosocial functioning measures. However, some research has shown that there is a negative relationship between acculturation and mental health. “High” acculturation was linked to high quantity and frequency of alcohol consumption (Graves, 1967), high increased family disputes (Ramirez, 1979); increased
feelings of helplessness (Melville, 1983); and high incidence of psychological stressors, chronic and acute diseases, abnormal findings for health evaluations, and negative ethnomedical data (Bernal, 1982).

Lang et al. (1982) found that bicultural Latinos reported higher rates of psychological adjustment when compared to those in low or high acculturation stages. Specifically, the Latinos utilized for this study obtained higher scores on measures of quality of life ratings, positive effect, and indices of psychological adjustment. It was concluded that the curvilinear relationship between acculturation and mental health indicates that biculturality is the acculturation stage with the fewest negative mental health effects (Lang et al., 1982).

Rogler et al. (1991) and Lang et al. (1982) continue to assert from their studies that positive indices of mental health in bicultural individuals were explained by “the optimal combination of retaining the supportive ego-reinforcing traditional cultural elements and learning from the host society’s instrumental cultural elements” (p. 589). Thus, one major weakness with most studies is the fact that there remain inconsistent findings regarding the direction (unidimensional vs. bidimensional) of the relationship between acculturation level and mental health of Latinos.

**Outcome Studies**

The Abbreviated Multidimensional Acculturation scale has been utilized in several studies to examine acculturation. De Saissy (2009) utilized this acculturation scale with a Chinese immigrant sample in Northern Ireland. The study included a total of
108 Chinese participants, and their results were compared with a sample of 98 Northern Irish participants. The purpose of the study was to examine levels of acculturation, self-efficacy and social support, as well as to ascertain if the abbreviated Multidimensional Acculturation scale could be generalized to the Chinese immigrant sample. Results showed that the Chinese immigrant sample had lowered level acculturation scales compared to that of the Northern Irish participants. Thus, this could be due to the highly segregated areas in Northern Ireland, and the Chinese immigrant sample feeling that they were not a part of the Northern Irish culture at large.

In addition, Nieves (2007) examined the influence of acculturation and family characteristics on asthma outcomes in children that were Hispanic in her dissertation. The abbreviated Multidimensional Acculturation scale was utilized, and the study consisted of a total of 178 Hispanic caregivers of children with asthma. Results showed that acculturation was correlated with level of caregiver education. The dissertation results also showed that the more highly acculturated the caregivers were in the sample, they had both higher levels of educational attainment and higher family incomes. The AMAS has been utilized in many studies in order to measure acculturation among Hispanics in regards to both mental health and physical health (Marin, 1990).

*Diagnostic Criteria for PTSD*

According to the DSM-IV (2000), posttraumatic stress disorder can be characterized as:
The person has been exposed to a traumatic event in which both of the following were present: The person experienced, witnessed, or was confronted with an event or events that involved actual or threatened death or serious injury, or a threat to the physical integrity of self or others, or the person’s response involved intense fear, helplessness or horror (p. 467).

In addition, according to the DSM-IV (2000) there are specific criteria that must be met in order for a client to be diagnosed with PTSD. Thus, this traumatic event is persistently reexperienced in one (or more) of the following ways:

Recurrent and intrusive distressing recollections of the event, this including thoughts, images or perceptions. There can also be recurrent distressing dreams regarding the event. The person can act or feel as if the traumatic event were recurring (includes reliving the experience, hallucinations, and dissociative flashback episodes that can happen on awakening or when under the influence (drugs or alcohol). Also a person can experience intense psychological distress at exposure to internal or external triggers that symbolize or resemble an aspect of the traumatic event. As well as physiological reactivity on exposure to external or internal triggers of the traumatic event (p. 468).

The next criteria for a PTSD diagnosis are persistent avoidance of stimuli associated with the trauma, and a numbing is experienced, which was not present before the trauma, and is indicated by three (or more) of the following (DSM-IV, 2000):

Efforts to avoid certain thoughts, feelings or conversations associated with the trauma or traumatic event. Efforts to avoid places, activities and or people that
trigger recollections of trauma. Also, there is an inability by the person to recall an important aspect of the trauma (such a sense of repression). A decrease in interest or participation in significant activities. Feelings of estrangement or detachment from others. Restricted range of affect (e.g. difficulty having loving feelings). A sense of no future (e.g. does not expect to have a career, children, a marriage or a normal life).

Furthermore, additional symptoms will persist that were not present before the trauma, and the person would meet two (or more of the following):

- Difficulty sleeping (falling or staying asleep), irritability or anger outbursts, difficulty concentrating, a sense of hypervigilance, or an exaggerated startle response. The duration of the above mentioned symptoms are consistent for more than one month. Finally, these intense symptoms causes clinically significant impairment, distress and can greatly affect the person’s social, occupational, and other areas of functioning in life. PTSD can be specified as either acute (duration of symptoms is less than three months), chronic (is more than three months), or even delayed onset (and symptoms can be triggered after at least six months after the trauma or stressor) (DSM-IV, 2000).

**Ethnic Minorities and PTSD Prevalence**

Although prevalence of PTSD is observed in the Central American immigrant population, other ethnic minorities are prone to manifest recurring symptoms of PTSD similar to the Central American immigrant population. This is generally due to such
issues of being exposed to violence or being considered refugees upon their arrival in the United States from their country of origin. According to the NIMH (National Institute of Mental Health, 2009) approximately 7.7 million American adults age 18 and older, which is about 3.5 percent of people in this age group in a given year, have PTSD. Prevalence rates reaches approximately 1 in 52. Women were twice as likely to develop PTSD as men. PTSD can develop at any age, including childhood, but research shows that the median age of onset is 23 years. Community studies have consistently shown a higher prevalence of PTSD in females than in males, and addition 7.8 percent of Americans will experience PTSD at some point in their lives.

The majority of the epidemiological studies examining refugees and migrants have found that rates of psychopathology for these populations to be significantly higher than the general population (Garcia-Peltoniemi, 1991). In addition, Marsella, Freidman, and Spain (1993) found greater rates of depression, anxiety, and PTSD among refugees. The occurrence of posttraumatic stress disorder among the clinical refugee population has been estimated to be a little over 50% or higher, and in reference to other depressive disorders, the range is between 42% and 89% (Hauff and Vaglum, 1995; Mollica, Wyshak and Lavelle, 1987).

Sack, Him, & Dickason (1999) found that there may be a delay in the onset of PTSD years after the initial trauma, and that premigration trauma tends to decrease as other postmigration variables, such as employment and housing factors, become more essential. The U.S. Department of Health and Human Services (2003) reported that two-thirds of African American men living in urban areas met the criteria for posttraumatic
stress disorder a month after receiving and injury (examples include being stabbed or shot). Over 25% of African American youth exposed to violence met diagnostic criteria for PTSD.

Researchers have concluded that the legacy of race hatred affects African Americans in three ways:

Racial stereotypes and negative images can be internalized, denigrating individuals’ self-worth and adversely affecting their functioning. Racism and discrimination by societal institutions have resulted in minorities’ lower socioeconomic status and poorer living conditions in which crime and violence are persistent stressors that can affect mental health. Racism and discrimination are stressful events that can directly lead to psychological distress and physiological changes affecting mental health (USHHS, 2003, p. 6).

This concept can also be applied to the Central American immigrant population to a certain extent. Hovey (1999) found that immigrants may experience factors that are particular to the new environment, including discrimination, language inadequacy, lack of social and financial resources, stress (and frustration) associated with unemployment, or low income. For example, in the United States, refugees from Afghanistan or those of Palestinian or Asian descent may encounter racism and/or discrimination related to the September 11 attacks, and conflicts in the Mideast or the Vietnam War (Bemak, Chung, and Pederson, 2002, p. 42).

When examining the concept of acculturation level and posttraumatic stress disorder among Central American immigrants, one has to take into account the history of
trauma within this population. This is especially true if the Central American immigrant considers their country of origin to be El Salvador, Guatemala, or Nicaragua. In addition to the trauma of war, losses, and disruptions, refugees suffer from survivor’s guilt, self-recrimination, unresolved grief, dissociation, and severe stress, which are transmitted multigenerationally (Hernandez, 1996). Thus, examining the impact of this trauma and manifestations of posttraumatic stress disorder become a concern.

Pole, Best, Metzler, and Marmar (2005) conducted a study with Hispanic police officers, non-Hispanic Caucasian and Black American police officers, and found that the Hispanic police officers had higher rates of PTSD symptoms compared to their counterparts. The elevated posttraumatic stress disorder symptoms were attributed to the following variables: greater peritraumatic dissociation, greater wishful thinking, self-blame coping, lower social support, and greater perceived racism. Also, there are ethnocultural differences in the severity of “peritraumatic” responses, which Pole et al. (2005) describe as responses that occur during or immediately after the traumatic event, and may influence the risk of posttraumatic stress disorder. Peritraumatic dissociation can be explained as the tendency to experience altered states of consciousness at the time of trauma (Ozer, Best, Lipsey, and Weiss, 2003).

One of the key concerns in adjustment for many refugees is the difficult premigration period that in many cases has lead to PTSD. For example, Bemak, Chung, and Pederson (2002) presented a case study of a 26-year-old Cambodian who hid and watched her brother and sister being raped and her father and brother tortured and killed by a group of soldiers. Kinzie and Fleck (1987) identified eight universal components of
effective intervention specific to refugees of Southeast Asian descent who were diagnosed with posttraumatic stress disorder. The following are the eight components developed by Kinzie and Fleck (1987):

1. Ensure that the setting where treatment will occur is nonthreatening (not resembling a jail cell).
2. Counselors must have awareness of avoidance behaviors for clients, as this has been used as a coping mechanism.
3. Counselors should have an expectation of an outpouring of emotions, as Refugee clients are often times numb.
4. Due to the nature of PTSD, a long-term therapeutic relationship is suggested.
5. Counselors should be aware of that some symptoms are more disruptive to the client than others, and it is recommended that helping professionals focus on depressed mood and sleep disturbances.
6. Symptoms can increase since the client may reexperience the past, which can be triggered by many factors.
7. Counselors should seek support and assistance from outside agencies (such as refugee/immigrant agencies, churches, social services and support groups).
8. An existential approach with clients is recommended, and as the Counselor remaining silent may be best.

These interventions allowed the therapist and/or counselor to integrate the premigration trauma into postmigration adjustment. Bemak, Chung, and Pederson (2002) then developed the concept of the Multi-Level Model for psychotherapy for therapists working with refugee populations, especially those who have symptoms and/or have been diagnosed with posttraumatic stress disorder upon arrival to the United States from their country of origin. Figure 3 displays the MLM. A Refugee could be defined as a person or
persons who flee their country of origin due to political conflicts, membership in a social group, or political opinion (Marotta, 2003).

Therapist: Has necessary skills, awareness, and knowledge for Effective MLM application

Therapist and Client: The therapeutic process is a two way interaction

Refugee’s Experience: Influences the therapeutic process

Figure 3: Multilevel application model to counseling with refugees (Bemak, Chung and Pederson, 2002)

Such skills that should be acquired by the counselor and or therapist would be as follows: individual counseling skills, family, group work, experience with working with
those that have experienced trauma, and one of the basic counseling skills of cultural empathy (Bemak, Chung and Pederson, 2002). Bemak, Chung and Pederson (2002) continue to examine the concepts of multicultural counseling competency, with the utilization of the MLM model, another concept that refugees, and in particular to this study, Central American immigrants experience possible trauma in their country of origin. This could stem from the political climate of that country. This signifies the importance for counselors to provide adequate services to Latinos in particular that may be from Central American or other ethnic minorities such as Bosnian refugees or refugees from Somalia (Bemak, Chung & Pederson, 2002). The model emphasizes the importance of understanding not only the client’s cultural worldview, but involves the counselor becoming aware of their own cultural heritage and experiences with identity development.

Due to some of the inhumane experiences of Central American refugees and other ethnic minorities, the therapist and/or counselor must develop necessary skills to work with clients who will be reliving experiences of rape, torture, beatings, or extreme poverty from their country of origin (Sue & Sue, 2005).

Asner-Self & Marotta (2005) conducted a study with 68 Central American immigrants who had been exposed to war-related trauma and found that Central Americans scored significantly higher on all three indices of mental health problems—anxiety, depression, and posttraumatic stress disorder—when compared with published norms of the general U.S. population. The study also found that Central American immigrants exposed to war-related trauma exhibited high levels of mistrust, identity
confusion, and isolation that were comparable to those indicated by research with U.S.-
born Americans exposed to trauma (Alexander & Lupfer, 1987). Fedovskiy, Higgins, &
Paranjape (2007) conducted a study comparing domestic violence and the impact on
major depressive disorder and posttraumatic stress disorder among 102 immigrant
Latinas. The studied found that immigrant Latinas who had reported domestic violence
and partner abuse were more likely to meet the criteria for posttraumatic stress disorder.
Out of the 102 immigrant Latinas utilized in the study, 56 Latinas reported the experience
of both domestic violence and partner abuse, and all 56 met the criteria for PTSD.
However, a weakness of the study was that acculturation levels of the participants utilized
for the study was not measured.

However, this study illuminates the relevance of the Central American
immigrant’s exposure to violence and trauma due to the civil war.; Most of the Latinas
were of Central American or Mexican origin. The few studies that have been done
continue to report findings of high levels of traumatic stress symptoms and depression
(Cervantes et al., 1989).

_Counseling Ethnic Minorities: The Hispanic Client_

Counseling ethnic minorities and particularly Central American immigrants will
continue most likely become a duty that counselors and other helping professionals
perform. The Global Commission on International Migration (2005) stated:

Population growth will continue to grow, as well as mobility, mental health
practitioners and or counselors will increasingly serve clients from diverse
geographical, language and cultural backgrounds. The reality of the society that makes the United States of America is the fact that even in the last recent years, there has been a shift in the idea of “diversity”, and is reflected in the aspects of culture, racial, ethnic and religious discourses.

Multicultural Counseling can be defined as broadening the perspective of the helping relationship (Sue & Sue, 2005). Sue & Sue (2005) believe that a wide range of social variables are taken into consideration such as: gender, race, ethnicity, sexual orientation, religion, age, and disability. Counseling Central American immigrants entails recognition of the aspect of cultural identity. Central American immigrants may on an individual and group level consider their ethnicity to be either “Latino” or “Hispanic”. Kuraski, Sue, Chun, & Gee (2000) found that when cross-cultural interactions are not approached appropriately, clients are more likely to be misdiagnosed, receive inappropriate treatment, give up on treatment, and receive fewer benefits than their European American counterparts. Ethnic minorities may feel that mental health services, or even the idea of counseling as inaccessible, unaffordable, not appropriate or culturally insensitive (Eshun & Gurung, 2009). Furthermore, bringing back to the forefront of the multicultural counseling competencies of knowledge, skills and awareness, would be beneficial to adequately serve ethnic minorities appropriately. Eshun & Gurung (2009) expressed the benefits of being culturally competent or in essence providing culturally competent psychotherapy should include:

“Clinician flexibility in roles and treatments; ability to adapt to changing patient population; increased success interacting with people of different cultural
backgrounds; increased patient satisfaction and treatment adherence; and reduced mental health disparities” (National Center for Cultural Competence, 2007).

Furthermore, counselors will need to be equipped with more than just the multicultural counseling competencies (knowledge, skills and awareness) when counseling ethnic minorities, especially those that may meet the criteria for PTSD or that are diagnosed with PTSD. It is fair to state that, each individual is quite different in responding to a traumatic event, or experiencing trauma, and may not meet the criteria of PTSD.

When counseling the Hispanic or Latino client, a counselor will need to be aware of family values and the importance of *familismo*. *Familismo* stems from a collectivist worldview (allocentric) in which there is a willingness to sacrifice for the welfare of the group (Marín & Triandis, 1985). Also, because of this counselors may describe Latino clients as *codependent* or *enmeshed* with their families of origin. In times of crisis, Latinos are more likely to turn to family for support. In addition, there is evidence to support the issue that family closeness has not decreased or declined because of acculturation, or as a result of living in an urban-industrialized environment, although other aspects of familismo (such as providing financial assistance to immediate and extended family) have decreased (Keefe & Padilla, 1987). Frauenglass, Routh, Pantin, and Mason (1997) examined family social support with Latinos, and found that a strong sense of family support was associated with lower levels of deviant behaviors (such as tobacco use, marijuana, and alcohol use) among Latino adolescents. Thus, cultural values are quite important when counseling Latino clients. Other cultural values are also
important to be cognizant of such as: Compadrazco (importance of godparents), Personlismo (valuing and building interpersonal relationships), Religion and spirituality, beliefs about health and illness, Language, and gender socialization. For example, some Latinos may seek help from traditional folk healers, such as *curanderos* (Mexican), *santeros* (Cuban), or an *espiritista* (Puerto Rican). Because of this, Latinos may not comply with medical treatments prescribed by professionals who have different beliefs about the etiology of illness (Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2002, p. 47).

When examining PTSD prevalence among ethnic minorities, in particular among Central American immigrants, appropriate treatment that is culturally sensitive should be sought. Trauma can be experienced in different areas, periods, and in different intensities in immigrants. Zea, et al (1997) found that in Central American children, some were exposed to “massive violence”, and witnessed morbid executions of family and friends. Some of these children also experience loss of parents through death and separation (Zea et al, 1997).

A culturally competent counselor should be able to recognize symptoms of stress and anxiety-related disorders (Zea et al, 1997). For example, children may regress to earlier development stages whey they have experienced trauma, or have been exposed to violence (e.g., clinging behaviors, sucking fingers, or enuresis). Other symptoms may be present as well, in which counselors should be aware of while counseling Central American immigrants. These symptoms include: insomnia, numbness, and inability to remember or refusal to disclose premigration, migration and postmigration experiences
(Santiago-Rivera, Arredondo, & Gallardo-Cooper, 2003). Trauma may continue once an immigrant makes his or her way to the United States. The Hispanic client may bring with them continued experiences of trauma, exploitation, discrimination, and abuse during and after the migration phase) into the therapeutic relationship.

Altarriba & Bauer (1998) suggested that many Latinos or Hispanics share the following beliefs:

1. **Nature**: People are one with nature. This means in essence that one does not have control over the forces of nature
2. **Time**: The past and future are not as significant in deciding behavior and actions, it is the present.
3. **Activity**: Hispanic immigrants will often prefer activity that is spontaneous and expressive in emotions and desires.
4. **Social relations**: Traditional Hispanics endorse that relationships are hierarchical, such as an individual may be subordinate to another (or the respect for authority).

As a clinician counseling Latino clients, cultural values must be considered when assessing symptoms to assist in diagnosing possible mental disorders. Additionally, open communication between client and therapist is crucial to the therapeutic relationship. In particular bilingual counseling also becomes a dynamic, not just for Central American immigrants coming to the United States speaking Spanish, solely, but other indigenous languages (as such the case in Guatemala in particular). In addition other Latino immigrants and language barriers should be considered as well. Pitta, Marcos, & Alpert (1978) introduced the concept of **Language switching**, which is when a client changes languages during the counseling session. The study found that emotional expression is
more spontaneous and less inhibited in the client’s native language, whereas in the second language communication is more in a defensive style. Additional results of the study indicated that allowing the bilingual client to talk in their non-native language about anxiety provoking experiences and emotionally charged events were beneficial. This was especially accurate if the bilingual client found it difficult to express in their native language.

Javier (1990) provided clinical examples of utilizing language switching in counseling and therapy. For example, Javier utilized the Psychoanalysis approach, such as dream analysis, exploration of childhood memories and transference. The Hispanic client (24 year old male in his example) was allowed to switch between English and Spanish, which allowed the client to discuss childhood memories. These childhood memories were more accessible in the client’s native language (Spanish). Thus, the idea of language and counseling the Hispanic client becomes a beneficial component of the therapeutic relationship.

Figure 4 displays the counseling framework in utilizing culture and language in therapy as formulated by Santiago-Rivera (1995). There are a total of five dimensions that could facilitate bilingual counseling, such as (1). Level of acculturation, (2) Language preference, Culture, (3) Psychological and Physical health, (4) Therapeutic approaches/modalities, (5) Intervention strategies, and resources.
1. **Level of Acculturation**

2. **Assess Language** (dominance and preference):
   - Spanish-English Bilingual
   - (Dominant in Spanish)
   - Spanish-English Bilingual
   - (Dominant in English)
   - Spanish-English Bilingual
   - (Fluent in Both)
   - Spanish Monolingual

3. **Culture** (Values, norms, customs)
   - Assess degree to which client adheres to traditional culture

4. **Psychological & Physical Health**
   - Assess degree of pathology (Are they culturally based?)
   - Assess the perception to which problems are somatic (Are they culturally based?)
   - Assess psychological stressors

4. **Therapeutic Approaches/Modalities**
   - Adlerian  
   - Behavioral  
   - Cognitive  
   - Existential  
   - Psychodynamic  
   - Rogerian  
   - Multimodal

5. **Intervention Strategies**
   - Proverbs (Dichos)
   - Language switching
   - Cultural Themes
   - Cultural scripts

5. **Resources**
   - Hispanic Mental Health
   - Professionals
   - Interpreters
   - Folk Healers
   - Physicians
   - Clergy
   - Immediate & Extended family

*Figure 4: Incorporating Culture & Language in Therapy (Santiago-Rivera, 1995).*
Zuniga (1991) incorporates the use of Spanish language proverbs (*dichos*) in her counseling work with Hispanic clients. Such proverbs are integrated into her counseling sessions: *Dime con quién andas y te diré quién eres* (Tell me who your friends are and I will tell you who you are), and *A quién madruga, Dios la ayuda* (God helps early risers). In addition, Zuniga (1991) suggested that for counselors who are not proficient in the Spanish language, the clinician can still integrate these proverbs into treatment.

**Summary and Conclusions**

This chapter sought to review critical literature as it relates to Central American immigrants, their history, and concepts of acculturation and acculturative stress, acculturation level and mental health. Outcome studies researching ethnic minorities and PTSD prevalence, and counseling ethnic minorities (in particular the *Hispanic client*) were also provided. The Central American immigrant population continues to be understudied and as such further research would be beneficial.
CHAPTER 3: METHODOLOGY

This chapter sought to describe the process for conducting this research study. The purpose of this study was to determine if there was a relationship between acculturation level and Posttraumatic Stress Disorder prevalence among Central American immigrants in the United States. The rational for sampling the greater Washington, D.C., metropolitan area was supported by the large number of Central Americans residing in this location. In addition, this study sought to determine which demographic variables would best predict PTSD severity in Central American immigrants. This chapter provides a thorough discussion of the research design, population, sampling plan, instrumentation, data collection procedures, and data analysis procedures that were conducted for this study.

Research Design

The purpose of this study was to examine the relationship between acculturation level and PTSD among Central American immigrants. The research design of this study utilized correlational research. Statistical Package for Social Sciences (SPSS, 2008) was utilized for data analysis. SPSS is a computer software package commonly used for statistical analysis in the social sciences field (Aron & Aron, 2005). The study investigated if there were in fact a relationship between the two variables (acculturation level and Posttraumatic Stress Disorder). In addition, the study investigated demographic variables that would best predict PTSD severity in Central American immigrants. The dependent variable for both research questions was PTSD, and for the second research
question, the independent variables were: age, marital status, gender, migration reason, migration year, and acculturation level.

The statistical methods used in this research design included descriptive statistics using a Pearson correlation coefficient. Descriptive statistics are used to summarize distribution of scores, and to describe individual scores within a distribution by converting these scores to percentile ranks (Green & Salkind, 2005). In this study, descriptive statistics described the sample specifically. The demographic variables such as age, marital status, gender, migration reason, migration year, and acculturation level for the sample participants were a part of the descriptive statistics. In addition, variables such as migration to the U.S. and age were described.

The Pearson Correlation is used to study a correlation between two variables, three or more variables, as well as within and between sets of variables. The two variables in this study are acculturation level and posttraumatic stress disorder severity. The Pearson product-moment correlation coefficient (r) assesses the degree to which quantitative variables are linearly related in a sample. The significance test for r evaluates whether there is a linear relationship between two variables (Green & Salkind, 2005). Green and Salkind (2005) state that the Pearson correlation coefficient is an effect size statistic, meaning that SPSS computes the Pearson correlation coefficient and the effect size ranges in value from -1 to +1. Thus, the Pearson correlation coefficient displays the degree to which high or low scores on one variable tend to go with high or low scores on another variable. The mean score on that variable determines if scores are deemed high or low.
Multiple Regression was used to identify the best combination of predictors (IV’s) of the dependent variable (PTSD). Thus, for this dissertation, a Multiple Regression was conducted utilizing SPSS, to examine the best predictors for the demographic data (age, education, marital status, and acculturation level). The participants in the study were volunteers, and were asked to complete three self-report survey instruments that were available in both English and Spanish.

A correlation study was done to investigate both the hypothesis presented and the null hypothesis. A correlational study also examines both positive and negative relationships with two variables. Aron, Aron, and Coups (2005) discuss both positive and negative relationships. A positive correlation is the relation between two scores on one variable in which high scores go with high scores on the other variable. However, a negative correlation is a negative relationship between two variables in which high scores go with low scores. The first hypothesis for this study was that there is a relationship between acculturation level and PTSD among Central American immigrants in the U.S. the null hypothesis is that there is no relationship between acculturation level and PTSD among Central American immigrants in the U.S. The second research hypothesis was that there are predictive relationships among the demographic variables.

Identification of Population

The target population was the Central American population in the Washington, D.C., metro area that has the second largest concentration of Central Americans behind that of the city of Los Angeles. Due to the nature of the study (posttraumatic stress...
disorder and acculturation level) and the history of the Central American population, it was conducive to study this population in the Washington, D.C., metropolitan area since it hosts large numbers of Central Americans.

Sampling Plan

The researcher obtained a list of Central American organizations in both the Washington, D.C., metro area and New York by an Ohio University (Dr. Perla) professor who had ties to the Central American community, and from this list several organizations were contacted: The Central American Resource Center, La Clínica Puebla, Arlington County Public Schools (REEP ESL program), and additional ESL centers in the area such as the Carlos Rosario Charter School. Local churches that had Spanish ministries (several in Prince Georges’ County, MD) were also canvassed. Additionally, the researcher attempted to collect additional data with Central American immigrants who were already receiving mental health services and in counseling (i.e., posttraumatic stress disorder); however, La Clínica Puebla was no longer able to assist in research studies as had been done in the past by other researchers. The researcher had submitted a proposal to the Carlos Rosario Charter School, where several hundred Central American immigrants are enrolled in English classes each year. However, this was not approved as the school had several negative experiences with previous researchers, and the process would have taken several months to obtain approval.

Therefore, the researcher concentrated on both the Central American Resource Center in Washington, D.C., and the Arlington Public Schools ESL outreach classes for
participants to complete the study. For level of significance, power and effect size an alpha level of significance $\alpha = 0.05$ was assessed. The ideal sample size was 100 due to the subject matter, which necessitated that participants be 18 or older. In addition the sample size of 100 was appropriate in order to increase power. There were several attempts to obtain more participants for the study, but that proved unsuccessful. A total of 100 surveys were given out to prospective participants (a nonprobability sample) who attended ESL (English as a second language) classes in both the D.C./Maryland and Virginia areas (Aron & Aron, 2005). The participants selected to participate in the study were readily available and were willing to volunteer. Participants were given the option to choose Spanish or English language packets that contained the surveys and demographic information form. The informed consent was also in Spanish and English; all participants chose the packets that were in Spanish. A total of 63 participants completed and returned the finished packets in Spanish.

Instrumentation

Three instruments that were utilized in this study: (a) Abbreviated Multidimensional Acculturation Scale (Zea, Asner-Self, Birman, & Buki, 2003); (b) Trauma Assessment for Adults (Resnick, Falsetti, Kilpatrick, & Freedy, 1996); and (c) Posttraumatic Stress Disorder Checklist Civilian version (PCL-C; Weathers & Litz, 1994). The Spanish version of the PTSD checklist (PCL-C) was adapted for the study (Orlando & Marshall, 2002).
Selection and Development of Instruments

The Abbreviated Multidimensional Acculturation Scale (AMAS scale) was created by Zea, Asner-Self, Birman, and Buki (2003) to assess acculturation level; the scale is both bilinear and multidimensional. The scale consists of 42 items and has been validated both with community and college student samples. This measure includes three dimensions (six subscales): cultural identity (U.S. and Latino), language competence (U.S. and Latino), and cultural competence (U.S. and Latino). Thus, questions 1-6 ask participants about American identity and questions 7-12 inquire about Latino identity. Questions 13-21 discuss language competence in English, questions 22-30 ask about native language competence (for this study Spanish was the language), items 31-35 discusses cultural knowledge (American culture), and questions 36-42 examine native culture knowledge. The scale development was based on the model of acculturation, which suggests that cultural competence and identity are distinct dimensions of acculturation with a particular individual who is competent in a culture but not necessarily identifying with it, and vice versa (Zea et al., 2003). The AMAS utilized a 4-point Likert scale: 1 for “Strongly agree”, 2 for “Disagree somewhat”, 3 for “Agree somewhat”, and 4 for “Strongly agree”. The AMAS scale was also translated into the Spanish language. The AMAS scale asks participants to strongly agree or disagree with such statements as: “I think of myself as being U.S.-American” or “I am proud of being _______ (culture of origin).” Total scores were added to assess if participants were deemed “high or low acculturated.” Dr. Zea at The George Washington University noted
that to assess biculturalism, the researcher must add the total scores of Latino acculturation, and multiply total scores of the U.S. acculturation.

Resnick, Best, Kilpatrick, Freedy, and Falsetti (1993) formulated the TAA (Trauma Assessment for Adults) that is a self-report of a total of 12 items that covered life experiences and history of significant trauma. Because this study examined a small sample taken from the Central American immigrant population, it necessitated the researcher to gauge a history of trauma with each participant. Conducting the trauma history was necessary because the experiences reported in this population were in reference to high rates of exposure to trauma due to civil war and political strife in their country of origin. Identifying an individual’s trauma exposure is important because of the serious psychosocial impairments associated with PTSD (Cusak, Freuh, & Brady, 2004). Cusack, et al (2004) reported that the TAA is essential also to utilize as it is use to assess a lifetime history of traumatic events including physical abuse, and assault, sexual assault, natural disaster, serious accidents, witnessing someone being killed or seriously injured. The TAA has been utilized widely regarding research on trauma exposure in adults. The 12-item instrument has the respondents check either “yes” or “no” for each item, instead of scores for each question.

Lastly, the PCL-C was chosen to measure PTSD severity, and contains a 17-item self-report measure of the 17 DSM-IV symptoms of Posttraumatic Stress Disorder. Respondents were to rate how much they were “bothered by that problem in the past month.” The PCL-C items are rated on a 5-point scale ranging from 1 (“not at all”) to 5 (“extremely”). Participants were asked questions such as: “Repeated, disturbing
memories, thoughts, or images of a stressful experience from the past?” and “Feeling emotionally numb or being unable to have loving feelings for those close to you?”

There are several versions of the PCL. The original PCL is the PCL-M (military). The PCL-M was not chosen, as it concentrated for those that were exposed to trauma due to military service. The PCL-S (specific) asks about problems in relation to an identified “stressful experience.” Because the PCL-C (civilian) is for civilians and is not focused on any one experience, the PCL-C was chosen to be the best fit for the Central American immigrant population sample (Weathers & Litz, 1994). The Spanish translation was obtained and had been utilized by Orlando and Marshall (2003), as most of the participants were more comfortable with their first language, Spanish. The range scores for the PCL-C is between 17-85, with 17 meaning that the participant is low on the severity of PTSD and 85 would mean that the participant was high on their severity of PTSD. With a score of 50 or above, this would determine whether the client met the criteria for posttraumatic stress disorder as reflected in the DSM-IV. In this study, the researcher used the recommendations given by Weathers & Litz (1994) which utilized a cutoff score of >50 in determining if participants met the criteria for posttraumatic stress disorder.

Reliability based on Instruments’ Standardization

Zea et al. (2003) developed the AMAS, which was standardized by conducting two studies. The first study surveyed 156 students of Latino descent living in the United States using the AMAS. The second included 90 participants who migrated from Central
American and now residing in the Washington, D.C. metropolitan area (Zea et al. 2003). Vogt (2005) explains that internal reliability is the extent to which items in a subscale or scale produce similar results. These consistencies in scores represent reliability. Thus, the authors’ of the AMAS (Zea et al. 2003) found that there were internal reliabilities for the three subscales: (1) cultural identity (U.S. and Latino), (2) cultural knowledge (U.S. and Latino), and (3) language competence (U.S. and Latino). The estimates of Cronbach’s alpha reliability coefficients for the AMAS ranged from .83 to .97 (Zea et al. 2003). In addition, Zea et al. (2003, p. 117) reported that “internal consistencies of the AMAS-ZABB subscales were also adequate for this community sample of Central American immigrants.” The estimate of Cronbach’s alpha reliability coefficient for the AMAS is considered to be a high estimate of reliability (Trochim, 2001), considering that a reliability of 1.0 is perfect (Nardi, 2006, p. 63). In this study, the estimate of Cronbach’s alpha reliability coefficient for the Posttraumatic Stress Disorder Checklist Civilian version (PCL-C) to assess Posttraumatic Stress Disorders (PTSD) severity produced reliability of .836, and for the AMAS, .753. Both instruments were consistent in accessing what they were designed to measure (acculturation level and PTSD severity).

Validity based on Instruments’ Standardization

In an attempt to ensure validity among Central American participants, Zea et al. (2003) tested the Abbreviated Multidimensional Acculturation Scale (AMAS) first among participants from Latino/Latina descent (N = 156), and secondly among immigrants from Central American countries (N = 90). Both samples were drawn from
groups currently residing in the United States. The second study consisting of the Central American participants was drawn from community members within the greater Washington, D.C. metropolitan area. My research aimed to replicate Zea et al.’s (2003) standardized population of Central Americans by targeting the same region for participants in order to strengthen the validity of the current study.

Validity describes how well an instrument actually measures what the researcher intends to measure. Aron & Aron (2005) expresses that validity is a relative concept, describing the appropriateness and soundness of a measure for its designed intention. Construct validity refers to the degree to which a measure actually assesses the underlying theoretical construct that the researcher is pursuing. The AMAS measures the level of acculturation by examining three domains (cultural identity, cultural knowledge, and language competence), which goes beyond language preference typically examined in acculturation research. The additional scales utilized were translated by native Spanish speakers, and back-translated to ensure proper validity and measurement for the Central American immigrant population sample. The Trauma Assessment for Adults was also translated by a native Spanish speaker to ensure adequate translation of the items on the TAA.

To confirm validity of the AMAS Zea et al. (2003) utilized the Multigroup Ethnic Identity Measure (MEIM, Phinney, 1992) while surveying their standardized population. As a result, Zea et al. (2003) reported that the AMAS demonstrated both convergent and discriminant validity. This validation was suggested due to the positive relationship between the MEIM measure of ethnic identity and Latino/Latina ethnic identity (Zea et
al. 2003). Central Americans who scored higher on English language competence were also found to report high scores on the ethnic identity of the MEIM (Zea et al. 2003). However, Zea et al. (2003) found that Spanish language competence was not found to have a relationship with ethnic identity. U.S. and Latino/Latina competence higher scores represented a relationship with higher levels ethnic identity scores on the MEIM. In addition, there was an association between the MEIM scores of orientation with other ethnic groups and English language competence, U.S.-American cultural competence, and U.S. total acculturation, when there was no association among any of the AMAS Latino/Latina factors and orientation toward other ethnic groups (Zea et al. 2003).

Zea et al. (2003) suggested that a factor analysis of the AMAS indicated that the instrument demonstrated construct validity. Both the Latino/Latina student sample from study 1 and the Central American community members from study 2 (N = 246) were used to perform the factor analysis with a varimax rotation. The analysis yielded six major factors that represented nearly 78% of the variance within AMAS, which Zea et al. (2003) used as the subscales for their instrument.

Palmer (2009) argues for an examination of psychometric properties when utilizing a measure with a sample maintaining cultural diversity different from the instrument’s original standardized population. The rationale for researchers to assess the reliability and validity of a measure when studying diverse groups is to ensure the appropriateness of the instrument’s ability to measure psychological constructs of populations other than what it was designed (Palmer, 2009). However, in the current study the AMAS was employed with the same population that Zea et al. (2003) utilized to
standardize the measure. Replicating these methods limits the need for a prior validation investigation of the instrument and raises the potential to demonstrate concurrent validity.

Data Collection Procedures

After receiving approval from the Institutional Review Board (IRB), the researcher contacted the Central American Resource Center, Arlington County Public Schools (ESL), and other Latino organizations in the Washington, D.C., metro area. Each packet prepared was coded utilizing a scoring system from 1-100 (for Spanish) and 1-100 (for English) to ensure participants’ anonymity. Participants were asked to place their completed packet in a box. The Washington, D.C., metro area has several Latino enclaves where the population is predominantly from Central America. In an effort to obtain volunteers the researcher participated in festivals that are frequented by the Latino population in addition to networking with leaders in the Central American community. The director of the Central American Resource Center in Washington, D.C., agreed to assist in obtaining volunteers and participants for the study. Participants for the study were primarily recruited by the researcher, who taught an ESL course in Arlington, VA. Other participants were sought from other ESL classes being held in the area.

The researcher is proficient in Spanish, and conducted presentations in Spanish at the Central American Resource Center and Arlington Public Schools over a period of four months (June-September 2008), since the English classes and citizenship classes were on a brief summer break. Presentations were approximately 10 minutes. The researcher expressed the nature of the study, informed participants that it was
anonymous, and that participants could volunteer to complete the survey if they so desired. The researcher also worked closely with the staff of Central American Resource Center. All of the staff were fluent in Spanish and assisted the researcher during and after presentations about the purpose of the study. Snacks were brought to each class to recruit prospective participants. Participants were given the option to take the packets home or complete them after their classes. Several participants completed them after the class, and expressed the desire to discuss their experiences in their country of origin. These experiences were usually related to trauma and violence. It is important to note this service was offered, since interviews were not done with each participant.

Data Analysis Procedures

The research design for this study was both a correlational and multiple regression design. The independent variables were measured; however they were not manipulated. Aron, Aron, and Coups (2005) state: “The correlation coefficient by itself is a descriptive statistic. It describes the degree and direction (positive and negative) of a linear correlation in the particular group being studied (p. 35).” The researcher sought to test the research question, as well as both the hypothesis and null hypothesis. The research questions were as follows:

Research Question 1. Is there a relationship between acculturation level and PTSD among Central American immigrants in the U.S?
Research Question 2: What combination of demographic variables (i.e., age, marital status, gender, migration year, migration reason) best predicts PTSD severity in Central American immigrants?

Research Hypothesis 1: There is a relationship between acculturation level and PTSD prevalence among Central American immigrants.

Null Hypothesis. There is no relationship between acculturation level and posttraumatic stress disorder among Central American immigrants.

Research Hypothesis 2: There are predictive relationships among the demographic variables.

Null hypothesis: There are no predictive relationships among the demographic variables.

The correlation design was based upon conducting a correlation matrix that was set at an alpha level at \( \alpha .05 \). The researcher sought to analyze the data that examined the two variables (acculturation level and posttraumatic stress disorder symptoms) for each participant to assess if the correlation coefficient was statistically significant. The analysis of correlations among items in the scales was for acculturation level and PTSD symptoms utilizing the self-report PCL-C.

Multiple regression analysis is used to predict a quantitatively measured variable, which is called the criterion or dependent variable; this is done by using a set of either quantitatively or dichotomously measured predictor or independent variables (Meyers, Gamst, & Guarino, 2006). PTSD severity represented the Dependent variable, and
demographic variables (age, marital status, gender, migration reason, migration year, and acculturation level) represented the Independent variables.

**Assumptions of Tests and Test for Compliance**

The researcher sought to test two variables (acculturation level and Posttraumatic Stress Disorder) that have not previously tested, to examine the relationship between those two variables. For the Pearson correlation coefficient there are two assumptions underlying the significance test. The first assumption is that the variables are bivariately normally distributed and the second assumption is that the cases represent a random sample from the population and the scores on variables for one case are independent of scores on these variables for other cases (Green & Salkind, 2005).

The first assumption is that if variables are bivariately normally distributed, then each variable is normally distributed ignoring the other variable and each variable would be normally distributed at all levels of the other variable. Green and Salkind (2005) state that if this assumption is true, and the bivariate normality assumption is met, the only type of statistical relationship that can be plausible would be a linear relationship.

In regards to Multiple Regression and its assumptions, there are a total of four: 1) Regression assumes that variables have normal distributions, 2) linearity of the phenomenon (which is regarding the relationship between the dependent variable and the independent variables, and this relationship is a linear relationship). This linearity provides a basis of the correlation of the variables. 3) Constant variance of the error term (which is the concept of heteroscedasticity), and that if equal variances are present, and
must be remedied, 4) Independence of the error terms, and states that each predicted value is not related to any other prediction (Li, 2002).

Summary

This chapter provided the methodology used to investigate the relationship between acculturation level and posttraumatic stress disorder among Central American immigrants. In addition, the importance of utilizing multiple regression for the purposes of investigating the best predictors for PTSD severity was also discussed. The procedures for the study were outlined including a discussion of the research questions/hypotheses, surveys, reliability and validity issues, and data analysis.
CHAPTER 4: RESULTS

The purpose of this study was to examine if there is a relationship between acculturation level and posttraumatic stress disorder prevalence among Central American immigrants. The research hypothesis asserts that there is a relationship between acculturation level and PTSD among Central American immigrants in the U.S. Hence, the null hypothesis asserts that there is no relationship between acculturation level (six subscales) and PTSD among Central American immigrants in the U.S. The seven variables examined were both acculturation level (including six subscales) and Posttraumatic Stress Disorder severity. The additional purpose of this study was to ascertain which combination of demographic variables (i.e., age, marital status, gender, migration year, migration reason), and acculturation level would best predict PTSD severity in Central American immigrants. This study further sought to determine if a significant relationship (both positive and negative) existed.

Pearson correlation coefficients were used to assess if there was a significant relationship (both positive and negative) between the seven variables, acculturation level (including six subscales) and posttraumatic stress disorder severity. To measure this, raw scores were coded (acculturation level) utilizing the Acculturation Multidimensional Scale and the PCL-C for each participant \( n = 63 \). Multiple regression was utilized to identify the best predictor variables for PTSD severity among the participants. Table 1 shows the frequency distribution for the gender of sample participants. More females participated in the study \( n = 35 \) than males \( n = 28 \). Descriptive statistics were utilized to gain a better understanding of the sample population with this study.
Table 1

*Gender of Sample Participants*

<table>
<thead>
<tr>
<th>Gender</th>
<th>N</th>
<th>% of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>28</td>
<td>44.4%</td>
</tr>
<tr>
<td>Female</td>
<td>35</td>
<td>55.6%</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100%</td>
</tr>
</tbody>
</table>

Table 2 displays the country of origin that is most representative of the sample. The most prominent country chosen by participants was El Salvador \((n = 28)\), followed by Guatemala \((n = 17)\) and Nicaragua \((n = 18)\). This is not surprising as the sample population resided in the Washington, D.C metro area, which is heavily populated with Central American immigrants from El Salvador. In addition, according to the D.C. Office of Latino Affairs (2003), as reported, over one-third of DC Latinos identified their country of origin as being in Central America and the vast majority from El Salvador. In which, this pattern is in contrast to the rest of the Latino population in the US, which is mainly of Mexican, Puerto Rican or Cuba heritages.
Table 2

*Country of Origin for Sample Participants*

<table>
<thead>
<tr>
<th>Country</th>
<th>N</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>El Salvador</td>
<td>28</td>
<td>44.4</td>
</tr>
<tr>
<td>Guatemala</td>
<td>17</td>
<td>27.0</td>
</tr>
<tr>
<td>Nicaragua</td>
<td>18</td>
<td>28.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 3 represents the national population within the United States, as well as the Latino/Hispanic national population in the United States by estimation. The United States national population is estimated to be over 304 million; while the Latino/Hispanic population is estimated to be at 45.4 million. In regards to the Central Americans, the population is estimated to be approximately 3.5 million in the U.S.

Table 3

*United States National Population and Latino/Hispanic Population in the U.S.*

<table>
<thead>
<tr>
<th>Population</th>
<th>Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S population</td>
<td>304,059,724</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>45,432,158</td>
</tr>
<tr>
<td>Central American</td>
<td>3,592,810</td>
</tr>
<tr>
<td>Guatemalan</td>
<td>915,743</td>
</tr>
<tr>
<td>Nicaraguan</td>
<td>313,646</td>
</tr>
<tr>
<td>Salvadoran</td>
<td>1,477,210</td>
</tr>
</tbody>
</table>

*Source: U.S. Census Bureau, 2006-2008, American Community Survey*
Table 4 shows the educational attainment of the sample participants, with vocational school being the highest educational attainment of most participants. Vocational school was $n = 28$ (23% of the participants), and high school was $n = 25$ (20.5%). However, 7% of the participants had at least college ($n = 7$), and the lowest grouping comprises those who completed only elementary school ($n = 3$, 2.5%). Most participants of this study had at least vocational school or some high school prior to arrival in the United States. Research has shown that educational attainment is associated with acculturation levels. The higher acculturated a person is, the higher the level of educational attained (Santiago-Rivera et al, 2003). Generally, those individuals with higher levels of acculturation will have completed at least some college and/or have obtained a graduate degree.

Table 4

*Educational Attainment of Participants*

<table>
<thead>
<tr>
<th>Education</th>
<th>N</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary School</td>
<td>3</td>
<td>2.5</td>
</tr>
<tr>
<td>High school</td>
<td>25</td>
<td>20.5</td>
</tr>
<tr>
<td>Vocational school</td>
<td>28</td>
<td>23.0</td>
</tr>
<tr>
<td>College</td>
<td>7</td>
<td>7.0</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100</td>
</tr>
</tbody>
</table>
Figure 5 displays the migration year to the United States from Central America for each participant. During the years of 1982-1989 a total of 9 participants came to the United States from Central America \((n = 9)\), which is 14.4\% of the sample participants. The highest influx of immigration to the United States from Central America occurred between the years of 1990-1997, in which a total of 45 participants migrated to the United States \((n = 45)\), and this was representative of more than half of the sample of participants (71.4\%). Between the years of 1999-2001, there were a total of 9 participants \((n = 9)\). By the year 1993, in Central America (El Salvador, Guatemala and Nicaragua) the civil wars in those regions had come to an end. Immigrants may have endured traumatic events due to living through a civil war. Therefore, they would be more predisposed to PTSD due to their exposure to trauma.
Table 5 displays the marital status of each participant. The frequency distribution shows that most participants were married or either single ($n = 40$, 63.5% for married; $n = 16$, 25.4% for single). A small sample were divorced ($n = 3$), separated ($n = 2$), or widowed ($n = 1$), or other ($n = 1$). Marital status could have in some way attributed to lower levels of PTSD as having a spouse could have served as additional social support when navigating through American society and culture.

Figure 5 Migration to the United State from Central America
Table 5

*Marital Status of Participants*

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>N</th>
<th>% of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>16</td>
<td>25.4</td>
</tr>
<tr>
<td>Married</td>
<td>40</td>
<td>63.5</td>
</tr>
<tr>
<td>Divorced</td>
<td>3</td>
<td>4.8</td>
</tr>
<tr>
<td>Separated</td>
<td>2</td>
<td>3.2</td>
</tr>
<tr>
<td>Widowed</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>1.6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63</td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Table 6 shows the frequency distribution of the age of the sample participants. The age range was from 19 to 71, and the mean for age was 43 (M = 43). There were a total of three participants between the ages of 19-25 (n = 3) and represented 4.2% of the sample. There were a total of 5 participants that were between the ages of 25-30 (n = 5), and 8% of the sample of participants. Between the ages of 31-40, there were a total of 23 participants (n = 23), and was 36.7% of the sample. There were a total of 18 participants that were between the ages of 41-50 (n = 18) and was 28.7% of the sample. In addition, there were a total of 6 participants between the ages of 51-60 (n = 6, 9.6%), and 8 participants between the ages of 61-71 (n = 8, 12.8%). In regards to age, most of the participants that had higher levels of PTSD were over the age of 40.
Table 6

Age of Participants

<table>
<thead>
<tr>
<th>Age Range</th>
<th>N</th>
<th>% of sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 19-25</td>
<td>3</td>
<td>4.2</td>
</tr>
<tr>
<td>Age 25-30</td>
<td>5</td>
<td>8.0</td>
</tr>
<tr>
<td>Age 31-40</td>
<td>23</td>
<td>36.7</td>
</tr>
<tr>
<td>Age 41-50</td>
<td>18</td>
<td>28.7</td>
</tr>
<tr>
<td>Age 51-60</td>
<td>6</td>
<td>9.6</td>
</tr>
<tr>
<td>Age 61-71</td>
<td>8</td>
<td>12.8</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Table 7 displays the descriptive statistics for the means for PTSD severity, and acculturation level (six subscales). The mean represents the average of group scores, for high acculturation, a score of 4.00 would be the average for all participants, and a score of 1.00 would be considered low acculturation. The mean for PTSD severity was 37.5 (M = 37.5), which is lower than the cut-off score of 50 or above for a PTSD diagnosis. In addition, participants scores on the acculturation subscale for Spanish language were high, and the mean for sample participants was 3.57 (M = 3.57) and is considered low acculturation, when comparing scores for English language, the mean was 2.45 (M = 2.45), which would mean high acculturation as the dominant language in the United States is the English language.
Table 7

Means and Standard Deviations for PTSD and Acculturation Subscales

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD Severity</td>
<td>63</td>
<td>37.5</td>
<td>7.51527</td>
</tr>
<tr>
<td>Acculturation</td>
<td>63</td>
<td>2.7066</td>
<td>.20898</td>
</tr>
<tr>
<td>U.S. Identity</td>
<td>63</td>
<td>2.7328</td>
<td>.43947</td>
</tr>
<tr>
<td>Latino Identity</td>
<td>63</td>
<td>2.7672</td>
<td>.44252</td>
</tr>
<tr>
<td>English Language</td>
<td>63</td>
<td>2.4515</td>
<td>.28284</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>63</td>
<td>3.5750</td>
<td>.27474</td>
</tr>
<tr>
<td>U.S. Culture</td>
<td>63</td>
<td>2.3201</td>
<td>.35203</td>
</tr>
<tr>
<td>Latino Culture</td>
<td>63</td>
<td>2.4259</td>
<td>.45769</td>
</tr>
</tbody>
</table>

Table 8 shows the correlation matrix for the seven variables (acculturation level and PTSD). When examining acculturation in general, and PTSD severity, there was no statistically significant relationship ($r = .184$). There was a positive relationship between acculturation level with the subscale for cultural identity (U.S Identity, $r = .289$), and Latino identity ($r = .281$), at the significance level of $\alpha .05$. At an alpha level of $\alpha .01$ there was a negative relationship between English language and PTSD severity ($r = -.465$), which meant that participants that had higher level of English language proficiency had lower scores for PTSD severity. The demographic variable for age of participants was also positively correlated with PTSD severity at the significance level $\alpha .01$ ($r = .684$).
Table 8

*Correlation Matrix of Acculturation Level and PCL-C of Sample*

<table>
<thead>
<tr>
<th></th>
<th>PTSD Severity correlation (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acculturation</td>
<td>.184</td>
</tr>
<tr>
<td>U.S. identity</td>
<td>.289*</td>
</tr>
<tr>
<td>Latino identity</td>
<td>.281*</td>
</tr>
<tr>
<td>English language</td>
<td>-.465**</td>
</tr>
<tr>
<td>Spanish Language</td>
<td>.190</td>
</tr>
<tr>
<td>U.S. Culture</td>
<td>-.90</td>
</tr>
<tr>
<td>Latino Culture</td>
<td>.175</td>
</tr>
<tr>
<td>Age</td>
<td>.684**</td>
</tr>
</tbody>
</table>

*p <0.05, **p<0.01

Figure 6 displays the Scatterplot for the sample utilized for the study, and the dependent variable (PTSD) for each participant. The scatterplot also shows 3 participants that would be considered outliers, as their scores exceed the Mean (M = 37.5), and reaches scores higher than 50 for PTSD severity. Scatterplots are utilized to visually examine the correlation between seven variables. It depicts two scores for each participant (X score and a Y score). The minimum for the sample was a score of 27, and the highest score in the sample was 59. The highest score maximum is a score of 85, which would mean a high level of PTSD severity. In order to meet the criteria for the
DSM-IV (Diagnostic Statistical Manual for Mental Disorders, 2000), a score of 50 or above is needed (Weathers & Litz, 1994).

Figure 6 Scatterplot Matrix of PTSD Severity

Figure 7 is a histogram of the dependent variable (PTSD), and shows the scores for all participants. The mean for PTSD severity was 37.5 (M = 37.5). This score of 37.5 is lower than a score 50 or above that would meet the DSM-IV criteria for PTSD taken from the PCL-C (Posttraumatic Stress Disorder checklist); most participants would not meet the criteria for a PTSD diagnosis. Three of the participants met the criteria for PTSD and were considered outliers in the sample. Their scores were 54, 59, and 55. One participant that met the criteria for PTSD was male in his 40’s (score of 54), the other
was two females, and the highest score of 59 was reported by a female participant that was 63 years of age.

Table 9 displays the Cronbach’s alpha for both the AMAS-ZABB acculturation scale and the PCL-C checklist with the sample participants. Both the AMAS-ZABB (acculturation scale) and the PCL-C Checklist overall had scores that were greater than .7, which means that the instruments had acceptable reliabilities and would not limit validity. The Cronbach’s alpha for the AMAS-ZABB was a score of .753 for the 42-item

Figure 7: Histogram of PTSD Severity in Sample
scale, and the Cronbach’s alpha for the PCL-C Checklist had a Cronbach’s alpha of .836. However, when examining the subscales, the Cronbach’s alpha for the AMAS-Latino Identity items was .693. However when analyzing language, in particular the Spanish Language subscale, the Cronbach’s alpha was .406.

Table 9

*Cronbach’s Alpha for Acculturation Level Scale and PCL-C Checklist*

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s $\alpha$</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PTSD Scale</td>
<td>.836</td>
<td>17 items</td>
</tr>
<tr>
<td>Acculturation</td>
<td>.753</td>
<td>42 items</td>
</tr>
<tr>
<td>Acculturation Subscales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U.S. IDENTITY</td>
<td>.743</td>
<td>6 items</td>
</tr>
<tr>
<td>LATINO IDENTITY</td>
<td>.693</td>
<td>6 items</td>
</tr>
<tr>
<td>ENGLISH LANGUAGE</td>
<td>.619</td>
<td>9 items</td>
</tr>
<tr>
<td>SPAN LANGUAGE</td>
<td>.406</td>
<td>9 items</td>
</tr>
<tr>
<td>U.S. CULTURE</td>
<td>.676</td>
<td>6 items</td>
</tr>
<tr>
<td>LATINO CULTURE</td>
<td>.732</td>
<td>6 items</td>
</tr>
</tbody>
</table>

Table 10 displays the migration reason that participants migrated to the United States from Central America. The primary reason for migration was due to the Civil War in the participant’s country of origin. The secondary reason was due to economic reasons, and for better opportunities in the United States compared to opportunities available in the participant’s country of origin.
Table 10

*Migration Reason for Participants*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil War</td>
<td>41</td>
<td>65.1</td>
</tr>
<tr>
<td>Economic</td>
<td>22</td>
<td>34.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>63</td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Table 11 displays the Multiple Regression analysis for Research question 1, which is: Is there a relationship between acculturation level and PTSD. The model summary table provides several measures for assessing predicting the dependent variable. The value of $R$ is .614, and the $R^2$ of .378 shows the amount of variance of the criterion variable, which is accounted for by the six independent variables (the six subscales that represent acculturation level). Acculturation level (English language) significantly predicted PTSD severity scores, $b = -.484$, $t (-.484) = 5.661$, $p < .05$.

The ANOVA table included in Table 12 displays the summary of the analysis of variance for regression. The significant $F$ value $(6, 56) = 5.661$, $p < .01$ indicates a significant relationship exists between the independent variables (acculturation level subscales) and the dependent variable (PTSD). The Coefficients table describes the significance levels and $t$ tests for each independent variable. For research question 1, the independent variable of Acculturation level (English language) contributes statistical significance to the prediction of PTSD severity (.000). This is based on an alpha level of .05. However, acculturation level: U.S. identity, Latino Identity, Spanish language, U.S culture, and Latino culture makes no significant contribution to the prediction of PTSD severity.
Table 11

**Multiple Regression Analysis for Research Question 1**

### Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.614a</td>
<td>.378</td>
<td>.311</td>
<td>6.23879</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ACCLATCU, ACCENG, ACCSPAN, ACCUS, ACCAMCU, ACCLAT

### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>1322.055</td>
<td>6</td>
<td>220.343</td>
<td>5.661</td>
<td>.000a</td>
</tr>
<tr>
<td>Residual</td>
<td>2179.659</td>
<td>56</td>
<td>38.922</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3501.714</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), ACCLATCU, ACCENG, ACCSPAN, ACCUS, ACCAMCU, ACCLAT
b. Dependent Variable: PTSDSC1

### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>32.943</td>
<td>15.156</td>
<td>2.174</td>
</tr>
<tr>
<td></td>
<td>ACCUS</td>
<td>1.840</td>
<td>2.721</td>
<td>.108</td>
</tr>
<tr>
<td></td>
<td>ACCLAT</td>
<td>4.367</td>
<td>2.892</td>
<td>.257</td>
</tr>
<tr>
<td></td>
<td>ACCENG</td>
<td>-12.849</td>
<td>3.063</td>
<td>-.484</td>
</tr>
<tr>
<td></td>
<td>ACCSPAN</td>
<td>4.438</td>
<td>2.966</td>
<td>.162</td>
</tr>
<tr>
<td></td>
<td>ACCAMCU</td>
<td>-.343</td>
<td>2.822</td>
<td>-.016</td>
</tr>
<tr>
<td></td>
<td>ACCLATCU</td>
<td>1.607</td>
<td>1.868</td>
<td>.098</td>
</tr>
</tbody>
</table>

a. Dependent Variable: PTSDSC1
Table 12 displays the Multiple regression analysis for Research question 2, and includes the five demographic variables (migration reason, age, gender, migration year, and marital status). The demographic variables were grouped as dichotomous variables and were entered into SPSS. The demographic variable age, was not grouped into a dichotomous variable since it is a continuous variable. For example, migration reason became variable *Immigration2*, and scores of either “1” or “0” were coded (“Civil war”= 1, “Economic”= 0). Gender became dichotomous by grouping both “Male” and “Female” with the sample (“Male” = 1, “Female” = 0). Migration year was entered into SPSS as participants’ number of years in the United States (the year 2008 was subtracted from the year participants reported when they migrated) since data collection took place during the summer of 2008. Marital status was grouped for those that were “Married” versus “Non-married”.

The value of $R$ is .764 and the $R^2$ of .583 shows the amount of variance of the criterion variable, which is accounted for by the five independent variables (migration reason, age, gender, migration year, and marital status). Age significantly predicted PTSD severity scores, $b = .714$, $t (7.166) = 13.992, p <.05$. Migration reason (*Immigration2*) significantly predicted PTSD severity scores ($b = -.255$, $t (-2.519) = 13.992, p <.05$).

The ANOVA table included in Table 13 displays the summary of the analysis of variance for regression. The significant $F$ value $(5, 50) = 13.992, p <.05$ indicates a significant relationship exists between the independent variables (demographic variables) and the dependent variable (PTSD). For research question 2, the independent variables
(Age and Migration reason) contribute statistically significantly to the prediction of PTSD severity (.000, 015). This is based on an alpha level of .05. However, gender, migration year (TimeUS), and marital status makes no significant contribution to the prediction of PTSD severity.
Table 12

Multiple Regression Analysis for Research Question 2.a.

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.764a</td>
<td>.583</td>
<td>.542</td>
<td>4.84935</td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Immigration2, Age of participants, GENDER2, TIMEUS, Mar2

<table>
<thead>
<tr>
<th>ANOVA b</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
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<tr>
<td>1</td>
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<td>1645.171</td>
<td>5</td>
<td>329.034</td>
<td>13.992</td>
<td>.000a</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>1175.812</td>
<td>50</td>
<td>23.516</td>
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</tr>
<tr>
<td></td>
<td>Total</td>
<td>2820.982</td>
<td>55</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Immigration2, Age of participants, GENDER2, TIMEUS, Mar2
b. Dependent Variable: PTSDSC1

<table>
<thead>
<tr>
<th>Coefficients a</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
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<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
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<tr>
<td>1</td>
<td>(Constant)</td>
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<td>4.200</td>
</tr>
<tr>
<td></td>
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<td></td>
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<td>TIMEUS</td>
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<tr>
<td></td>
<td>Immigration2</td>
<td>-3.882</td>
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a. Dependent Variable: PTSDSC1
Table 13 includes the Multiple regression analysis for Research question 2, and includes all demographic variables, in addition to the acculturation subscales to predict PTSD severity among participants. The value of $R$ is .826 and $R^2$ of .682 shows the amount of variance of the criterion variable, which is accounted for by the five independent variables (migration reason, age, gender, migration year, and marital status), as well as the acculturation subscales (six in total). Age and acculturation level (English language) were statistically significant in predicting PTSD severity (age, .000, English Language, .008). However, compared to Table 12, when examining migration reason (Immigration2), when regression analysis included acculturation subscales, migration reason was no longer statistically significant in predicting PTSD severity (.076).

Table 13

*Multiple Regression Analysis for Research Question 2.b.*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
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<tr>
<td>1</td>
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a. Predictors: (Constant), ACCLATCU, ACCENG, GENDER2, ACCSPAN, ACCUS, Immigration2, Age of participants, Mar2, ACCAMCU, TIMEUS, ACCLAT
### Table 13 (continued)

#### ANOVA

<table>
<thead>
<tr>
<th>Model</th>
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<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
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<td></td>
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<td></td>
<td>Total</td>
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<td>55</td>
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<td></td>
</tr>
</tbody>
</table>

*a. Predictors: (Constant), ACCLATCU, ACCENG, GENDER2, ACCSPAN, ACCUS,
Immigration2, Age of participants, Mar2, ACCAMCU, TIMEUS, ACCLAT

*b. Dependent Variable: PTSDSC1

#### Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
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<tr>
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<td>Age of participants</td>
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<td></td>
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<td></td>
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<td></td>
<td>ACCUS</td>
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<td>ACCLAT</td>
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<td></td>
<td>ACCENG</td>
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<td></td>
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<td></td>
<td>ACCAMCU</td>
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<td></td>
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<td>1.286</td>
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</table>

*a. Dependent Variable: PTSDSC1
Conclusion

The results show that there is a relationship between acculturation level and PTSD. Age of participants played a role in that the older a participant was, the higher their scores of PTSD severity. In addition, there are significant predictors among the demographic variables that can predict PTSD severity in the participants in this sample. The significant predictors were age, as well as acculturation level (English Language), in addition when examining the demographic variables; migration reason played a role and was statistically significant.
CHAPTER 5: DISCUSSION

The purpose of this study was to examine the relationship between acculturation level and PTSD prevalence in the Central American immigrant population sample, as well as to examine the demographic variables in predicting PTSD severity. This chapter seeks to discuss the summary of findings, study limitations, and recommendations for future research.

The first research hypothesis was that there would be a relationship between acculturation level and posttraumatic stress disorder among Central American immigrants in the U.S. In addition, the second research hypothesis was that there would be predictive relationships among the demographic variables. The following displays the research questions for this study:

Research Question 1. Is there a relationship between acculturation level and PTSD among Central American immigrants in the U.S?

Research Question 2: What combination of demographic variables (i.e., age, marital status, gender, migration year, migration reason) best predicts PTSD severity in Central American immigrants?

Research Hypothesis 1:
There is a relationship between acculturation level and PTSD prevalence among Central American immigrants.

Null Hypothesis. There is no relationship between acculturation level and posttraumatic stress disorder among Central American immigrants.

Research Hypothesis 2:
There are predictive relationships among the demographic variables.

*Null hypothesis:* There are no predictive relationships among the demographic variables.

**Summary of Findings**

The present findings did support both hypotheses that there is a relationship between acculturation level and Posttraumatic Stress Disorder among Central American immigrants in the United States. In addition, the results did support that there are predictive relationships among the demographic variables. The Pearson correlation coefficient was used to examine the dependent variable (PTSD), and independent variables, acculturation level (six subscales). When examining acculturation in general, and PTSD severity, there was no statistically significant relationship ($r = .184$). There was a positive relationship between acculturation level with the subscale for cultural identity (U.S Identity, $r = .289$), and Latino identity ($r = .281$), at the significance level of $\alpha .05$. At an alpha level of $\alpha .01$ there was a negative relationship between English language and PTSD severity ($r = -.465$), which meant that participants that had higher level of English language proficiency had lower scores for PTSD severity. The demographic variable for age of participants was also positively correlated with PTSD severity at the significance level $\alpha .01$ ($r = .684$).

Multiple Regression analysis was used to assess predictors for PTSD severity among the sample population utilized for the study. The independent variables were the demographic variables: migration reason, age, gender, migration year, and marital status.
Acculturation level (six subscales) was also added as independent variables, and each subscale were separate variables in the regression analysis.

There were three significant predictors in the study that could predict PTSD severity with the sample participants. The three predictors were Age, as well as Acculturation level (English Language subscale), and migration reason (civil war and economic reasons). The higher the age of the participant the higher the PTSD severity, and the more acculturated (English language fluency), the higher the scores for PTSD severity. In addition, if participants came to the United States due to Civil war versus economic reasons, the higher the scores of PTSD severity.

In regards to the Pearson correlation scores in this study, a positive value (+) for the correlation implies a positive association (large values of X tend to be associated with large values of Y and small values of X tend to be associated with small values of Y). A negative value for the correlation implies a negative or inverse association (large values of X tend to be associated with small values of Y and vice versa) (Simon, 2005). In this study, there were both positive and negative associations. Meaning, positive scores were associated with high scores. For example, for the variable acculturation level (U.S. Identity), scores were high for acculturation level and for PTSD severity ($r = .289$). In addition, Latino identity resulted in high scores for acculturation level, and high scores for PTSD severity ($r = .281$).

In addition, the findings support that most participants reported lower levels of Posttraumatic Stress Disorder severity. The mean score cut-off for this study was 37.5 ($M = 37.5$). Weathers & Litz (1994) suggested that a score of 50 or above would meet the
criteria for a PTSD diagnosis. This is quite contrary to other research that has been conducted with this population in regards to severity of PTSD among Central American immigrants. This could be due to several reasons as most participants had a difficult time answering questions concerning trauma history, if they had previously experienced trauma, or if their experiences in general involved PTSD symptoms. Asner-Self & Marotta (2005) found that in their sample of Central American participants, scores were higher than the general population in the U.S when comparing two variables (mistrust and isolation). Participants may have expressed feelings of mistrust, due to the nature of the study and the questions being asked of them. Mistrust could have hindered the participants from answering the questions truthfully. In addition, participants from the researcher’s ESL class may have felt compelled to give positive answers, or to comply with helping the researcher with the study.

More females than males that participated in the study and the most frequent country of origin for females were El Salvador. Out of the 63 participants, 35 were female and 28 were male. This is not surprising considering that per the DC office of Latino Affairs (2003), most immigrants to the Washington, D.C. metro area are from El Salvador, and followed by Guatemala and Nicaragua. Within the United States, rates of PTSD among Immigrant populations and the Americans have been on the rise, and in regards to gender, females are more likely to have PTSD symptoms (NIMH, 2009). The National Institutes of Mental Health (2009 reported that) PTSD is a highly prevalent lifetime disorder that often persists for years. The qualifying events for PTSD are also common, with many reporting the occurrence of quite a few such events during their
lifetimes. In regards to Immigrants, and in particular Central American, PTSD is an issue at hand for helping professionals to tackle.

Educational attainment is also important in this study, as most participants had Vocational training \( (n=28) \). This is much higher when comparing some participants that have a College degree \( (n=7) \). Education could impact participants reporting PTSD symptoms as it may enable them to access additional resources in the community such as mental health services or other community organizations services. The location of educational attained could be pertinent depending on where the education was attained (U.S versus Central America). Most participants came to the United States from Central America during the years of 1990-1997, with nearly half of all participants migrating to the United States \( (n=45) \). The civil wars in Central America ended in 1993. Thus, many of the participants may have been attempting to flee the war and strife in their country of origin.

Marital status was also pertinent to this study. Research in the past indicated that most of the Central American Immigrant population reported that they were Single (Hovey, 1999). However, in this study, married participants far exceeded single participants, in contrast to previous research. Most participants reported being Married \( (n=40) \), which is over 63.5% of the total sample. It is unclear if those participants that reported that they were married came to the United States with their spouse or met their spouse after they migrated. When examining the age of the participants, the older participants may have been able to migrate to the United States from El Salvador, Guatemala or Nicaragua. This could also greatly impact symptoms of PTSD severity, as
social support has greatly shown to assist with the adjustment (acculturation) of Latino immigrants in the United States (Mirander & Umhoefer, 1998).

Age was not only a significant predictor, but was positively correlated with PTSD severity. Most participants were the between the ages of 19-40 ($n = 31$), but the older participants (41-60, $n=24$; 61-71, $n =8$), reported higher levels of PTSD severity when compared to younger participants. There were three significant outliers, and their ages fell in the range of 41-60. They are considered outliers, as the three scores are above the mean for the sample ($M = 37.5$). There scores were outside the range of the score of 50.

One female participant, age 63 years old, reported high levels of PTSD severity, and would meet the criteria for a PTSD diagnosis. According to the DSM-IV (2000), the age of onset for Posttraumatic stress disorder can occur at any age, and also including during childhood. Some of the participants may have not only experienced premigration trauma, but additional trauma once they came to the United States. The participants that were older in age may have experienced more difficulty adjusting to the United States, especially in regards to language acquisition. The majority of participants in this study were most comfortable speaking and writing information in the Spanish language.

One male had a score of 54, and one female had a score of 55, and the other female reported a score of 59 and was 63 years of age. This is consistent with past and current research, which continues to report higher rates of PTSD, particularly among Central American Immigrants in the United States (Asner-Self & Marotta, 2005). Most participants also reported that they migrated to the United States, or fled their country of origin due to the Civil Wars in their respective countries (over 65.1% of the sample). This
does not imply that those participants have PTSD or may have a PTSD diagnosis in the future. Additional coping mechanisms may have been put in place, or resilience may have played a role.

Multiple regression results showed that a statistically significant relationship exists between the weighted linear composite of the independent variables (demographic variables), and the dependent variable (PTSD) (Myers, Gast, & Guarino, 2006, p.213). The results did show that not all demographic variables were significant in predicting PTSD severity. Age and acculturation level (English Language), and migration reason (civil war and economic reasons) were significant predictors in this study, and greatly impacted PTSD severity in the sample. For example, while teaching an ESL and interaction occurred between this researcher and a female from El Salvador, age 63. The participant depended heavily on her native language of Spanish and found it difficult to learn English although she had been in the United States for over 15 years.

The impact of acculturation level can be brought to the forefront. The results showed that most Central Americans in this study would not be considered highly acculturated (all survey packets were completed in Spanish). Most participants for example depended heavily on their native language of Spanish, which would mean lower acculturation, compared to participants that were able to speak in the English language which meant higher acculturation. In addition, most studies that researched the Central American population, only concentrated on mental health issues (such as: anxiety, PTSD, and depression), and did not take into account the acculturation level of the participant.
The Central American immigrant population is dynamic, with persons who have experienced immense adversity but remain resilient. In this study, Berry’s model of acculturation was integrated to compare participant’s results with the acculturation strategies posed by Berry. Several researchers (Berry, 1980; Szapocznik, Kurtines, & Fernandez, 1980; Wong-Reiger & Quintana, 1987) have found from their perspective research that biculturalism or integration produces healthier acculturation outcomes. Berry and Kim (1988) believed the acculturation process can be broken down into five phases that occur on individual and group levels. The phases include precontact, contact, conflict, crisis, and adaptation. Precontact is before an individual or group comes into contact with a different culture. Contact is when an individual or group comes into contact with a different culture from their culture of origin. Conflict is what an individual or group may experience due to the difference in values and cultural norms due to coming in contact with a different (dominant) culture. Crisis is when an individual or group struggles to either maintain aspects of their culture of origin or assimilate to the different culture. Adaptation is when an individual or group had completed the acculturation process.

Research findings with regard to immigrant populations, demonstrates that acculturation occurs in a particular phase (as shown in the Berry & Kim model in Figure 3). The phase of acculturation depends upon how an individual deals with two fundamental questions: (1) How much of one’s cultural identity is valued and retained? (2) To what extent are positive relations with the dominant culture sought?
In addition, Berry’s model emphasized the four phases of the acculturation process and participants in this study were representative of those various levels of acculturation. The model integrated different stages of how individuals acculturate. They were assimilation, bicultural (integration), marginalization, and separation.

Studies have reported higher rates of PTSD among Hispanics compared to the general population especially in regards to Central American immigrants. For example, Pole et al. (2001) surveyed 655 Hispanic, non-Hispanic Black, and non-Hispanic Caucasian police officers and found that Hispanic police officers reported more severe duty-related PTSD symptoms than their non-Hispanic counterparts. However, it has been reported that as a collectivistic culture, Hispanics may also be concerned with adhering to social norms and reporting in a socially desirable direction (Pole, Best, Metzler, & Marmar, 2005). In this study, lower levels of PTSD may have been reported by participants so as not to seem as “pathological” or in severe distress. Our social norms govern how we act in society, thus some Central American immigrants that participated in the study may have felt that reporting their real feelings may be seen as “abnormal” and “un-American.” However, this could also imply the difference in cultural norms when comparing United States culture. This is in contrast to the Latino cultural norms and especially in regards to coping with trauma as several of the participants in this study reported their trauma experiences. Several participants expressed that they had witnessed sexual assaults and other violence in their country of origin. One participant from El Salvador, who wanted to discuss the study after filling out the packet, stated: “I came to the United States for better opportunities, as I could not pay for food for my family; we
had nothing to eat a lot of times.” Another participant reported that her cousin was murdered during the war.

Several healthcare professionals have also noticed a difference in immigrants exhibiting signs of trauma. After attending an Eating Disorder symposium in Baltimore, Maryland, several nurses reported to me that there were several young teens in Prince Georges’ County who are displaying PTSD symptoms while in school. A registered nurse commented on her experience with a 13-year-old from El Salvador: “Watching a film in health class of women giving birth via c-section, caused the young man to have a severe panic attack in class, and no one at the school knew what to do to help him.” She expressed to the researcher that the video brought back nightmares of a relative being cut up with a knife. In my current role as a teacher on a college campus, workers from Central America speak of their life experiences in their particular country. They often discuss acts of continued violence in such countries as El Salvador where there is a high prevalence of youth gang activity. As such, this speaks volumes in regards to the Central American community, and the need for providing accessible as well as adequate services.

Study Limitations

Having a total of 63 participants in the study \( n = 63 \) created limitations with the sample. Future studies should seek to obtain larger samples if the results are going to be generalized (Aron & Aron, 2005). Therefore, the results of this study should not be generalized to the Central American population as a whole. Since the Central American population is quite large in both the United States as well as the Washington, D.C., metro
area, and there was such a small sample size. According the U.S. Census (2008), the Hispanic/Latino population has reached over 45 million so obtaining a larger sample size should be an attainable goal.

Although participants in the study were comfortable with reading the informed consent, and articulated that they understood the study in the Spanish translation provided, this was nonetheless, a limitation. The Informed consent was not back translated (which is the process of translating a document that has already been translated into a foreign language back to the original language, this is usually done by a native speaker in that language). Despite the translation issues, each participant that volunteered to participate in this study understood and was aware of their rights. The researcher conducted presentations in both English and Spanish to ensure participants fully understood the nature of the study. Participants were able to ask questions before they decided to take part in this study.

Another limitation of this study was the lack of interviews. Future researchers should seek to interview participants if possible in addition to administering a survey, preferably in the language clients choose. With this sample, Spanish was the language of choice and the one that was most comfortable for participants to communicate. While interviews were not done, that did not derail any participant who had questions or who wished to share experiences with the researcher.

Another limitation of the study was related to the use of the TAA. While the Trauma Assessment of Adults was used, it was not used prior to the interview process to screen participants to determine if they may have already been in counseling for PTSD.
This was not done as the researcher had previously conducted presentations to screen possible participants for the study, and due to time limitation, interviews were not conducted. Hence, three participants, one male and two females reported high rates of PTSD symptoms in this study. However, since interviews were not conducted, PTSD symptoms were not assessed in each participant. Resnick, Falsetti, Kilpatrick & Freedy (1996) developed the Trauma Assessment of Adults (TAA), as well as formulated an interview process to also screen perspective participants. Interviews could have served as a pertinent tool for screening those that migrated due to the Civil War in their country of origin, versus other Central American Immigrants that migrated to the United States for economic reasons. In addition, this would have greatly benefited the research on this community.

Lastly, some problems with mistrust by the participants towards the researcher may have been inherent. In this study, one participant reported that in his country of origin, his sister had been sexually assaulted in front of her husband by the police. Because of this, the family was greatly mistrustful of the police in El Salvador. This also caused significant stress for his sister and him, as he felt “helpless.” When asked about if he liked living in the United States, he said “yes,” and he did not want to return to El Salvador to live. Asner-Self & Marotta (2005) found high levels of mistrust in the study they conducted with 68 Central American immigrants. Results indicated that when examining Central American immigrants that were exposed to war-related trauma, the participants exhibited high levels of mistrust. Because of this exposure, not only were high levels of mistrust exhibited, but identity confusion, and feelings of isolation as well.
Feelings of mistrust toward services providers or the police in the United States could be a reality of numerous Central American immigrants.

Recommendations for Future Research

Future research should focus on conducting a qualitative study or perhaps a mixed methodology (both quantitative and qualitative) study. Conducting both quantitative and qualitative studies (Mixed-Method) could broaden the research with this population and provide a variety of ways to evaluate trauma, acculturation level and experiences of participants. Other research should be directed toward investigating trauma and the effects of civil war associated with the stress of moving to a new country.

Considerations for counselors and counselor educators include the possibility of providing additional training to become bilingual. Clients who have immigrated to the United States would benefit from more counselors providing bilingual counseling. An additional hypothesis to address future research would be to examine if Central American immigrants who are more acculturated (bicultural) will differ on posttraumatic stress disorder prevalence (or manifestations) when examining less acculturated Central American immigrants. This study was utilized to see if there was a relationship between acculturation level and PTSD, and to determine predictors of PTSD severity.

Pitta, Marcos, and Alpert (1978) brought to the forefront the concept of Language switching, when a client switches from their native language when discussing certain emotions, and then to the second language. Most participants in this study would not be considered fully bilingual, but there were a small minority of participants that were
comfortable in speaking both English and Spanish. However, the understanding was limited in regards to speaking and understanding English. Thus, bilingual counseling service delivery could be utilized with not only counseling Central American immigrants, but other Latinos that engage in *Language switching*. Javier (1990) allowed Latino clients to language switch during counseling and therapy sessions. Language switching proved to be an important aspect of the therapeutic relationship, and served to enhance the well-being of the Latino client that may have experienced traumatic experience (or even life experiences), in their native language of Spanish.

Becoming more bilingual could spark some uneasiness within the counseling profession, as there are a limited amount of bilingual therapists in the field. Currently, most clients have to be in a primarily Latino community, or urban city where Spanish language services are more readily available in order to receive bilingual counseling. In the Washington, D.C. metropolitan area several communities have a primarily large Latino community base such as Langley Park, Mt. Pleasant, Takoma Park, Silver Spring, and Hyattsville, Maryland.

This study also documented that the Central American Immigrant population depended heavily on community resources, and especially resources that catered to their community. For example the Central American Resource Center in Washington, D.C was a haven for the Latino community and provided resources in the Spanish language. Information was also provided to assist Latinos in obtaining citizenship in the United States (Citizenship classes), classes in English (ESL), and a social support network with others that were from Central America. Participants who utilized the services described it
as” feeling of home” and were able to fulfill their needs for social support. Research continued to show the importance of social support of Latinos. Frauenglass, Routh, Pantin and Mason (1997) found that a strong sense of social support (primarily family social support) in Latino adolescents was associated with lower levels of deviant behaviors.

Asner (1999) stated that, counselors working with Central American immigrants need to explore their own values, beliefs, and behaviors vis-à-vis their own culture, the dominant U.S. culture, and the Central American culture. The Central American immigrant population is a large and concentrated in the Washington, D.C., metro area. Although this study had a small sample size, future research should focus on obtaining a larger study when researching this population, especially in regards to how they acculturate and PTSD severity. Research should continue to be cultivated in regards to Central American immigrants, as it continues to be an understudied population (Asner-Self & Marotta, 2005). Central Americans that have experienced trauma due to Civil wars in their country of origin, may seek services due to manifestations of PTSD, and are indeed struggling to navigate, and adapt to American society and culture.

Latinos and Hispanics in the United States continue to contribute to the overall makeup of the society of the U.S. Therefore knowledge of their cultural worldview is essential for counselors. In the near future, it would be quite interesting to see what happens within the helping professions and if they are able to adequately serve not only the Central American Immigrant community, but the Latino community as a whole. The demographics of the United States continues to change, and has shifted to a more diverse
and multiethnic society. It is up to counselors to provide not only adequate mental health services, but also to provide an environment that fosters acceptance and trust for the client.
REFERENCES


Washington, D.C.


and mental health (pp. 64-83). Washington, DC: International Society for Education, Training, and Research.


MA: Allyn and Bacon.


APPENDIX A: OHIO UNIVERSITY INSTITUTIONAL REVIEW BOARD
APPROVAL LETTER

The following research study has been approved by the Institutional Review Board at Ohio University for the period listed below.

**Project:**
An Examination of the Relationship between Acculturation Level and PTSD among Central American Immigrants in the United States

**Researcher(s):** Sarita Sankey

**Advisor:**
Mona Robinson

**Department:**
Counseling and Higher Education

Jeff Vancouver, Ph.D., Chair
Institutional Review Board

08F017

Approval Date: 5/6/09
Expiration Date: 5/5/09

This approval is valid until expiration date listed above. If you wish to continue beyond expiration date, you must submit a periodic review application and obtain approval prior to continuation.

The approval remains in effect provided the study is conducted exactly as described in your application for review. Any additions or modifications to the project must be approved by the IRB (as an amendment) prior to implementation.

Adverse events must be reported to the IRB promptly, within 5 working days of the occurrence.
Title of Research: An Examination of the Relationship between Acculturation level and PTSD among Central American Immigrants in the United States

Researchers: Sarita M. Sankey

You are being asked to participate in research. For you to be able to decide whether you want to participate in this project, you should understand what the project is about, as well as the possible risks and benefits in order to make an informed decision. This process is known as informed consent. This form describes the purpose, procedures, possible benefits, and risks. It also explains how your personal information will be used and protected. Once you have read this form and your questions about the study are answered, you will be asked to sign it. This will allow your participation in this study. You should receive a copy of this document to take with you.

Explanation of Study
This study is examining acculturation level (how you have adapted to the American culture since relocating to the United States), and Posttraumatic Stress Disorder (PTSD). This study will be utilizing participants from the Central American region (the countries of El Salvador, Nicaragua and Guatemala). If you have been exposed to a traumatic event in your life or you or anyone in your family fled your country of origin during the 1970's-1990's because of a civil war, this study will seek to examine your symptoms at this present time. Each scale (two will be used for this study) will take approximately 10-15 minutes to complete), and the timeframe will be on a scheduled time and date with the researcher, but that would be according to a schedule that works best with you (for example, a Saturday or evening during the week). Lastly, the two surveys will be provided in both English and Spanish.

Risks and Discomforts
The scale on PTSD (Posttraumatic Stress Disorder) may spark memories of a traumatic event, and some of the questions may be uncomfortable to answer. Thus, it is important that you are made aware of this, and the researcher will be there to answer any questions that may arise from this study. If after you complete this study and become distressed or want to seek counseling services, you can call La Clinica Del Pueblo at 202-462-4788 for counseling services, or the DC Department of Mental Health as they have a 24hr helpline 7 days a week at 1-888-793-4357.
Benefits
Participation in this study is strictly VOLUNTARY; however this study will help to aid counselors that may work with the Central American population to provide recommendations and suggestions. This study will benefit the community as there is still minimal research to help service providers with working with persons from the Central American region.

Confidentiality and Records
All survey's (two scales) will be confidential; any names that may be shared with the researcher will not be used in this study. All data collected will be used strictly for the dissertation completion of the researcher. Choosing not to participate will not reduce the availability of attending or accessing ESL services. This is VOLUNTARY.

Additionally, while every effort will be made to keep your study-related information confidential, there may be circumstances where this information must be shared with: ~Federal agencies, for example the Office of Human Research Protections, whose responsibility is to protect human subjects in research; * Representatives of Ohio University (OU), including the Institutional Review Board, a committee that oversees the research at OU;

Contact Information
If you have any questions regarding this study, please contact Sarita M. Sankey/Or. Mona Robinson, ss327 705@ohio.edu; robinsoh@ohio.edu, at 307-860-4767. If you have any questions regarding your rights as a research participant, please Contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740)593-0664.

By signing below, you are agreeing that:

• you have read this consent form (or it has been read to you) and have been given the opportunity to ask questions
• known risks to you have been explained to your satisfaction.
• you understand Ohio University has no policy or plan to pay for any injuries you might receive as a result of participating in this research protocol
• you are 18 years of age or older
• your participation in this research is given voluntarily
• you may change your mind and stop participation at any time without penalty or loss of any benefits to which you may otherwise be entitled.

Signature _____________________________ Date. _____

Printed Name ______
Version Date: [insert 04/02/08]
Forma de Consentimiento de Universidad de Ohio

Título de Investigación: un Examen de la Relación entre Aculturación nivel y PTSD entre Inmigrantes centroamericanos en los Estados Unidos

Investigador: Sarita M. Sankey
Le piden participar en la investigación. Para usted para ser capaz de decidirse si usted quiere participar en este proyecto, usted debería entender lo que el proyecto es sobre, así como los riesgos posibles y ventajas a fin de tomar una decisión informada.

Este proceso es conocido como el consentimiento informado. Esta forma describe el objetivo, procedimientos, ventajas posibles, y riesgos. Esto también explica como su información personal será usada y protegida. Una vez que usted ha leído esta forma y sus preguntas sobre el estudio son contestadas, le pedirán firmarlo. Este permitirá su participación en este estudio. Usted debería recibir una copia de este documento para tomar con usted.

Explicación de Estudio
Este estudio examina el nivel de aculturación (como usted se ha adaptado al americano cultura desde traslado a los Estados Unidos), y Desorden de Tensión Postraumático (PTSD). Este estudio utilizará a participantes de la región centroamericana (los países de El Salvador, Nicaragua y Guatemala). Si usted ha sido expuesto a un acontecimiento traumático en su vida o usted o alguien en su familia huyó su país de procedencia durante los años 1990 de años 1970 debido a una guerra civil, este estudio procurará examinar sus síntomas en este presente.

Cada revisión (tres será usado para este estudio) tomará aproximadamente 10-15 minutos para completar, y el margen de tiempo será durante un tiempo previsto y pasará de moda con el investigador, pero sería según una lista que trabaja mejor con usted (por ejemplo, un sábado en el Centro de centroamericano recurso en Washington, D.C. o tarde durante la semana). Finalmente, la tres revisión será proporcionada tanto en inglés como en español.

Riesgos e Incomodidades
La revisión en PTSD (Desorden de Tensión Postraumático) puede provocar memorias de un acontecimiento traumático, y algunas preguntas pueden ser incómodas para contestar. Así, es importante que usted sea hecho consciente de este, y el investigador deberá contestar allí cualquier pregunta que puede provenir de este estudio. Si después de que usted completa este estudio y se hace apenado o quiere buscar servicios de orientación, usted puede llamar La Clínica Del Pueblo en 202-462-4788 para aconsejar servicios, o el
Departamento de la Salud Mental (Washington, D.C.) cuando ellos están abiertos 24 horas, 7 días por semana en 1-888-793-4357.

**Ventajas**
La participación en este estudio es estrictamente VOLUNTARIA; sin embargo este estudio ayudará a consejeros que pueden trabajar con la población centroamericana para proporcionar recomendaciones y sugerencias. Este estudio beneficiará la comunidad cuando hay investigación todavía mínima para ayudar a consejeros de salud mental y otros que trabajan con personas de la región centroamericana.

**Confidencialidad y Archivos**
Toda la revisión (tres) será confidencial; cualquier nombre que puede ser compartido con el investigador no será usado en este estudio. Todos los datos coleccionados serán usados estrictamente yo para la finalización de disertación del investigador. La elección no participar no reducirá la disponibilidad de asistencia o tener acceso a clases inglesas y servicios. Este es VOLUNTARIO.

*Además, mientras cada esfuerzo será hecho para guardar su información relacionada con el estudio confidencial, pueden haber circunstancias donde esta información debe ser compartida con:*
*Las agencias federales, por ejemplo la Oficina de Protecciones de Investigación Humanas, cuya responsabilidad es proteger sujetos humanos en la investigación.**
*Los representantes de la Universidad de Ohio (OU), incluso el Comité Examinador Institucional, un comité que supervisa la investigación en OU.

**Póngase en Contacto con Información**
Si usted tiene alguna pregunta en cuanto a este estudio, por favor póngase en contacto con Sarita M. Sankey/Dr. Mona Robinson, ss321105@ohio.edu; robinsoh@ohio.edu, en 301-860-4167.
Si usted tiene alguna pregunta en cuanto a sus derechos como un participante de investigación, por favor póngase en contacto con Jo Ellen Sherow, el Director de Conformidad de Investigación, Universidad de Ohio, (740) 593-0664.

Firmando abajo, usted está de acuerdo que:
• Usted ha leído esta forma de consentimiento (o le ha sido leído) y han sido dado la oportunidad de hacer preguntas.
• Riesgos conocidos a usted han sido explicados a su satisfacción.
• Usted entiende que la Universidad de Ohio no tiene ninguna política o plan de pagar para cualquier herida que usted podría recibir a consecuencia de la participación en este protocolo de investigación.
• Usted son 18 años mayores de edad o más viejos.
• Su participación en esta investigación es dado voluntariamente.
• Usted puede cambiar de opinión y parar la participación en cualquier momento sin la pena o la pérdida de cualquier ventaja a las cuales usted puede tener por otra parte derecho.

____________________________ _______________
Firma      Fecha

___________________________________
Nombre impreso
Demographic Information

Instructions for Volunteers Please respond to each question below.

1. Sex: ____________

2. Age: _____ Birthdate ______________________________

3. Where were you born? Country: __________________
   City/Town: ____________________________

4. What is your Race? ____________________________ ¿What is your ethnicity? (Salvadorian or Central American) ______________

5. What is your marital status?
   single ___ married _____ divorced ____ separated ____ living with partner ____
   widowed ____ other: __________________________

6. What is your occupation? _________________

7. What level of Education have you completed?
   Elementary school ____ High School _____ Vocational or Technical School ____
   College _____ Graduate School ______

8. What year did you come to United States? ______________

9. Do you have family in the United States? YES NO

10. Who else your family is in the United States?
    __________________________________________

11. Why did you or your family leave your country of origin? The War ______ Other reason: ____________________________
Información Demográfica

Instrucciones para voluntarios: Por favor responda las siguientes preguntas abajo.

1. Sexo:__________

2. Edad:______ Fecha de nacimiento________________________

3. ¿Donde nació usted? País:_______________________
   Ciudad/Pueblo: _________________________

4. ¿Cuál es su raza?______________________ ¿Cuál es su origen étnico?
   (salvadoreño o Central americana) ________________

5. ¿Cuál es su estado civil?
   Soltero/a___ casado/a_____ divorciado/a___ separado/a___
   Conviviendo con un compañero/a____ viudo/a___ otro: _____________

6. ¿Cuál es su ocupación?______________

7. ¿Que nivel de educación ha completado usted?
   Escuela primaria____ escuela secundaria_____ escuela vocacional o
   técnica____
   universidad____ estudios de posgrado_____

8. ¿Qué año vino usted a los Estados Unidos?______________

9. ¿Es su familia en los Estados Unidos con usted? Si No

10. ¿Quién en su familia está en los Estados Unidos?________________________

11. Por qué hizo usted o su familia dejan su país de origen? la guerra______
    otro:__________________________________________
Permission to use the AMAS-ZABB

From: Maria-Cecilia Zea (zea@gwu.edu)
Sent: Thu 3/27/08 1:38 PM
To: Sarita Sankey (keysan1@msn.com)

Sarita,

Yes, you have our permission to use the AMAS-ZABB. Please keep this note for your records, as UMI requires it.

Good luck in your defense!

__________________________________________

Maria Cecilia Zea, Ph.D.
Professor
Department of Psychology
George Washington University
2125 G. St., N.W.
Washington DC 20052

Telephone: (202) 994-6321
FAX number: (202) 994-4619
web page: http://home.gwu.edu/~zea
e-mail: zea@gwu.edu
PCL-C scale in Spanish (just an inquiry)

From: Marshall, Grant (grantm@rand.org)

Sent: Mon 6/16/08 2:41 PM
To: Edelen, Maria Orlando (orlando@rand.org); Sarita Sankey (keysan1@msn.com)

Hi Sarita,

I'd be happy to send you our Spanish version. I have it at the office, and I'm working at home today. So, I will send to you in the next day or so.

Best, Grant

________________________________

From: Edelen, Maria Orlando
Sent: Mon 6/16/2008 11:37 AM
To: 'Sarita Sankey'
Cc: Marshall, Grant
Subject: RE: PCL-C scale in Spanish (just an inquiry)

Hi Sarita -- I am forwarding your request to my colleague Grant Marshall. I think he will be able to give you access to the Spanish translation of the PCL-C. Thanks for your interest, and good luck with your dissertation. -Maria
Trauma Assessment for Adults-Self-report (TAA) (In Spanish?)

From: Resnick PhD, Heidi S (resnickh@musc.edu)
Sent: Wed 6/25/08 9:21 AM

Sarita, I forwarded your e-mail to a few folks here to see if they might have a translated version. There is a briefer version that has been used in a mental health center setting and then a longer interview version we use in our clinic. See attached
PTSD inquiry (Working with Spanish-speaking populations) (From PhD Candidate)

From: Frank Weathers (weathfw@auburn.edu)

Sent: Tue 9/16/08 4:20 PM
To: Sarita Sankey (keysan1@msn.com)

Hi, Sarita. I can’t tell if I ever responded to this or not. If not, I apologize for the delay. It got buried in my inbox, and I’m just now coming across it. You are welcome to use the Spanish version of the PCL, which it sounds like you already have. Beyond that, I really don’t know of good measures with adequate translations in Spanish. I hope you have been able to track some down for use in your project. I’m sorry I can’t be of more help. Frank
APPENDIX E: TAA (TRAUMA ASSESSMENT FOR ADULTS) - ENGLISH AND SPANISH

Trauma Assessment for Adults – Brief Revised Version*

This questionnaire asks about many different types of stressful or difficult life events. These kinds of events can be frightening or upsetting to almost everyone. During your life, have any of the following things ever happened to you?

INSTRUCTIONS: PLEASE CHECK YES OR NO IN RESPONSE TO EACH QUESTION ABOUT THE FOLLOWING TYPES OF EVENTS.

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Have you ever been in the military in a war zone, or had a military combat experience?</td>
<td>___</td>
</tr>
<tr>
<td>2. Have you ever been in a really bad accident (car, at work, or somewhere else) and thought you might be killed or injured?</td>
<td>___</td>
</tr>
<tr>
<td>3. Have you ever been in a natural disaster (tornado, hurricane, flood, or major earthquake) and thought you might be killed or injured?</td>
<td>___</td>
</tr>
<tr>
<td>4. Have you had a serious illness, such as cancer, leukemia, AIDS, multiple sclerosis, etc.?</td>
<td>___</td>
</tr>
</tbody>
</table>

The next three questions are about unwanted sexual experiences you may have had during your life. You may not have reported these experiences to the police or ever told family or friends. Also, the person who did these things might not have been a stranger, but may have been a friend, a date, or even a family member. These kinds of sexual experiences can happen at anytime in a person's life, even as a child. Regardless of how long ago it happened, or who did these things, have any of the following events ever happened to you...

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>5. Did you ever have sexual contact with anyone who was at least 5 years older than you before you reached the age of 13?</td>
<td>___</td>
</tr>
</tbody>
</table>

(Sexual contact can mean between someone else and your sexual organs—(penis or genital area for men; vagina, genital area, or breasts for women), -or between you and someone else's sexual organs (a male or female's genital area, or a woman's breasts) |

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Before you were age 18, has anyone ever used pressure or threats to have sexual contact with you?</td>
<td>___</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. At any time in your life, whether you were an adult or a child, has anyone used physical force or threat of force to make you have some type of unwanted sexual contact?</td>
<td>___</td>
</tr>
</tbody>
</table>
8. At any time in your life has anyone (including family members or friends) ever attacked you with a gun, knife, or some other weapon, regardless of whether you ever reported it?  Yes  No

9. At any time in your life has anyone (including family members or friends) ever attacked you without a weapon, but with the intent to kill or seriously injure you?  Yes  No

10. Have you ever witnessed someone seriously injured or killed?  Yes  No
   If yes, what happened?  

11. Have you experienced any other situation that was not already asked about which was extremely stressful?  Yes  No
   If yes, what was it?  

12. Has a close friend or family member ever been intentionally killed or murdered by another person or killed by a drunk driver?
   A. Murdered/killed?  Yes  No
   B. Killed by a drunk driver?  Yes  No
   Relationship of the victim(s) to you?  

Evaluación de traumas para adultos— breve versión revisada

Este cuestionario indaga sobre distintos tipos de eventos difíciles y estresantes. Esos tipos de eventos pueden ser espantosos o perturbadores para prácticamente cualquier persona. ¿Ha experimentado usted algunos de los siguientes eventos durante su vida?

Instrucciones: Por favor marque <sí> o <no> respondiendo a cada pregunta referente a los siguientes tipos de eventos

<table>
<thead>
<tr>
<th>Núm.</th>
<th>Pregunta</th>
<th>Sí</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>13.</td>
<td>¿Ha servido usted en las fuerzas armadas y, como tal, estado alguna vez en una zona de guerra? ¿Ha sido un combatiente?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>¿Ha estado usted alguna vez en un grave accidente (automovilístico, laboral, otro lugar), donde pensó pudo haber muerto o lesionarse seriamente?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>¿Ha experimentado usted alguna vez algún desastre natural (tornado, huracán, inundación, terremoto), donde pensó pudo haber muerto o lesionarse seriamente?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>¿Ha sufrido alguna vez o actualmente sufre usted de una enfermedad grave como, por ejemplo, cáncer, leucemia, SIDA, multiple sclerosis, etc.?</td>
<td></td>
<td></td>
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</table>

Las próximas tres preguntas tienen que ver con experiencias sexuales no deseadas las cuales, acaso, usted experimentó alguna vez en su vida. Posiblemente usted ni reportó esa experiencia a la policía, ni confió en un pariente o amigo. Así también, la persona que llevó a cabo esas acciones pudo no haber sido un desconocido, sino que pudo haber sido un amigo, un pretendiente o, incluso, un miembro de la familia. Ese tipo de experiencias le pueden ocurrir a cualquiera, no importa la edad. Independientemente del tiempo que haya transcurrido desde aquel incidente, o quién lo perpetró, ¿ha usted experimentado alguno de los siguientes eventos…?

<table>
<thead>
<tr>
<th>Núm.</th>
<th>Pregunta</th>
<th>Sí</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Antes de cumplir los 13 años, tuvo usted contacto sexual con alguna persona al menos cinco años mayor?</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(La definición de contacto sexual incluye el contacto con alguien más y sus órganos reproductivos —(el pene o el área genital para los hombres; la vagina, el área genital y los senos, para las mujeres)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Antes de cumplir los 18 años, alguien, alguna vez, intentó presionarle o intimidarle sexualmente?</td>
<td></td>
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<tr>
<td>7.</td>
<td>En algún momento de su vida, sea ya de adulto o durante su infancia o adolescencia, alguien, alguna vez, utilizó fuerza física o la promesa de fuerza física para obligarle a usted a participar en algún tipo de</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>contacto sexual no deseado?</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sí No</td>
<td></td>
<td></td>
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<tr>
<td>8. Independientemente de haberlo reportado o no, alguna vez en su vida (incluyendo a parientes y a amigos) ha sido usted atacado con un arma de fuego, navaja o cualquier otro tipo de objeto?</td>
<td></td>
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<tr>
<td>9. alguna vez en su vida (incluyendo a parientes y a amigos) ha sido usted atacado, aún en la ausencia de un arma, pero con la intención de matarle o herirle severamente?</td>
<td></td>
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<tr>
<td>10. ¿Ha sido alguna vez usted testigo ocular de algún evento en cuyo resultado alguien fue asesinado o herido severamente?</td>
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<tr>
<td>De ser afirmativa su respuesta, ¿qué sucedió?</td>
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<tr>
<td>11. Ha experimentado usted alguna otra situación sobre la cual no se le ha preguntado, pero que fue considerablemente estresante?</td>
<td></td>
<td></td>
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<tr>
<td>De ser afirmativa su respuesta, ¿cuál es la situación?</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Ha usted sufrido la muerte de algún miembro familiar o de alguna amistad en manos de un conductor ebrio o como resultado de alguna intención homicida?</td>
<td>Asesinado/matado</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Muerte accidental (conductor ebrio)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>¿Qué tipo de relación tenía usted con la persona difunta?</td>
<td></td>
<td></td>
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</tbody>
</table>

3/01 *Adapted from the Trauma Assessment for Adults – Self Report version Resnick, Best, Kilpatrick, Freedy, & Falsetti (1993)
APPENDIX F: AMAS-SCALE (ZEA, ASNER-SELF, BIRMAN & BUKI, 2003)
ABBRIEVIATED MULTIDIMENSIONAL ACCULTURATION SCALE- ENGLISH AND SPANISH

*Abbreviated Multidimensional Acculturation Scale (Zea, Asner-Self, Birman, & Buki)*

The following section contains questions about your *culture of origin* and your *native language*. By *culture of origin* we are referring to the culture of the country either you or your parents came from (e.g., Puerto Rico, Cuba, China). By *native language* we refer to the language of that country, spoken by you or your parents in that country (e.g., Spanish, Quechua, Mandarin). If you come from a multicultural family, please choose the culture you relate to the most.

Instructions: Please mark the number from the scale that best corresponds to your answer.

1. Strongly Disagree
2. Disagree Somewhat
3. Agree Somewhat
4. Strongly Agree

1. I think of myself as being U.S. American.
2. I feel good about being U.S. American.
4. I feel that I am part of U.S. American culture.
5. I have a strong sense of being U.S. American.
6. I am proud of being U.S. American.
7. I think of myself as being (a member of my culture of origin).
8. I feel good about being (a member of my culture of origin).

9. Being (a member of my culture of origin) plays an important part in my life.

10. I feel that I am part of culture (culture of origin).

11. I have a strong sense of being (culture of origin).

12. I am proud of being (culture of origin).

Please answer the questions below using the following responses:

1- Not at all
2- A little
3- Pretty Well
4- Extremely Well

**How well do you speak English:**

13. at school or work
14. with American friends
15. on the phone
16. with strangers
17. In general

**How well do you understand English?**

18. on television or in movies
19. In newspapers and magazines
20. Words in songs
21. In general
Please answer the questions below using the following responses:

1- Not at all  
2- A little  
3- Pretty Well  
4- Extremely Well

**How well do you speak your native language?**

22. with family  
23. with friends from the same country as you  
24. on the phone  
25. with strangers  
26. In general

**How well do you understand your native language:**

27. on television or in movies  
28. In newspapers and magazines  
29. Words in songs  
30. In general

**How well do you know:**

31. American national heroes  
32. Popular American television shows  
33. Popular American newspapers and magazines  
34. Popular American actors and actresses  
35. American history
36. American political leaders

**How well do you know:**

37. National heroes from your native culture

38. Popular television shows in your native language

39. Popular newspapers and magazines in your native language

40. Popular actors and actresses from your native culture

41. History of your native culture

42. Political leaders from your native culture
Abbreviated Multidimensional Acculturation Scale (Zea, Asner-Self, Birman, & Buki, 2003)

Aculturación

La siguiente sección contiene preguntas sobre su cultura de origen y su lengua materna. Al usar el término cultura de origen, nos referimos a la cultura del país del cual usted o sus padres vienen (por ejemplo, Puerto Rico, Cuba o China). Lengua materna se refiere al idioma que usted o sus padres hablaban en ese país (por ejemplo, español, quechua, mandarín). Si viene de una familia multicultural, por favor escoja la cultura hacia la cual siente más apego.

NOTA: Cuando vea la palabra “estadounidense” queremos decir persona de los Estados Unidos.
Instrucciones: Escoja una de las opciones que aparecen a continuación de cada una de las frases. Por favor señale con un círculo la opción que corresponda a su respuesta.

1. Me considero estadounidense.

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

2. Me siento bien de ser estadounidense.

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

3. Ser estadounidense juega un papel importante en mi vida.
4. Yo siento que formo parte de la cultura estadounidense.

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

5. Me siento completamente estadounidense. Totalmente

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

6. Me siento orgulloso de ser estadounidense. Totalmente

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
7. Pienso que soy ___________ (miembro de mi cultura de origen).

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

8. Me siento bien de ser ___________ (miembro de mi cultura de origen).

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

9. Ser ___________ (miembro de mi cultura de origen) juega un papel importante en mi vida.

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
10. Siento que formo parte de la cultura ____________ (mi cultura de origen).

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

11. Me siento completamente ____________ (mi cultura de origen).

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo

12. Me siento orgulloso de ser ____________ (mi cultura de origen).

1- Totalmente en desacuerdo
2- Más o menos en desacuerdo
3- Más o menos de acuerdo
4- Totalmente de acuerdo
Instrucciones: Por favor señale con un círculo la opción que corresponda a su respuesta.

CUÁN BIEN HABLA INGLÉS?

13. en el colegio o trabajo

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   Bien

14. con amigos norteamericanos

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

15. en el teléfono

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

16. con desconocidos

1- Nada
17. en general
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

CUÁN BIEN ENTIENDE INGLÉS?

18. en la televisión o en el cine
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

19. en periódicos y revistas
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

20. en la letra de las canciones
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21. **en general**

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<td>4</td>
<td>Perfectamente</td>
<td>bien</td>
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**CUÁN BIEN HABLA ESPAÑOL?**

22. **con la familia**

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<td>Bastante</td>
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<td>4</td>
<td>Perfectamente</td>
<td>bien</td>
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23. **con amistades de su mismo país**

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<td>3</td>
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<td>4</td>
<td>Perfectamente</td>
<td>bien</td>
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</tbody>
</table>
24. por teléfono
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

25. con desconocidos
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

26. en general
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

CUÁN BIEN ENTIENDE ESPAÑOL?

27. en la televisión o en el cine
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
28. en periódicos y revistas
   1- Nada
   2- Un poco
   3- Bastante
      bien
   4- Perfectamente
      bien

29. en la letra de las canciones
   1- Nada
   2- Un poco
   3- Bastante
      bien
   4- Perfectamente
      bien

30. en general
   1- Nada
   2- Un poco
   3- Bastante
      bien
   4- Perfectamente
      bien

CUÁN BIEN CONOCE...

31. Los héroes nacionales de Estados Unidos.
   1- Nada
32. Los shows populares de la televisión de Estados Unidos.

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

33. Los periódicos y revistas populares de Estados Unidos.

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

34. Los actores y actrices populares de Estados Unidos

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien
35. La historia de Estados Unidos.

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

36. Los líderes políticos de Estados Unidos.

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

CUÁN BIEN CONOCE...

37. Los héroes nacionales de su cultura nativa.

1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

38. Los shows populares de la televisión en su lengua materna.

1- Nada
2- Un poco
3- Bastante
bien
4- Perfectamente
bien

39. Los periódicos y revistas populares en su lengua materna.
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

40. Los actores y actrices populares de su cultura materna.
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

41. La historia de su cultura nativa.
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien

42. Los líderes políticos de su cultura nativa.
1- Nada
2- Un poco
3- Bastante
   bien
4- Perfectamente
   bien
APPENDIX G: PCL-C- ENGLISH AND SPANISH

PTSD Checklist – Civilian Version (PCL-C)

Instruction to patient: Below is a list of problems and complaints that sometimes people have that experienced trauma, and have in response to stressful life experiences. Please read each one carefully, put an “X” in the box to indicate how much you have been bothered by that problem in the last month.

<table>
<thead>
<tr>
<th>No.</th>
<th>Response</th>
<th>Not at all (1)</th>
<th>A little bit (2)</th>
<th>Moderately (3)</th>
<th>Quite a bit (4)</th>
<th>Extremely (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Repeated, disturbing memories, thoughts, or images of a stressful experience from the past?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Repeated, disturbing dreams of a stressful experience from the past?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>3.</td>
<td>Suddenly acting or feeling as if a stressful experience were happening again (as if you were reliving it)?</td>
<td></td>
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<tr>
<td>4.</td>
<td>Feeling very upset when something reminded you of a stressful experience from the past?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Having physical reactions (e.g., heart pounding, trouble breathing, or sweating) when something reminded you of a stressful experience from the past?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Avoid thinking about or talking about a stressful experience from the past or avoid having feelings related to it?</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Avoid activities or situations because they remind you of a stressful experience from the past?</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>8.</td>
<td>Trouble remembering important parts of a stressful experience from the past?</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9.</td>
<td>Loss of interest in things that you used</td>
<td></td>
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</tr>
<tr>
<td>16.</td>
<td>Being &quot;super alert&quot; or watchful on guard?</td>
<td></td>
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<tr>
<td>17.</td>
<td>Feeling jumpy or easily startled?</td>
<td></td>
<td></td>
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</tbody>
</table>

(HAND CARD 2)

Antes, estábamos conversando sobre lo que usted estaba pensando y sintiendo durante el (ataque). Ahora, le voy a leer una lista de los problemas y las quejas que tienen algunas veces las personas después de fueron (atacadas). Por favor, digame desde el momento en que lo/a (atacaron/an) hasta ahora qué tanto le ha molestado cada una de las cosas que le voy a mencionar.

Desde que lo/a (atacaron/an), ¿qué tanto le ha molestado ________?

<table>
<thead>
<tr>
<th></th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA- DAMENTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>D1. Que se le repitan los recuerdos, los pensamientos, o las imágenes preocupantes del (ataque)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D2. Que se le repitan algunos de los sueños (ataque) que lo/a atormentan?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D3. Que de repente comience a actuar o a sentirse como si lo/a estuvieran (atacando) de nuevo (como si lo estuviera viviendo otra vez)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D4. Sentirse muy disgustado/a, enfadado/a cuando algo le hacía acordar el (ataque)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D5. Tener reacciones físicas (como que le late (palpita) muy fuerte el corazón, problemas para respirar, sudores) cuando alguna cosa le hacía recordar el (ataque)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D6. Evitar pensar o hablar sobre el (ataque) o evitar los sentimientos que tengan que ver con el (ataque)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D7. Evitar las actividades o situaciones porque le recordaban que usted fue (atacado/a)?</td>
<td>1</td>
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<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D8. Los problemas que ha tenido para recordar lo que pasó durante el (ataque) (sin contar las cosas que no puede recordar porque estaba inconsciente)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>5</td>
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<tr>
<td>D9. Perder el interés en las actividades que disfrutaba antes?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D10. Sentirse distante o alejado/a de los demás?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>D11. No tener sentimientos o como que no era capaz de sentir cariño o amor por las personas cercanas a usted?</td>
<td>1</td>
<td>2</td>
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<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Desde que lo/a (atacaron/an), ¿qué tanto le ha molestado ______?

<table>
<thead>
<tr>
<th>D12. Sentir como si de alguna manera su futuro va a ser más corto de lo que pensaba?</th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA DAMENTE</th>
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<table>
<thead>
<tr>
<th>D13. Los problemas para quedarse dormido/a, o problemas durmiendo?</th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA DAMENTE</th>
<th>75/</th>
</tr>
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<thead>
<tr>
<th>D14. Sentirse de mal humor o tener ataques de cólera? (coraje, enojarse)?</th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA DAMENTE</th>
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<thead>
<tr>
<th>D15. Tener dificultades para concentrarse?</th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA DAMENTE</th>
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<table>
<thead>
<tr>
<th>D16. Estar muy pero muy &quot;alerta&quot; o atento/a, o muy a la defensiva?</th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA DAMENTE</th>
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<table>
<thead>
<tr>
<th>D17. Sentirse que se ajusta o se siente saltar fácilmente?</th>
<th>PARA NADA</th>
<th>UN POQUITO</th>
<th>MODERADAMENTE</th>
<th>BASTANTE</th>
<th>EXTREMA DAMENTE</th>
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