ACCULTURATIVE STRESS AND POST-TRAUMATIC

STRESS DISORDER AMONG LATINO

AND ASIAN IMMIGRANTS

by

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ABSTRACT

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Mental health needs for immigrants are complicated by previous trauma and living in a new country. This study examined acculturative stress (AS) and post-traumatic stress disorder (PTSD) among immigrants by conducting a secondary data analysis of the 2002 to 2003 National Latino American and Asian American Study (N=3,259). The primary acculturative stressors identified were limited contact with family and friends, difficulties interacting with others due to language limitations and not receiving the same respect as in the country of origin. Latinos experienced more acculturative stress than Asians. Measures of sex, age, race, education, age of immigration, length of stay in the U.S. were used as independent variables to assess differences between Latinos and Asians in both PTSD and AS. Latinos experienced more AS factors than Asians and Asians experienced more PTSD than Latinos. Implications and recommendations for social work practice and policy are discussed along with recommendations for future research.

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CHAPTER 1

INTRODUCTION

Mental health needs of immigrants are complicated by previous exposure to trauma and stress related to living life in a new country and a new culture—often referred to as the host culture (Cheung & Snowden, 1990; Ellis, MacDonald, Lincoln, & Cabral, 2008; Jamil, Nassar-McMillan, & Lambert, 2007; Nicholson, 1997). Trauma exposure may lead to posttraumatic stress disorder (PTSD), where a specific life threatening event has occurred affecting mental health (American Psychiatric Association [APA], 2000). As higher rates of PTSD are experienced by immigrant minorities (Dreyden-Edwards, 2009; Penk et al., 1989; Pole, Gone, & Kurkarni, 2008), psychosocial factors and factors related to a person's environment, must also be considered (APA, 2000). For instance, available data indicates that PTSD rates range between 10 to 30% among combat veterans and rape victims (Dreyden-Edwards, 2009), yet rates range higher for PTSD among minorities: 39% among Hispanic Vietnam veterans, 38% for Native Hawaiian Vietnam veterans and 24% among White Vietnam veterans (Loo, 2010). Higher PTSD rates are also found among women than men (Department of Health and Human Services [DHHS], 2009; Smart & Smart, 1995a). Proficient cultural mental health services are needed as the immigrant population continues to grow (Smart & Smart, 1994). Unfortunately, research and data regarding immigrant minority mental health is lacking (Escobar et al., 1983; Le, 2010; National Asian American Pacific Islander Mental Health Association [NAAPIMHA], 2007; Nicholson, 1997). Institutional barriers are evident beginning with phenotypic-based data lumping techniques which promote overgeneralization in literature (Cole, 1996; Le, 2010). To address some overgeneralizations, health needs for the largest (Latino) and fastest (Asian) growing immigrant groups were explored in this study by examining the 2002 to 2003 National

Latino American and Asian American Study (NLAAS). Stressors related to the adjustment process, deemed as acculturative stress (Berry, 2006), may serve as compounding psychosocial factors affecting immigrant mental health.

In addressing mental health needs, it is crucial that ethnic differences are considered including stressors related to acculturation. For years, disparities of access to healthcare for minorities have been documented and are recognized clearly by the government via the DHHS (Atdjian & Vega, 2005). To appropriately address immigrant needs in context, trauma and acculturative stress experienced by immigrants should be prioritized in treatment (Ellis et al., 2008; Jamil et al., 2007; Nicholson, 1997). Unlike non-minorities, the severity of experiences and needs vary per socio-political and subgroup background creating a varied and unique ecological conundrum for immigrant minorities (Chang & Subramaniam, 2008; Dale, Smith, Norlin, & Chess, 2009; Rothery, 2008; Sands, 2001). Acculturative stress has an effect on immigrant's PTSD symptoms. Being part of the Latino or Asian population increases the likelihood of trauma exposure and stress related to the acculturation process and may be indicative of the types of services needed, particularly by the adult minority immigrant populations (Weisman et al., 2005).

The costs of inappropriately addressed mental health issues are of high concern due to loss of productivity or loss of life itself (Añes, Sylvia, Paris, & Bedregal, 2008; Sawyer-Morse, 2004; DHHS, 1999b). As Jensen (2001) reported to the National Academy of Sciences, as baby-boomers get older "the *long-term* consequences of contemporary immigration for the American economy and society will hinge more on the future prospects of children in immigrant families rather than on the fate of their parents" (p.22). Pivotal culturally related factors must be addressed through national health trend recognition and effective health care planning as has been the need and the case for second generation minority immigrants. The NLAAS is a tool toward this end. Using data gathered in the NLAAS, the questions guiding this study were: 1) What are the top AS stressors faced by Latino and Asian immigrants? and 2) Are there

differences in PTSD among Latino and Asian immigrants based on the following variables: sex, age, race, age of immigration and years in the U.S. or education?

<p style="text-align:center">1.1 Literature Review</p>

1.1.1 Post-traumatic Stress Disorder

Great challenges in mental health have been generated through diversity in ethnic minority subgroups (Ortega & Rosenheck, 2000). Knowledge about immigrant minorities' mental health has been limited, particularly regarding post traumatic stress disorder (PTSD) (Escobar, et al., 1983). PTSD is directly related to a life threatening traumatic experience (APA, 2000). PTSD may appear at times with depression (APA, 2000; Kaltmen, Green, Mete, Shara, & Miranda, 2010). Neurologically in PTSD, memory may be impaired while remembering a traumatic event (APA, 2000). PTSD diagnostic criteria cover the broad categories of re-experiencing the event, avoidance, a restricted range of emotions, and hypervigilence (APA, 2000).

As reported in research, cultural minorities may experience higher rates of PTSD due to varying symptomology (Penk et al., 1989; Pole et al., 2008; Dreyden-Edwards, 2009). PTSD symptomology varies by duration, severity and proximity of trauma exposure (APA, 2000; Bremner, 2006; Shin, Rauch, & Pitman, 2006; Tischler et al., 2006). As individual experiences vary, a person-in-environment assessment approach is essential while working with a client.

A review of the literature found relatively high incidents of PTSD among Latino and Asian Americans. Immigrant minorities affected by PTSD have usually been exposed to war, rape, political related turmoil, community or interpersonal violence and other traumatic events at higher rates than their White counterparts (Holman, Silver, & Waitzkin, 2000). Therefore, the type and severity of trauma may be much more pronounced, particularly among Southeast Asians (U.S. DHHS, 1999a). In other words, trauma may be of a worse kind and more severe when experienced by immigrants. Comorbidity (experiencing more than one disorder) with

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PTSD is not uncommon due to its various complexities and various psychosocial stressors (APA, 2000; Shauer, Neuner, & Elbert, 2005). According to the literature, the multiplicity of traumatic events and length of time in the U.S. have been associated with an increased comorbidity rate of depression with PTSD (Kaltman et al., 2010). PTSD affects about 8% of the U.S. population (APA, 2000), 7% of Hispanics and 4% of Asians (Roberts, Gilman, Breslau, Breslau, & Koenen, 2010). However, this is likely a poor estimate given underreporting.

The U.S. DHHS (1999a) has long recognized underreporting of mental disorders among minorities. Underreporting may occur due to lack of cultural congruity (between research methods and populations of interest) and cultural pattern recognition (due to lack of cultural expertise in treatment) as found in mental health service utilization records (Cheung & Snowden, 1990). Unfortunately, those often needing treatment for PTSD do not receive it (Roberts et al., 2010). For instance, one medical primary unit study reported that 50% of Mexican and 76% of Central American patients were more likely to have experienced at least one traumatic event in their lifetimes (Holman et al., 2000). Evidence exists that the majority of Asian refugees from various countries of severe turmoil have experienced PTSD at staggering rates of 70% and up to 92% (Loue, 1998). Without a doubt, generational differences exist per global socio-political factors meaning that each generation will deal with their own set of socio-political factors affecting them. Consequently, PTSD may be prevalent among various refugees. Human trafficking victims may also be affected by severe traumatic experiences. Unfortunately, refugees and human trafficking victims are not within the specific scope of this study. Per available data from the NLAAS nationally representative household survey, this study focused on Latino and Asian immigrants in the U.S. and their experiences with PTSD which may be further compounded by acculturative stress.

1.1.2 Acculturation

Acculturation begins with interactions and exchanges between two cultural groups: immigrants and those in the host country (Berry, 2006). In adapting, negative adaptive changes lead to concerns about mental health (Berry, 2006). Exclusion, marginalization and segregation can occur for the immigrant making life difficult (Berry, 2006). Thus, acculturative stress is more evident when adjustment is problematic for groups or individuals (Berry, 2006).

Limited research on acculturative stress exists. A majority of the research has been completed on university students. Research completed on university participants may not be representative of the neediest immigrant populations and their situations. Critical race theorists provide insight into Eurocentrism and question the validity of interventions offered to marginalized groups per the mere racial structure in this country (Ortiz & Jani, 2010). Proportionate access and delivery of culturally relevant mental health services continues to lack for Asians (Chung & Bemak, 1998; Hwang and Ting, 2008; Le, 2010; Meyers, 2006; U.S. DHHS, 1999a; Yeh, 2003) and Latinos (Atdjian & Vega, 2005; Berkman, Guarnaccia, Díaz, Badger, & Kennedy, 2005; U.S. DHHS, 1999b; U.S. Public Health Service, 1999).

Immigration status may be commonly related to hardships, military oppression, lack of health information, natural disasters or other unfortunate circumstances individuals experience at micro, mezzo or macro levels in society. As immigrants face various challenges, acculturative stress indicators will be helpful in guiding future research as will be shown later (Alegría et al., 2004a). Older Latinos are less likely to face mental health distress than younger Latinos. For immigrant youth, Hispanic youth who are more acculturated report more stress than other youth, more suicide ideation and more suicide attempts among female adolescents than Asian youth who do not demonstrate these similar characteristics (The National Institute on Drug Abuse [NIDA], 2003). Hispanic youth who are more acculturated report higher drug usage as well when compared to Asian youth (NIDA, 2003). As psychosocial and mental health concerns continue to surround the process of acculturation, further research will be needed to extract the

interplay of challenges faced by minority immigrants in the U.S.

On the other hand, higher education levels among immigrants have been associated with better health and less acculturative stress. Less education and increased trauma are associated with higher anxiety rates (Nader, Dubrow, & Stamm, 1999). For Asian Indian Americans, mental health was reportedly mostly affected by acceptance (Mehta, 1998). The less accepted an Asian Indian felt by his or her workplace, for example, the higher his or her symptomology (Mehta, 1998). Due to high education, Asian Indians may not suffer acculturative stress related to language, usually a predictive stressor (Mehta, 1998). Hence, acculturative stress may be higher or not depending on an immigrant minority's level education.

In this literature review, only one study was found to focus on acculturative stress and PTSD though anxiety and depression were also included as these are often comorbid with PTSD. Jamil et al. (2007) completed a study of three waves of Iraqi immigrants to the U.S. Recency of immigration was positively correlated with all factors (acculturative stress, PTSD, anxiety and depression) (Jamil et al., 2007). "Duration, pervasiveness and intensity" of acculturative stress influenced the already complicated conditions under which Iraqi immigrants have migrated to the U.S. (Jamil et al., 2007, p.200). Though perhaps both well-educated, those Iraqis that moved to the U.S. due to political reasons since the Gulf War, have had more difficulty acclimating to the American culture than those who came in search for better educational and economic opportunities. Those who had experienced more difficulties were apparently more likely to hold on to their ethnic and cultural values leading to a slowing down of their acculturation process (Jamil et al., 2007).

Also, regarding stress, research has shows that heightened stress levels due to trauma could be more indicative of PTSD development than the trauma exposure itself (Schauer et al., 2005), which may especially be the case for immigrants. For instance, the primary medical unit study mentioned above indicated a higher percentage of Mexican and Central American

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patients experiencing trauma. Iraqis from the latest waves of immigrants in the Jamiel et al.'s (2007) study, also reported higher incidents of PTSD.

As previously mentioned, PTSD rates are also higher among women than men, regardless of ethnic background. As immigrant women deal with their process of acculturation and career advancement, they must also deal with societal expectations about obligations to their husband and posterity (Chung & Bemak, 1998) leading to potentially higher rates of PTSD. The *NAAPIMHA* (2007) reported that Asian Pacific Islander women hold the highest suicide rates among women while 40% of Southeast Asian refugees are affected by depression and 14% suffer from PTSD due to torture. Lack of language acquisition has notably affected women's mental health and their access and use of mental health services (Chung & Bemak, 1998). Sense of meaning and a person's loss of locus of control have also been documented in the literature regarding women (Berry, 2006; Smart & Smart, 1995a). Importantly, the DHHS' comments on immigrant mental health are thereby reiterated in some immigrant studies regarding gender.

Additionally, other immigrant trends persist. Age of arrival in addition to recency of arrival, also plays a role throughout the acculturation process. Immigrants' cultural identity varies per time spent in the U.S. and maladaptation related to the acculturation may be related to increased mental health problems (Berry, 2006). An apparently contrasting finding is that other research has shown that less acculturated individuals may actually seek more help when needed (Meyers, 2006; Ramos-Sánchez & Atkinson, 2009).

For mental health professionals, demographic variables may indicate the likelihood of encountering PTSD among immigrants. Women, older individuals and people with less education appear most vulnerable to higher levels of symptoms associated with PTSD due to higher probabilities of trauma exposure and greater acculturation pressures. Therefore, race and gender may serve as a proxy for acculturative stress such that women and minorities would have greater acculturative stress and higher levels of PTSD symptomology. Gaps in the

literature include: (1) an understanding of what are the acculturative stressors for Asians and Latinos; and (2) knowledge of differences between Latino and Asian subgroups related to PTSD and acculturative stress. This study sought to answer some these questions using data in NLAAS.

1.2 Theoretical Framework

Migrating from one country to another is a difficult and challenging experience for all people. The new immigrant experience varies for each ethnic group of people and for each individual person. One's culture and way of life is often challenged in the new country and in the new culture. Culture may be defined as, "the organized pattern of values, beliefs, and behaviors developed and transmitted over time by a social group" (Robbins, Chatterjee, & Canda, 1998, p. 122). Facing new cultural values, beliefs and behaviors will affect an ethnic group of people or an individual person's adjustment to the new country and the new culture. Adjusting to living in a new, host, country may entail learning a new language, becoming accustomed to new food, work styles, dealing with credit agencies, purchasing property, dealing with new educational or vocational systems, different methods of transportation and so on.

An immigrants' experience will vary upon the actual contact made with groups and individuals of the host culture in which they live. For example, an immigrant's experience may be different if they moved to a large urban area versus moving to a rural area within the same state in the same country. A person's mental health may also be affected by dealing with various cultural stressors when and if struggling to find a balance with his or her own cultural background within the new host culture setting. The immigrant's particular culture and stressors related to the acculturation process must be taken into account. As mental health can potentially be affected through this transition, it is important for practitioners to remember that symptom expression of ailments, worries, stressors or other issues related to mental health vary per culture as feelings, emotions and behaviors (including various forms of expression) are culture-

bound and interpreted differently by given cultures and individuals (APA, 2000; Ellis et al., 2008; Escobar et al., 1983; Nicholson, 1997; Ortega & Rosenheck, 2000).

The process of acculturation occurs when living in a new country. Acculturation is the socialization process in one's identity formation regarding a host culture (Baker, 2003). The host culture is the dominant culture which establishes the norms in the country; "the host culture in the U.S. is largely European-based" (Hsiag & Witig, 2008, p.286). The interactions and exchanges between cultures of origin and what is considered "the larger social network" (Berry, 2006, p.290), have been analyzed through different lenses. Theorists have argued for linear versus bicultural models for interpreting the process of acculturation for ethnic groups or individuals in relation to the host culture. Linear models include assimilation or "Americanization" ideas where immigrant minorities give up their own culture (language, traditions and habits) and embrace the new host culture completely and thus, assimilate (Robbins et al., 1998). Bicultural models argue that positive aspects of two cultures can be embraced to function within both cultures (Robbins et al., 1998).

Berry posits ideas of different cultural interactions in his theory of acculturation through an interactive cultural exchange between the culture of origin and the host culture. According to Berry (2003), methods of learning culture vary by country of origin. The change in cultures ultimately affects a person's ethnic identity. Chae and Foley's (2010) cited Phinney, Dupont, Espinosa, Revil and Sanders (1994) in defining ethnic identity as "a feeling of belonging to one's group, a clear understanding of the meaning of one's membership, positive attitudes toward the group, familiarity with its history and culture and involvement in its practices" (p.467). As we become socialized in a new country, we, in essence, develop a new ethnic identity as new customs or means of doing things may change in order to function in the new country (Robbins, et al., 1998). We adapt in various ways by adding, incorporating or somewhat rejecting various cultural elements.

The acculturative process may include self-made negotiations and decisions about how much one will conform to the larger society (Barker, 2003). When one integrates two cultures, a bicultural socialization process affecting ethnic identity formation takes place and conflict or stress is created when "[enculturated] values or behaviors are different from those of society at large" (Robbins et al., 1998). "Society at large" or the "host culture" may require, expect or enforce assimilation from another individual or ethnic group. For example, Latino youth's socialization processes are mediated partly by their generational status in the U.S., (resembling a level of acculturation), and their family's ethnic socialization and influence (resembling enculturation) (Umaña-Taylor, Alfaro, Bámaca, & Guimond, 2009). The Latino youth, in this instance, must develop coping strategies to address any tension built around this socialization process, particularly as dynamic intergenerational exchanges occur in the family.

Berry's model of acculturation includes four categorizations to describe the plausible interaction between an immigrant and a host culture. These include assimilation, integration, separation and marginalization (Berry, 2006). Assimilation entails a greater acceptance of a host culture than the culture of origin whereas separation entails rejection of the host culture while embracing the culture of origin (Berry, 2006). Integration represents a merging of cultures where both cultures are valued by the immigrant and seen as healthy. On the other hand, separation may occur when the immigrant is set aside from the larger society or when the immigrant rejects the larger society which is seen as negative and unhealthy (Berry, 2006). As interpreted through the model, society's role as the host culture may or may not be conducive to an individual or a group's integration into the host culture (Berry, 2006). Yet, "when there is little possibility or interest in cultural maintenance (often for reasons of enforced cultural loss), and little interest in having relations with others (often for reasons of having experienced exclusion or discrimination) then marginalization [the fourth categorization in the acculturation model] is defined" (Berry, 2006, 291). Marginalization is considered the worst type of category to be in according to the acculturation model.

Although previous researchers proposed that some immigrants maladapted due to their "low adherence to both ethnic family cultural values and behaviors and societal values and behaviors" (similar to the marginalization described above) (Robbins et al., 1998, p.133), thus pathologizing those who maladapted, recent social work research advocates for an anti-oppressive social work model for working with immigrants (Sakamoto, 2007). It is proposed that society itself aids to separate or marginalize immigrants by oppressing the immigrant minority culture. In developing an anti-oppressive social work model, Sakamoto (2007) argues that those who do no acculturate "enough" are pathologized by the greater society and that social workers must pay attention to different disciplines' ideological positions to examine how these assumptions actually translate to practice (p.521). She argues that social service workers implicitly assume "structural assimilationist views under the guise of 'immigrant integration'" per the nature of their governmentally funded jobs (Sakamoto, 2007, p. 527). In other words, as social workers work with immigrants, the goal should not be strict integration of the immigrant into mainstream or larger society, but collaboration among intersecting cultures while paying particular attention to the bigger picture involved in providing services to immigrants.

Understanding stress associated with "acculturation" is necessary as different cultural groups and individuals' reactions to living in a new country and a new culture vary. Specific stressors that immigrants deal with can be termed "acculturative stress," a term which originated from other terms like "culture shock" (Berry, 2006) and "culture stress" (Smart & Smart, 1995). Acculturative stress may be defined as "the psychological impact of adaptation to a new culture," (Smart & Smart, 1995b, p.25). Stressors may be psychological, social, or physical, related to the individual, the role of the environment and the coping strategy chosen or experienced as presented in the acculturation categories (assimilation, integration, separation and/or marginalization) (Berry, 2006).

The acculturation process may be affected by and related to acculturative stress for an immigrant individual or group (Berry, 2006; Cuéllar, Arnold, & González, 1995; Smart & Smart,

1995). Loss is often a part of the acculturative stress experience (Berry, 2006; Smart & Smart, 1995) and acculturative stress may be pervasive and intense (Smart & Smart, 1995). For instance, Smart and Smart (1995) report that perceived self-identity is affected by support loss in Hispanics, thus affecting Hispanics' mental health as if one's locus was lost. In a study of female Mexican migrant workers in Michigan, Hovey and Magana (2003) found that the women were at higher risks for depressive symptoms per the real and psychological loss produced by the acculturation process. In Sakamoto's study, Chinese Canadians expressed much difficulty in obtaining employment once in Canada. One former dean for a school department related that she cried for a month while not being able to not only not continue her profession in Canada, but for not being able to do very much at all as far as her career advancement in her new country (Sakamoto, 2007).

The financial burdens associated with acculturation stress is illustrated by a South African immigrant who tells the story of having to "start from scratch" as he was not allowed to take any of his monetary assets when he left his home country. Upon arrival to the U.S. he stated, "the system is discriminatory by nature. Though I may not look like I am from somewhere else, the minute I open up my mouth people ask, "Where are you from?" and nothing else matters. I am an outsider to them. The 14 houses or over 100 employees I had in one company alone did not matter. It did not matter at all." (Name withheld, personal communication, April 24, 2011).

As migratory practices continue or increase by the demands of an ever-increasing global economy and political systems, the development of specific measures of acculturative stress would aid in understanding the additional challenges experienced by the immigrant workforce. Acculturative stress has been recently assessed through specific indicators. Acculturative stress indicators may involve dealing with loss as explained above, issues of respect as received or perceived by the immigrant, limited contact with friends or family of origin, language barriers, questions about legal status or other employment-related discrimination, or fear of deportation if

health services were to be accessed (Alegría, Vila, Woo, Canino, Takeuchi, Vera, et al., 2004). Studying acculturative stress measures provides insight into top stressors faced by immigrants, particularly when compounded by dealing with traumatic experiences.

1.3 Research Questions

Research questions remain regarding acculturative stress (AS) and PTSD among immigrant populations. Per the NLAAS, gaps in the literature can begin to be addressed with a representative sample of Latino and Asian immigrant minorities. Based on the data from the NLAAS, the following questions are addressed in this study:

(1) What are the top AS stressors faced by Latino and Asian immigrants?

(2) Are there differences in PTSD among Latino and Asian immigrants based on the following variables: sex, age, race, age of immigration and years in the U.S. or education?

CHAPTER 2

METHODS

2.1 Study Components

A secondary data analysis was completed using the 2002 to 2003 National Latino American and Asian American Study (NLAAS). Approval was granted from the University of Texas at Arlington's Institutional Review Board for exempt status #2011-0465e (See Appendix A). This study sought to explore the most prevalent acculturative stress factors for Latinos and Asians immigrants in the U.S. and to compare PTSD rates within these two groups.

2.1.1 Sample

The NLAAS used a national stratified probabilistic sample design through telephone household interviews. Though the NLAAS originally included data on 4, 659 individuals, data on 3,259 individuals was used. Data regarding U.S. born Latino or Asian minorities were excluded as they lacked AS measures in the data. The independent variables in this study were race, sex, age, age of immigration, years living in the U.S. and level of education. The mean age reported was about 42 years of age (SD = 15.08), median age was 41. See Table 1 for detailed information on the independent variables.

Table 1. Demographics from the 2002-2003 National Latino American and Asian American Study (N = 3,259)

	Race			
	Asians[a]	%	Latinos[b]	%
Race	1635	50.17	1624	49.83
Sex				
Male	769	23.60	721	22.13
Female	866	26.57	903	27.71
Age Groups				
18-30 years	371	11.38	394	12.09
31-45 years	631	19.36	595	18.26
46-60 years	436	13.38	374	11.48
61-75 years	156	4.79	202	6.20
76-99 years	41	1.26	59	1.81
Years in the U.S.				
< 5 years	302	9.27	250	7.67
5-10 years	299	9.18	245	7.52
11-20 years	531	16.29	408	12.52
20+ years	502	15.40	714	21.91
Age of Immigration				
< 12 years old	237	7.27	364	11.17
13-17 years old	129	3.96	215	6.60
18-34 years old	884	27.12	732	22.46
35+ years old	384	11.78	306	9.39
Years of Education				
0-11 years	299	9.17	742	22.77
12 years	271	8.32	361	11.08
13-15 years	369	11.32	297	9.11
16 or more years	696	21.36	224	6.87

[a] Asians includes Chinese, Filipinos, Vietnamese and All Other Asians.
[b] Latinos includes Cubans, Mexicans, Puerto Ricans and All Other Latinos.

2.1.2 Dependent Variables

Post-traumatic Stress Disorder

This analysis included 12-month and lifetime prevalence measures for PTSD meeting *Diagnostic and Statistical Manual of Mental Disorders IV-TR* (DSM) criteria. Questions used in compiling total PTSD measures included previous rape history, combat experience or domestic

abuse, for example. About 281 items were available with dichotomous yes or no answers or brief categorical explanations. Construct items included timing of traumatic experiences, duration of event(s), frequency, type of feelings and symptoms involved. The DSM criteria are summarized in Table 2 below.

Table 2. DSM Criteria for Post-traumatic Stress Disorder

DSM Criteria	Criteria Specifics
A	A1) Exposure to specific extreme traumatic event A2) The person's response to the event must involve intense fear, helplessness, or horror
B	Re-experiencing through one or more of the following: flashbacks or intrusive recollections of the event, memories or dreams, re-experiencing the event, or experiencing distress when reminded of the event psychologically or physiologically
C	Experience 3 or more symptoms related to avoidance and numbing: Avoiding thoughts, feelings or activities somehow related to the trauma, inability to recall the event or aspects of the event, detachment from friends or loved ones, restricted affect, sensing a foreshortened future
D	Experience persistent symptoms of increased arousal: trouble falling or staying asleep, irritability or anger outbursts, trouble concentrating, hyper-vigilance, or experiencing an exaggerated startle response
E	Timing: Qualified after 1 month after the event

These were used to determine PTSD lifetime and 12 month prevalence as seen in Table 3.

Table 3. Reports of PTSD meeting DSM Criteria for last 12 Month and Lifetime Measures from the 2002-2003 NLAAS (N = 3,259)

Factor	12 Month Prevalence Meeting DSM Criteria by Race				Lifetime Prevalence PTSD Meeting DSM Criteria by Race			
	Asians[a]	%	Latinos[b]	%	Asians[a]	%	Latinos[b]	%
Race	14	.43	41	1.23	25	.77	74	2.30
Sex								
Male	8	.25	13	.40	12	.37	22	.68
Female	6	.18	28	.90	13	.40	52	1.60
Age Groups								
18-30 years	3	.10	8	.25	7	.21	13	.40
31-45 years	5	.15	14	.43	9	.28	26	.80
46-60 years	2	.06	12	.37	4	.12	22	.70
61-75 years	2	.06	6	.18	3	.10	10	.31
76-99 years	2	.06	1	.03	2	.06	3	.10
Years in the U.S.								
< 5 years	3	.10	2	.06	3	.10	7	.21
5-10 years	1	.03	5	.15	5	.15	8	.25
11-20 years	4	.12	7	.21	8	.25	16	.50
≥ 20 years	6	.18	27	.83	9	.28	43	1.32
Age of Immigration								
≤ 12 years	3	.10	14	.43	7	.21	21	.64
13-17 years	2	.06	3	.10	3	.10	9	.28
18-34 years	4	.12	16	.49	8	.25	27	.83
≥35 years	5	.15	9	.28	7	.21	17	.52
Years of Education								
0-11 years	2	.06	17	.52	4	.12	36	1.10
12 years	3	.10	14	.43	4	.12	16	.50
13-15 years	3	.10	7	.21	5	.15	13	.40
≥16 years	6	.18	3	.10	12	.37	9	.28

[a]Asians includes Chinese, Filipinos, Vietnamese and All Other Asians.
[b]Latinos includes Mexicans, Puerto Ricans, Cubans and All Other Latinos.

Acculturative Stress

Measures of acculturative stress (AS) vary and have not been widely standardized. AS factors included 9 questions with dichotomous yes or no answers. AS questions related to common AS indicators found in the literature and related to support systems, accessing health care when needed, receiving the same respect in the U.S. as in the country of origin and so on.

Conbrach's α including all PTSD measures and AS was .783 for this study, with α=.82 for the

AS items as demonstrated in Appendix B.

2.2 Analytic Strategy

The secondary data analysis was completed using the *Statistical Package for the Social Sciences Version 18* (SPSS). First, the computed PTSD scores were obtained as shown in Table 3. Parametric tests were used in this study for the two major population distributions in this study, Latinos and Asians. T-tests and analyses of variance (ANOVA) were completed to examine if differences existed between the Latino and Asian groups on the dependent variables of PTSD (12 month and lifetime prevalence) and acculturative stress.

CHAPTER 3

RESULTS

3.1 Findings Reported

The following study focused on two questions: 1) What are the most prevalent AS stressors faced by Latino and Asian immigrants?; 2) Are there differences in PTSD among Latino and Asian immigrants based on the following variables: sex, age, race, age of immigration and years in the U.S. or education?

3.1.1 Acculturative Stress

About 76% (2,486 out of 3,259) of all immigrants experienced at least 1 out of 9 AS factors. As seen in Table 4, these factors were endorsed by Latinos and Asians to varying degrees. The most prevalent AS indicators included 42% of immigrants who endorsed AS3 (limited contact with family and friends), 39% who endorsed AS4 (difficulties in interacting due to English language) and 24% who did not endorse AS2 (receive the same respect in the U.S. as in country of origin). An independent-samples t-test was conducted to compare AS measures among Asians and Latinos. There was a significant difference between Asians (M=.20, SD=.19) and Latinos (M=.25, SD=.22): t (3257) = -6.276, p<.01 indicating that Latinos experience more acculturative stress than Asians.

Table 4. Immigrant Responses to the Acculturative Stress (AS) Questionnaire

		Race (N = 3,259)				Total n	Total %
Item	Description	Asians	%	Latinos	%		
AS1	Feel guilty for leaving family or friends?	254	7.79	262	8.04	516	15.8

Table 4 - *Continued*

AS2[a]	Feel similar respect in the U.S?*	347	10.65	464	14.24	811	24.9
AS3	Feel limited your contact with family or friends?	595	18.26	773	23.72	1368	42.0
AS4	Difficulty interacting with others due to English language?	587	18.01	695	21.33	1282	39.3
AS5	Badly treated due to accent or they think you don't speak English well?	412	12.64	331	10.16	743	22.8
AS6	Difficulty finding work due to Latino/Asian descent?	397	12.18	410	12.58	807	24.8
AS7	Questioned about your legal status?	250	7.67	390	11.97	640	19.6
AS8	Think you will be deported if you go to a social or government agency?	20	0.61	156	4.79	176	5.6
AS9	Avoid seeking health services due to fear of immigration officials?	9	0.28	99	3.04	108	3.3

[a]Reverse Item Score

3.1.2 Post-traumatic Stress Disorder

Race

Data revealed that race is an important variable to consider for lifetime prevalence of PTSD among Latinos and Asians in this study. An independent-samples t-test was conducted to compare Asians and Latinos for lifetime prevalence of PTSD. Equal variances were not assumed ($F = 105.32$, $p < .01$). There was a significant difference between Asians (M=4.94, SD=.491) and Latinos (M=4.82, SD=.834), $t (2623.06) = 5.05$, p<.01 indicating that Asians' lifetime prevalence of PTSD was higher than Latinos.

Data also revealed that race is an important variable to consider for PTSD prevalence in the last 12 months for Latinos and Asians in this study. Equal variances were not assumed (F

= 55.79, p < .01). There was a significant difference between Asians (M=4.97, SD=.369) and Latinos (M=4.90, SD=.628), t (2620.23) = 3.70, p=<.01 also supporting that Asians' prevalence of PTSD in the last 12 months was higher than Latinos.

Considering the difference between Asians and Latinos in PTSD, analysis of variance was used to assess for interactions between PTSD and other demographic variables: sex, age at data collection, years of education, number of years living in the US, and age at immigration. No interactions were detected except with sex (Lifetime: F = 5.3, p = .02; past 12 months: F = 25.5, p < .01).

CHAPTER 4

DISCUSSION

4.1 Summary of Research Questions and Results

This study attempted to answer two questions: 1) What are the top acculturative stress (AS) indicators faced by Latino and Asian immigrants?; 2) Are there differences in PTSD based on the following variables: sex, age, race, age of immigration and years in the U.S. or education? The study included a total of 3,259 Asian and Latino participants from the 2002-2003 National Latino American and Asian American Study (NLAAS) with 1,635 Asians and 1, 624 Latinos. The sample was composed of 46% males and 54% females (See Table 1 for a detailed description of the demographics included in this study).

4.1.1 Question One

Findings

The findings in this study indicated that for question one, about 75% of all immigrants experienced at least 1 out of 9 AS indicators. The highest AS indicators endorsed by immigrants included: 42% who endorsed limited contact with family and friends (AS3), 39% endorsed difficulties in interacting with others due to English language limitations (AS4) and 24% endorsed not receiving the same respect in the U.S. as in their country of origin (AS2) (See Table 4 for more details on other AS indicators). The findings also indicate that Latino immigrants experience more acculturative stress than do Asian immigrants.

Implications and Recommendations

Implications for social workers relate to our ethical responsibility to be culturally competent practitioners. Stress coping theories highlight intergroup socialization which may

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provide solidarity as a benefit to immigrants (Outten, Schmitt, Garcia, & Branscombe, 2009), support. Experiencing support while in the U.S. may be a key to experiencing a healthier life transition. However, accumulating research appears to indicate the effect of lacked support for Latinos. Ruiz (2009) found a weak relationship between family support and depression among Latinos. Coffman & Norton (2010) also found that "immigration stress" and depression were greatest among recent Latino immigrants. In addition, Ruiz's (2009) findings are also upheld by the lack of support reported by the Latino population in this study, an otherwise mostly collectively-related group. As shifts or acculturative stress occur in a Latino person or Latino group's cultural makeup of values, beliefs and behaviors, depression has been reported. When the concepts of support and identity are related to significant stress, perhaps symptoms of depression as a consequence are of little surprise.

Though acculturative stress for Asians was not as severe as for Latinos, Asians usually are from collective societies as well and may be affected in similar ways by the process of acculturation. For Asian college students, according to Hwang and Ting's (2008) research, higher levels of acculturation indicated more mental health problems, but not the Asian culture itself. Acculturative stress was related to psychological distress and clinical depression among Asian college students (Hwang & Ting, 2008).

Further questions should be raised by social workers for the implications found in the acculturation framework itself which can interpret maladaptive behavior (substance abuse, interpersonal violence and delinquency) as concerns related to marginalization (perceived little interest in maintaining one's culture and in interacting with others) (Berry, 2006). In assessing subcultural groups, it is helpful to obtain information from the subgroups themselves, through their literature, to gain an international perspective of matters related to acculturation.

Spanish literature views marginalization differently as evidenced in social consciousness, "la concientización," movements throughout Latin America. Regarding life in Mexico, for example, Arizpe (2005) wrote [from a Spanish translation] "the indigenous

undoubtedly belong to the marginalized population of the city of Mexico; with them, they share poverty, miserable living conditions, lack of education and [lack of] instruction. But, the fact [that] they are indigenous is not the determinant factor: their socioeconomic position is given by the urban occupational structure and not by their cultural characteristics" (p.156). She also states, "What has the city offered to those who are not indigenous but are still marginalized urbanites?" (Arizpe, 2005, p.156). She describes an exchange that is required of the indigenous groups while being left with lack of employment, misery, criminality and alcoholism (Arizpe, 2005). In this example from Spanish literature regarding culture, education and social economic status have more to do with a person acclimating to the larger social context than ethnicity, race or language (as indigenous ethnicities have various dialects). Marginalization, then, is viewed as a part or a logical outcome of a stronger structurally imposed operative and not solely an example of faulty or maladaptive psychological processing. This could raise the question of how the process of acculturation itself is viewed and interpreted.

Other recent studies of epidemiological evidence state that Latinos with low social economic status have better health than non-Latino Whites in the same health categories and that Latino immigrants still had better health than U.S. born Latinos (Alegría et al., 2007b). More research is needed in this area to understand how acculturation may or may not affect various aspects of health to include mental health. Thus, comprehensive knowledge of psychosocial needs is needed to better understand the mental health needs of Latinos and Asians. Stressors must be measured in light of personal and socio-political backgrounds as acculturative stressors can vary per ethnic group, ethnic subgroup and individual while including the new environment faced.

4.1.2 Question Two

Findings

For question two, findings indicated that significant differences exist in PTSD rates

among Latinos and Asians for both lifetime and within the last 12 months. For both lifetime and in the last 12 months, Asians' severity of PTSD was higher than Latinos.

Implications and Recommendations

Research is limited for Asians suffering from PTSD. However, previous research has indicated that Southeast Asians are particularly vulnerable and more susceptible to PTSD symptoms related to terror and trauma (DHHS, 1999b) as in the case of Vietnamese Americans after the Vietnam War (Chung & Bemak, 1998). The *National Asian American Pacific Islander Mental Health Association* (*NAAPIMHA*) (2007) reported that Asian Pacific Islander females hold the highest suicide rates among females; 40% of Southeast Asia refugees are affected by depression; and 14% suffer from PTSD due to torture (Nicholson, 1997; NAAPIMHA, 2007), which may or may not be by exacerbated by acculturative stress. Reasons for higher PTSD rates may include war consequences, natural disasters and others. Thus, encompassing an accurate historical framework assists in understanding how a current situation came to be, whether due to traumatic experiences throughout the lifetime or traumatic experiences that have occurred within the last 12 months.

The question of utilization of services is then raised by those who may need it most. As we understand it, several studies have questioned if underutilization is truly a product of cultural differences. In the past, DHHS (1999b) reported that Asians underutilized services even when they qualify for things like Medicaid. Less acculturated Asians have now been found to be more likely to seek help, especially women (Meyers, 2006; Ramos-Sánchez & Atkinson, 2009). Reasons for utilizing services may vary, yet culturally, U.S. mental health dichotomies of mind and body experiences are different from mind and body dualities for Asian populations (Chung & Bemak, 1998). Similarly, Ruiz (2009) found that first generation Latino immigrants were not necessarily resistant to mental health treatment, but rather were unaware that they were in need of it. Culturally appropriate mental health education continues to be needed among the Asian population in particular (Meyers, 2006) as well as in the Latino communities (Ruiz, 2009) to

promote mental health service utilization when needed.

Implications rest on the number of Latinos and Asians that reported both AS factors and PTSD symptoms in this study. About 64% (9 out of 14) Asians who endorsed PTSD prevalence in the last 12 months also endorsed at least one AS factor. The rate was much higher for Latinos where 85% (35 out of 41) of Latinos who endorsed PTSD prevalence in the last 12 months also endorsed at least one AS factor. For lifetime prevalence of PTSD, about 72% (18 out of 25) of Asians who endorsed lifetime PTSD prevalence also endorsed at least one AS factor and again 85% (63 out of 74) Latinos who endorsed lifetime PTSD prevalence also endorsed at least one AS factor.

On the other hand, about 74% (1203 out of 1621) of Asians who did not endorse PTSD prevalence in the last 12 months, endorsed at least one AS factor. The rate was slightly higher for Latinos where 79% (1276 out of 1624) of Latinos who did not endorse PTSD prevalence in the last 12 months also endorsed at least one AS factor. For lifetime prevalence of PTSD, about 74% (1194 out of 1610) of Asians who did not endorse lifetime PTSD prevalence also endorsed at least one AS factor and 78% (1207 out of 1550) of Latinos who did not endorse lifetime PTSD prevalence, endorsed at least one AS factor. Latinos who endorsed PTSD in either last 12 month prevalence or lifetime prevalence scored higher AS than Asians when not endorsing any form of PTSD.

However, these results are speculative in nature and research is needed to clearly establish if a relationship exists between PTSD and acculturative stress. First, an established acculturative stress scale is needed as acculturative stressors may be different from the process of acculturation itself. Jamil et al. (2007) was the only study this author found that specifically related PTSD, its commonly comorbid mental disorders and AS factors. Further research is also needed for determining any sex differences as the female sex appeared to have higher lifetime measures for PTSD. Lifetime prevalence among females may perhaps hint

at the chronicity of traumatic events for women as suggested in some the literature, particularly among refugees (NAAPIMHA, 2007).

As mental health professionals seek to address PTSD and acculturative stress, evident psychosocial needs need to be addressed. Coffman and Norton (2010) refer to the Psychological Adaptation to Migration and Resettlement mode where overcoming occupation and language deficiencies along with other barriers may aid in decreasing AS factors for immigrants. Expansion of Eurocentric paradigms must be achieved as being part of an international whole necessitates the shift toward more collaborative cultural interactions.

Future analyses should focus on which factors in AS may predict PTSD in immigrants and if those factors are the same for both Asians and Latinos. To achieve these goals, it is also recommended that data collection techniques be better tailored to the populations of interest. The prioritization of needs may be skewed due to data gathering methods. For instance, as data gathered for this research excluded institutionalized individuals and occurred by telephone interview, immigrants without a telephone were not included. Those without a telephone may represent those of lower social economic standing or those who prefer to use cell phones only, thus altering the results of this study.

<div align="center">4.2 Limitations</div>

The aims of this study were to identify the most common acculturative stressors and assess if there were differences between Latino and Asian immigrants on PTSD. Limitations for this study were several. First, a biased sample was used composed solely of Asians and Latinos. A lack of a control or comparison group of non-immigrants is an inherent need in a study like this one, which makes generalizability questionable. One questionable finding to generalize relates to the prevalence of PTSD among these two groups. APA (2000) has shown that about 8% of the total U.S. population suffers from PTSD and Roberts et al. (2010) found that about 7% of Hispanics and 4% of Asians were affected by PTSD, results not reflected in this study. Second, telephone surveys are particularly biased as well. Home telephone surveys

are more likely to be answered by a particular type of person (people who have time, people who have a land line, people who care to go through an hours long interview process over the telephone, people perhaps without a cell phone, home bound individuals and so on).

<u>4.3 Overall Implications for Social Work Practice</u>

Four key areas have emerged per this study—three related to assessment and one to intervention For assessment, there is a need for knowledge of clients' socio-political backgrounds, previous trauma, and support systems. While completing psychosocial histories with clients, social workers must learn a client's perception of their culture and the U.S. culture to assess for AS factors to encourage a healthy cooperative navigation in a new culture.

For intervention, there is a need for a better understanding of what successful integration into U.S. society means for each individual client. For example, level of education attained may be indicative of a previous government's role or structural impositions in the life of an immigrant. A different method of thinking about education itself may be needed. Sakamoto (2007) amplifies this view in her call for a non-oppressive social work model for working with immigrants. Mental health education in particular must be culturally and linguistically appropriate and more accessible to immigrant minorities. Unfortunately, unless policy dictates otherwise, time-limited assessments can overlook details affecting diagnosis and treatment planning. Hogg Foundation initiatives demonstrate the need for integrative health models (where general medical providers and mental health providers operating in the same locale) would prove useful in promoting mental health education and providing truly holistic care for all people (Ruiz, 2009). Language and cultural congruity are essential factors to consider when providing mental health assistance (Atdjian & Vega, 2005).

Strong policies are needed on completing well-informed culturally competent assessments and treatment plans that encourage effective integrative holistic health care and do not merely seek assimilative goals for immigrants as cooperation with a different culture may

be most effective (Sakamoto, 2007). Lastly, advocacy for minority representation among mental health professionals needs to become a priority in the US.

4.4 Future Directions

Questions such as how do immigrants deal with acculturative stress and what can we do, from a best-practices perspective, to help decrease acculturative stress factors remain. Applied neurobiological findings are needed particularly for PTSD to more accurately determine effective tools for its treatment. Interlocking contingencies related to past trauma, acculturative stress, overall health, gender and successful integration into U.S. with appropriate support should be explored. Barriers must be addressed. Appropriate tools of healing are needed that we all may thrive.

APPENDIX A

UNIVERSITY OF TEXAS AT ARLINGTON INSTITUTIONAL REVIEW BOARD APPROVAL
LETTER

April 08, 2011

Yajaira Villeda
Dr. Sung Seek Moon
School of Social Work
Box 19129

Protocol Title: *Exploring PTSD among Immigrants*

RE: Exempt Approval Letter

IRB No.:   2011-0465e

The UT Arlington Institutional Review Board (UTA IRB) Chair (or designee) has reviewed the above-referenced study and found that it qualified as exempt from coverage under the federal guidelines for the protection of human subjects as referenced at Title 45 Part 46.101(b)(4). You are therefore authorized to begin the research as of April 07, 2011.

Please be advised that as the principal investigator, you are required to report local adverse (unanticipated) events to this office within 24 hours. In addition, pursuant to Title 45 CFR 46.103(b)(4)(iii), investigators are required to, "promptly report to the IRB *any* proposed changes in the research activity, and to ensure that such changes in approved research, during the period for which IRB approval has already been given, are not initiated without IRB review and approval except when necessary to eliminate apparent immediate hazards to the subject."

All investigators and key personnel identified in the protocol must have documented Human Subject Protection (HSP) training or *CITI Training* on file with this office. The UT Arlington Office of Research Administration Regulatory Services appreciates your continuing commitment to the protection of human research subjects. Should you have questions or require further assistance, please contact Robin Dickey at robind@uta.edu or you may contact the Office of Regulatory Services at 817-272-3723.

Sincerely,

Patricia G. Turpin, PhD, RN, NEA-BC
Clinical Associate Professor
UT Arlington IRB Chair

APPENDIX B

ACCULTURATIVE STRESS QUESTIONNAIRE SUMMARY FROM THE NLAAS

Please answer the following with a yes, no or does not apply:

AS1) Feel guilty for leaving family or friends from country of origin?

AS2) Feel similar respect now in the U.S as in your country of origin?*

AS3) Feel that living out of your country has limited your contact with family or friends?

AS4) Find it difficult to interact with others due to difficulties with the English language?

AS5) People treat you badly because they think you do not speak English well or have an

   accent?

AS6) Do you find it difficult to find the work you want because you are of Latino/Asian descent?

AS7) Have you been questioned about your legal status?

AS8) Do you think you will be deported if you go to a social or government agency?

AS9) Do you avoid seeking health services due to fear of immigration officials?

*Reversed scored item.

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BIOGRAPHICAL INFORMATION

Yajaira Villeda is completing her Master of Science in Social Work at the University of Texas in Arlington (UTA). She holds two Bachelor of Arts degrees in Psychology and Spanish from UTA where she graduated Summa Cum Laude with both degrees. She is a Hogg Foundation for Mental Health Bilingual Scholarship recipient and Phi Alpha member, both esteemed honors in her field. Ms. Villeda serves as vice president of the UTA Graduate Student Senate and has held several leadership positions at her university. She has been dean appointed to serve in a student-faculty committee for the direct practice content area in her field. While demonstrating initiative and motivation in social work, she serves as an Attorney General certified Rape Crisis Victim's Advocate in Tarrant County. She has also participated in a homeless count, CHIPS drives and other venues of leadership and service. Ms. Villeda was selected to participate in the Social Work Day at the United Nations conference in New York in March, 2010. She is currently completing a one year internship at Parkland Hospital's Department of Psychiatry where she has focused on working with Latina women experiencing postpartum depression and general psychiatry. She has also completed internships at Refugee Services of Texas the Child Study Center in Fort Worth, Texas. As a student of social sciences, she is interested in learning more about mental health needs in the Latino and other minority populations and improving her knowledge and skills through a multicultural practice perspective. In thinking about her future, she intends on continuing to work with minorities to address mental health concerns and perhaps later return to obtain her doctorate degree. Her dreams are to aid in establishing a national resource center for promoting mental health education in the Latino community and teaching future mental health practitioners.