The Role of Stigma and Acculturation in Mental Health Services Utilization Among Foreign-Born and U.S.-Born Latinos

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Abstract

Foreign-born Latinos are at particular risk for underutilizing mental health services (Alegría et al., 2007b). The purpose of this study was to examine the roles of acculturation and stigma about mental disorder in the use of mental health services among West Coast Latinos, including foreign- and U.S.-born. Variables measured included acculturation, stigma, mental health status, and past-year mental health service visits to three types of providers: (a) medical; (b) specialty mental health; and (c) non-clinical. I accounted for the influence of mental health status as I evaluated the following hypotheses: (1) Foreign-born Latinos will report lower levels of acculturation and higher levels of stigma than U.S.-born Latinos; and (2) lower levels of acculturation and higher levels of stigma will correlate with lower mental health services use. Results indicated that foreign- and U.S.-born Latinos had used services to the same extent in the year prior and reported similar levels of mental health functioning. There was no evidence of a relationship between acculturation, stigma, and mental health services use. However, having insurance and lower education were shown to be predictors of making a mental health visit ($p = .014$). Unexpectedly, more U.S.-born Latinos had made at least one past-year visit to a non-clinical source than foreign-born Latinos ($p = .043$). Overall, this study demonstrated that, while cultural and attitudinal factors did not play a significant role in the use of mental health services, socioeconomic factors of having health insurance and lower educational attainment did.

Keywords: Latino, disparity, immigrant, mental health, services use, stigma, acculturation, nativity, socioeconomic

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Chapter 1

The U.S. Latino population is a group that currently and has historically underutilized mental health services (Gary, 2005). In the last several decades, there has been an influx of immigrants to the U.S. from Latin America, transforming not only the population demographic, but also the demographic of individuals seen in health care settings (Alegría et al., 2007a). Latinos are the largest ethnic/racial minority group in the U.S. (U.S. Census Bureau, 2010). Mexicans, Puerto Ricans, Cubans, and a variety of Central and South American nationalities make up the heterogeneous Latino nationalities and ethnic subgroups (Gil, Wagner, & Vega, 2000). Over half of the total U.S. population growth between 2000 and 2010 was attributable to an increase in the Latino population with a growth rate of 43% in the span of a decade (Humes, Jones, & Ramirez, 2011). Currently, Latinos make up 16% of the total population at 50.5 million (Humes et al., 2011). While migration has begun to slow for the first time, by 2050, Latinos are projected to nearly triple in size to comprise 29%—over one quarter—of the U.S. population at 128 million (Passel & Cohn, 2008; Passel, Cohn, & Gonzalez-Barrera, 2012). Latinos in Washington State currently make up 14% of the population (Ennis, Ríos-Vargas, & Albert, 2011). Similar to national patterns, the population of Latinos in Washington State is steadily on the rise (Ennis et al., 2011). Given the considerable size and growth of Latinos in the U.S. in general and in Washington State in particular, it is important to consider implications in the delivery of mental health services to this population.

The focus of this investigation was to compare mental health service utilization between foreign- and U.S.-born Latinos. The most underrepresented Latinos in mental

health settings are foreign-born/first generation immigrants (Alegría et al., 2007a), resulting in underuse of mental health services compared to Latinos born in the U.S., and thus creating a disparity (Alegría et al., 2007b; González, Tarraf, Whitfield, & Vega, 2010; U.S. Department of Health and Human Services [U.S. DHHS], 2015; Vega, Kolody, Aguilar-Gaxiola, & Catalano, 1999). Few studies have considered within-group differences in service use among Latinos, which is to say, foreign-born compared to U.S.-born Latinos. Instead, the majority have focused on the broader Latino-White disparity. Further, most studies have been descriptive in nature and have not focused on specific processes by which Latinos access mental health services (U.S. DHHS, 2001). Thus, an understanding of factors affecting service use among Latinos is lacking (Alegría et al., 2007b). In studies that do exist, attempts to explain the gap have fallen short of offering a full picture of the problem. Accounting for differences in rates of mental disorder, socioeconomic variables (such as education and income), and insurance coverage still resulted in a significant pattern of underuse among Latinos compared to Whites (Alegría et al., 2002; Alvidrez, 1999; Cook, McGuire, & Miranda, 2007; González et al., 2010; Padgett et al., 1994; U.S. DHHS, 2015). For foreign-born Latinos, the same was true when accounting for differences in mental disorder: Significant patterns of underuse were still apparent compared to their U.S.-born counterparts (Alegría et al., 2007b; Vega et al., 1999). It is plausible that cultural and attitudinal factors pose as barriers to care and play a role in the continued disparity.

For this reason, I investigated the role of cultural and attitudinal factors in explaining why foreign-born Latinos elect not to seek or participate in mental health treatment (Alvidrez, 1999; Gary, 2005; Padgett, Patrick, Burns, & Schlesinger, 1994).

Level of acculturation is one cultural barrier to seeking care, as foreign-born Latinos whose values, attitudes, language and beliefs differ from the dominant culture may be more wary of pursuing professional help or may not perceive it as helpful or relevant (Ellison, Jandorf, & Duhamel, 2011). In addition, the attitudinal barrier of stigma about mental disorders is associated with a reluctance to seek or to continue treatment for fear of discrimination and rejection by family or others (Gary, 2005). Stigma research has primarily focused on specific mental health diagnoses or broad comparisons between racial groups. It remains unclear whether stigma may differentially affect foreign-born Latinos, thereby influencing mental health seeking behavior (Nadeem et al., 2007). In this study, I focused on factors contributing to the utilization of mental health care services between foreign- and U.S.-born Latinos. I considered the role of acculturation and stigma as possible explanations for continued disparities in care.

Definition of Terms

Throughout this study, I will use a number of terms repeatedly. The following definitions are provided to clarify their meaning for the purposes of this study.

Acculturation. The process by which immigrants adopt the values, attitudes, customs, beliefs, and behaviors of another culture (Abraído-Lanza, Armbrister, Flórez, & Aguirre, 2006; Cook et al., 2007).

Culture. More inclusive than race or ethnicity, culture includes traditions of thought, feeling, and behavior that is external (e.g., not biological), acquired, and transmissible to others (Smedley & Smedley, 2005).

Culture-bound syndromes. The Diagnostic and Statistical Manual of Mental Disorders IV (DSM-IV; American Psychiatric Association, 1994) defines these as

"recurrent, locality-specific patterns of aberrant behavior and troubling experience that may or may not be linked to a particular DSM-IV diagnostic category…generally limited to specific societies or culture areas and are localized, folk, diagnostic categories that frame coherent meanings…" (p. 844). Specific to Latino culture, these disorders include *bilis/colera*, *ataque de nervios*, *nervios*, *locura*, and *susto*. For definitions of these, refer to the DSM-IV or later version.

Disparity. The difference between foreign-born Latinos and U.S.-born Latinos, or Latinos overall and Whites, in health services utilization that is attributable to factors other than health status. Operationally, mental health disparities have been measured in terms of number of mental health service visits or total mental health care expenditures (e.g., prescription drugs, inpatient care, outpatient care, and emergency care) within a given time frame (Cook et al., 2007; Lopez, Barrio, Kopelowicz, & Vega, 2012).

Ethnicity. The concept of a group's "peoplehood," which includes common ancestry, group identity, shared values, customs, beliefs, norms, behaviors, language, and institutions (Hays, 2010; McGoldrick et al., 2005, p. 2). The Latino ethnic group is the focus of this investigation (see definition below).

Foreign-born Latino. Also known as a Latino immigrant or first-generation immigrant, this term refers to an individual born abroad and immigrating to the U.S. Immigration is unrelated to documentation or citizenship status (Sullivan & Rehm, 2005, p. 246).

Generational status. Consisting of first, second, and third or higher generation, first generation is defined as not being born in the U.S. Second generation indicates being

U.S.-born with at least one parent born abroad. Third generation indicates being born in the U.S. and both parents also born in the U.S (Alegría et al., 2007b).

Latino. An individual "whose origins can be traced back to Spanish speaking regions of Latin America, including that of the Caribbean, Mexico, Central America, and South America" (Flores et al., 2002, p. 83). The largest ethnic subgroups are Mexicans, Puerto Ricans, Cubans, and Nicaraguans, while the remainder includes a variety of Central and South American nationalities (Gil et al., 2000). Throughout this study, the term *Latinos* will refer to a mixed group of both foreign- and U.S.-born individuals unless otherwise specified. The term *Hispanic* will not be used due to its inclusion of people from European Spanish origin (Hays, 2010).

Medical provider. A family doctor, general practitioner, chiropractor, massage therapist or nurse (Kessler & Üstün, 2004). In this study, the mention of this term relates to these professionals providing mental health services.

Mental disorder. Any psychiatric disorder classified in the DSM-IV or later (DSM-IV; American Psychiatric Association, 1994) or the International Classification of Diseases, 10th Revision or later (ICD-10; World Health Organization, 1990). Several earlier studies cited in this paper used diagnostic criteria from prior versions of the DSM or ICD.

Minority. A group classified by race, ethnicity, or national origin (although other classifications exist) for which access to power is limited by the dominant culture (Wang & Sue, 2005). Minority status is often accompanied by marginalization, exclusion, oppression, or misrepresentation by mainstream psychology (Hays, 2010).

Nativity. The place of origin of an individual in terms of being born abroad or born in the U.S. (Alegría et al., 2007a). The term *foreign nativity* refers to an immigrant, while the term *U.S. nativity* refers to an individual born in the U.S.

Non-clinical source of support. A religious or spiritual minister, pastor, or priest, or any other healer like an herbalist, curandero, sobador, or self-help or support group (Kessler & Üstün, 2004).

Prevalence. The proportion of a population who have or had a specific illness, condition, or risk factor in a given time period. Prevalence rates are an estimate based on samples of the population of interest (U.S. DHHS, 2013a).

Psychosocial difficulties. For Latino immigrants, these include acquiring a new language, establishing new relationships, adjusting to cultural norms different from those of a person's country of origin, living in poverty, and inadequate housing (Nadeem et al., 2007).

Race. A social construct developed to classify individuals into groups of genetically-related peoples based on geography and physical characteristics such as skin color, hair texture, and facial features (Spickard, 1992). Racial classifications do not reliably account for variation in physical characteristics among groups (Hays, 2010).

Socioeconomic status. A level of social standing and privilege including factors of occupation, income, education, marital status, gender, ethnicity, community, and family name (Hays, 2010). With regard to research on Latino socioeconomic status, this concept has been measured by education, income, and having health insurance (Alegría et al., 2008; Cook et al., 2007).

Somatization. Psychic distress expressed via bodily complaints (Escobar, Waitzkin, Cohen, Gara, & Holman, 1999).

Specialty mental health provider. A psychiatrist, psychologist, social worker, counselor, psychotherapist, mental health nurse, or other mental health professional providing mental health care (Kessler & Üstün, 2004).

Stigma. Specific to mental disorders, stigma is "a collection of negative attitudes, beliefs, and behaviors that influence the individual, or the general public, to fear, reject, avoid, and discriminate against people with mental disorders" (Gary, 2005, p. 980).

Undocumented Latino immigrant. Included in this group are individuals without written proof of identity (e.g., driver's license, ID card, birth certificate) or immigration documentation (e.g., asylee or refugee status, green card, temporary visa; Sullivan & Rehm, 2005, p. 246).

West Coast. For the purposes of this study, this term will refer to the U.S. states of Washington, Oregon, and California.

White. A racial category that originally referred to individuals of English and northern European descent, later including those of southern and eastern European descent. Today, this term represents a broad category of individuals of European descent, including peoples of a wide range of physically and culturally distinct characteristics (Smedley & Smedley, 2005).

Literature Review

Disparities in mental health services utilization. A landmark 2001 report by the U.S. Surgeon General documented that Latinos suffer notable disparities in the utilization of mental health services and face significant barriers to treatment of mental disorders as

an ethnic/racial minority group (U.S. DHHS, 2001). In this publication, the magnitude of the problem was highlighted upon reviewing data from several studies on Latinos (Hough et al., 1987; Kessler et al., 1994; Vega et al., 1999). Among Latinos with a mental disorder, less than 1 in 11 sought specialty mental health services, and less than 1 in 5 sought general medical services for mental health concerns (U.S. DHHS, 2001). These figures doubled for foreign-born Latinos: Less than 1 in 20 used specialty mental health services, while less than 1 in 10 used general medical services (U.S. DHHS, 2001). Since then, disparities in access to and consequent use of services among the Latino population have been well established in literature (Alegría et al., 2007a; Alegría et al., 2007b; Cook et al., 2007; Nadeem et al., 2007; U.S. DHHS, 2012; U.S. DHHS, 2015). Cook and colleagues (2007) found that the Latino-White disparity worsened between 2000 and 2004—the time period that the researchers considered. They concluded that Latinos are less likely than Whites to obtain any kind of mental health care, whether in specialty or primary care settings, and that the mental health care system was continuing to provide disproportionately less care for Latinos. In the last decade, there has been overall improvement for Latinos in access to healthcare (U.S. DHHS, 2013b). The 2013 National Healthcare Quality and Disparities Report (U.S. DHHS, 2013b) indicated improvement for Latinos in barriers to care, including health insurance, cost of services, and having a regular provider. These barriers were worsening until 2009, after which they began to gradually improve until arriving at the lowest level of the decade in 2011. The report highlighted that healthcare policy changes have improved access to mental health care in recent years. These include the Mental Health Parity and Addiction Equity Act of 2008, and the Affordable Care Act of 2010. (U.S. DHHS, 2015). Most recently however, in a

national study by the U.S. DHHS (2015), past-year mental health service use for Latinos was still less than half that of Whites (7% vs. 15%), indicating substantially less contact with the mental health system. In sum, despite significant improvements, Latinos continue to receive less care than Whites (U.S. DHHS, 2013b).

Within-group disparities among Latinos. While the Latino-White disparity has received attention in literature, differences in service utilization patterns based on *nativity*—whether a Latino is born in the U.S. or abroad—have not been adequately studied. Foreign-born Latinos are particularly prone to service underutilization. In the late 1990's, rates of service use among foreign-born Latinos with a diagnosed mental disorder were less than half those of U.S.-born counterparts (Vega et al., 1999). More recently, Alegría and colleagues (2007b) found improving trends of service use among Latinos in a nationally-representative sample of Latinos. They found a significant correlation between mental health care utilization and nativity (see Figure 1), language preference (see Figure 2), and years of residence in the U.S. (see Figure 3). Researchers included in the *specialty mental health category* the use of psychiatrists, psychologists, counselors, and social workers in mental health settings, while the *general medical* category included general practitioners, family doctors, nurses, and other health professionals seen for mental health problems. Overall, foreign-born Latinos reported significantly less past-year use of any type of service (9%) compared to U.S.-born Latinos (15%), representing about 40% lower use. Latinos who spoke primarily Spanish reported half the amount of service use (8%) compared to those who spoke primarily English (16%).

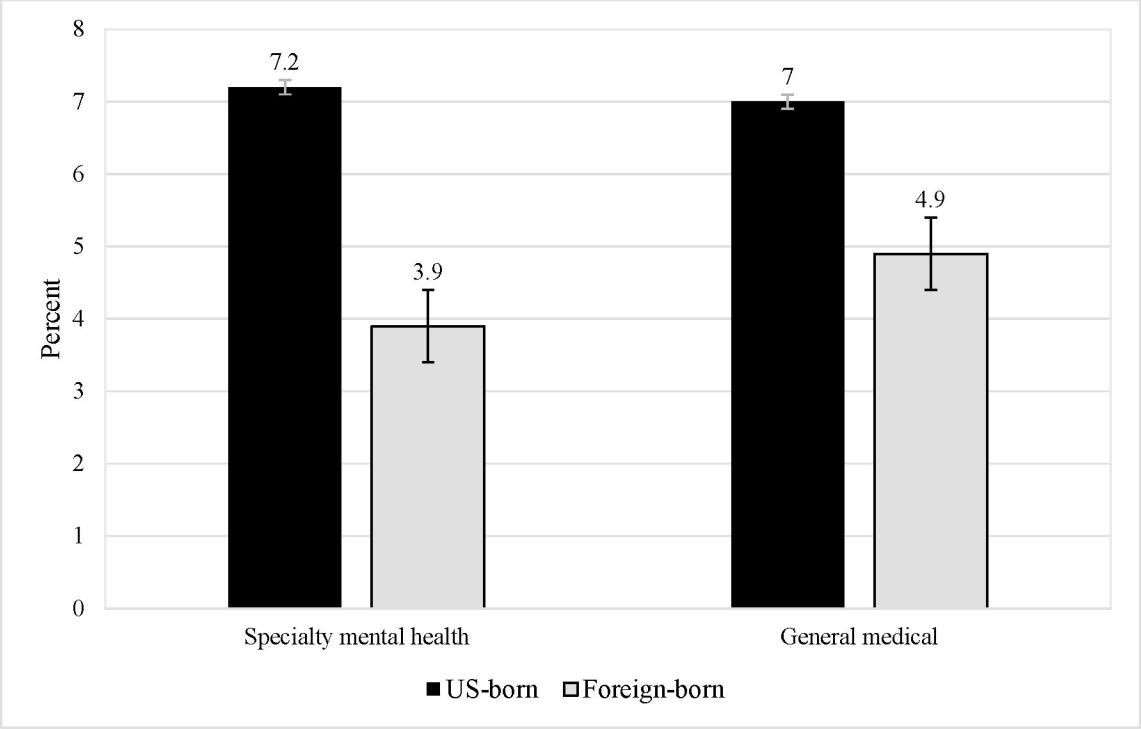

Figure 1. Past year mental health services use by nativity. Error bars represent standard errors. $N = 2{,}554$, specialty mental health $p < .01$, general medical $p = .12$.

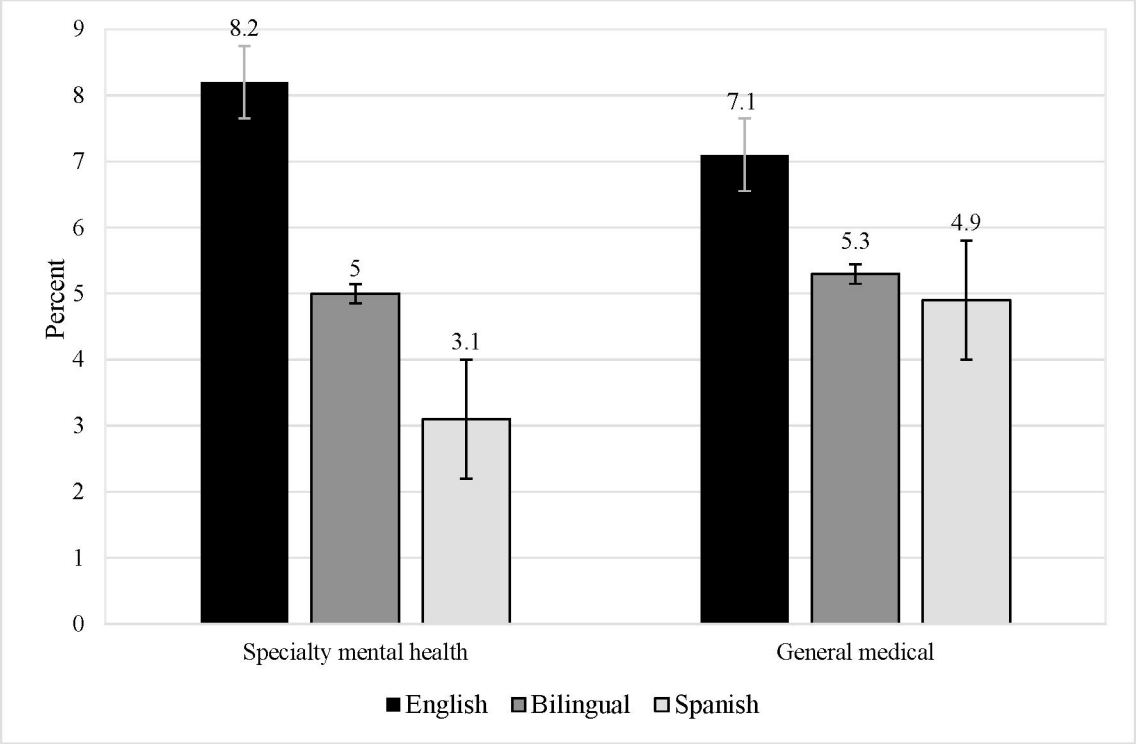

Figure 2. Past year mental health services use by language preference. Error bars represent standard errors. $N = 2{,}554$, specialty mental health $p < .01$, general medical $p = .13$.

Foreign-born Latinos who had resided in the U.S. less than five years (7%) and between 6-10 years (5%) reported significantly lower use than those who had resided in the country 21 years or more (12%; see Figure 3). Further, only 9% of foreign-born/first generation Latinos sought specialty or general mental health care in the preceding year compared to 18% of third-generation Latinos (see Figure 4). Ethnic subgroup differences were found: One in every 5 Puerto Ricans had used services in the past year compared to 1 in every 10 Mexicans. Satisfaction with services was correlated with number of years in the U.S., as those who had resided in the country for less than five years reported lower

levels of satisfaction (52%) than those who resided in the country for more than 20 years (89%).

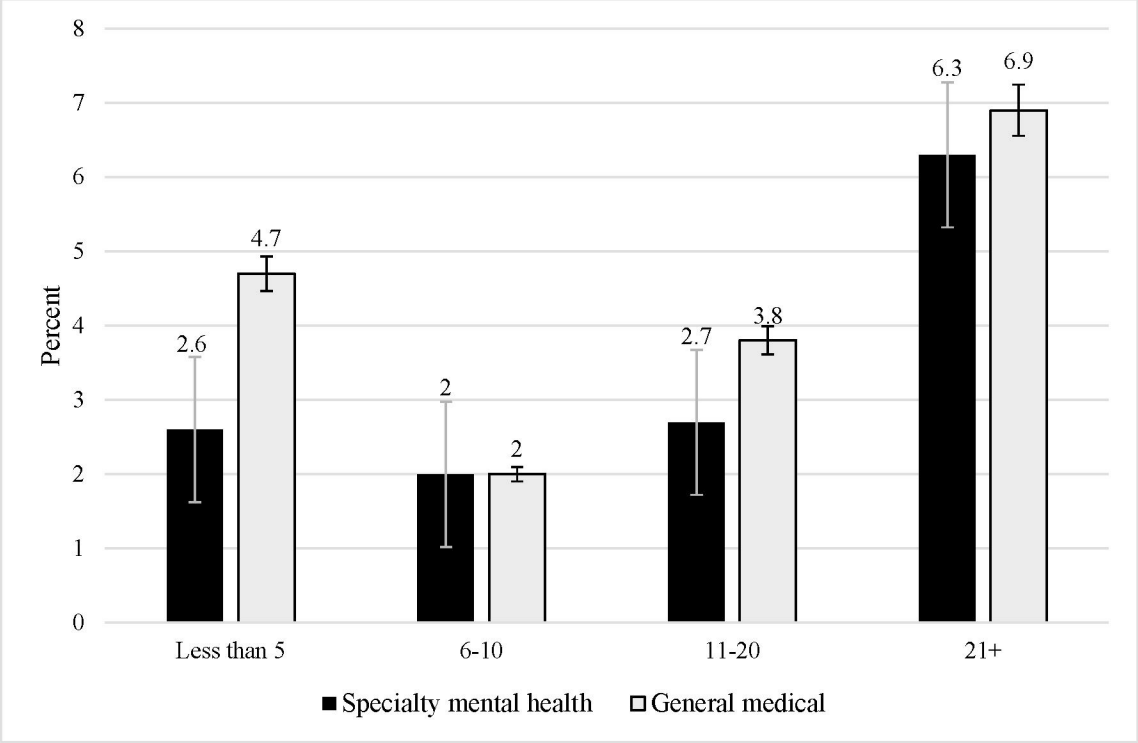

Figure 3. Mental health services use by years of residence in the U.S. Error bars represent standard errors. $N = 1{,}622$, $p < .01$.

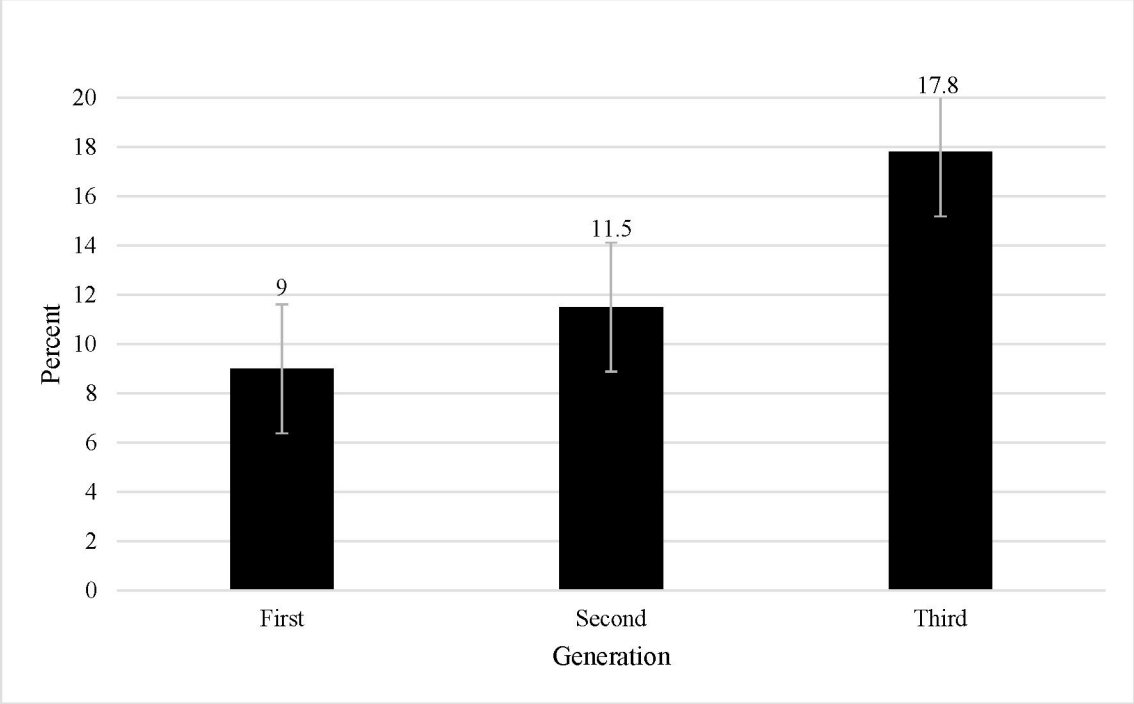

Figure 4. Mental health services use by generational status. Error bars represent standard errors. $N = 2{,}549$, $p < .01$.

Undocumented Latino immigrants—those without legal immigration or residency status—also face a large burden of access to mental health services. In a study of Latina women, nearly all of those who were undocumented lacked health insurance (91%) compared to Latina citizens at 42% (Marshall, Urrutia-Rojas, Mas, & Coggin, 2005). Further, 33% of undocumented Latinas reported having a regular health care provider compared to 57% of Latina citizens (Marshall et al., 2005), indicating issues with consistency of care. Across four U.S. cities, undocumented Latino immigrants with at least one past-year physician visit was an average of 37% compared to a sample representative of the total Latino population at 66% and the general U.S. population at 75% (Berk, Schur Chavez, & Frankel, 2000). In sum, literature reveals trends of a disparity in mental health services utilization for Latinos in general, but particularly for

first-generation/foreign-born Latino immigrants with limited English language proficiency and fewer years of residence in the U.S.

Socioeconomic barriers to care. Access to and utilization of mental health care services is related to a synergistic effect among a number of factors. Immigrant-related characteristics related to service use, as described previously, include nativity, language, years in the U.S., generation status, and ethnicity (Alegría et al., 2007b). It is not these variables themselves that are implicated in healthcare disparities, but rather their association with other socioeconomic variables that put certain groups at a disadvantage. These variables include poverty, cost of services, lack of health insurance, unemployment or underemployment, and low educational attainment (Bustamante, Fang, Rizzo, & Ortega, 2009; Cook et al., 2007; Gallo, 2009; Marshall et al., 2005; NASEM, 2015; Sribney, Elliot, Aguilar-Gaxiola, & Ton, 2012). Addressing poverty first, Latinos demonstrate significantly lower income levels than Whites (Alegría et al., 2008; Grant et al, 2004), while foreign-born Latinos, and in particular those who are undocumented, demonstrate the lowest income levels (Grant et al., 2004; NASEM, 2015). The result of policy efforts has not been the prevention of undocumented immigrants from working, but instead a wage injustice as pay rates to undocumented are disparagingly low (NASEM, 2015). Further, inability to pursue education limits opportunities for gainful employment (NASEM, 2015). This creates a greater burden of affording mental health care services. In a sample of 4,558 Mexicans in the U.S., 71% of foreign-born Mexicans had a family income of less than $20,000 compared to 58% of U.S.-born Mexicans and 44% of Whites (Grant et al., 2004). Poor Latinos, defined by a household income of less

than $15,000 per year, had 3.6 times less use of specialty mental health care than poor Whites (Alegría et al., 2002).

Considering health insurance, of all ethnic groups in the United States, Latinos are the least likely to have public or private health insurance (Cook et al., 2007; U.S. DHHS, 2001). In a recent study by The Substance Abuse and Mental Health Services Administration (SAMHSA; U.S. DHHS, 2015), the most commonly endorsed reason for not using mental health services among Latinos who had an unmet need for services was cost/lack of insurance coverage. Since lacking coverage is related to failure to seek health care (Alegría et al., 2007b; Cook et al., 2007; Ku & Waidmann, 2003; Valdez, Giachello, Rodriguez-Trias, Gomez, & De La Rocha, 1993; Woodward, Dwinell, & Arons, 1992; U.S. DHHS, 2015), mental health needs may often go untreated. In a sample of Latinos with existing mental disorders, only 19% of uninsured Latinos used any type of mental health service compared to 39% of privately-insured Latinos and 52% of publically-insured Latinos (Alegría et al., 2007b). The rate of Latinos being uninsured is nearly triple that for Whites at 32% compared to 10% (Cook et al., 2007). The rate is thought to be driven by lack of employer-based coverage (U.S. DHHS, 2001), which puts foreign-born Latinos at greatest risk for underutilization of services. Both employment and income difficulties are driven by lower levels of educational attainment and less English-language proficiency (Gallo, 2009).

Foreign-born Latinos are most likely to experience the negative impact of socioeconomic barriers to care, as those with limited English proficiency and lower education levels often work in jobs that do not offer health insurance (Alegría et al., 2007b). These individuals often experience more difficulty with the practical process of

seeking care, which includes securing transportation and child care, completing applications and paperwork, having sufficient time, and being aware of resources available (Nadeem et al., 2007; Sribney et al., 2012; U.S. DHHS, 2015). The most disadvantaged sector of foreign-born Latinos are the undocumented. (NASEC, 2015). Federal and state health care and financial assistance benefits are not available to undocumented immigrants (Ku & Waidmann, 2003). Over past decades, the primary reasons for undocumented Latinos immigrating to the U.S. were to obtain employment and reunite with family, while substantially less endorsed motivations of participating in government and social services (Berk, Schur, Chavez, & Frankel, 2000). Today, those reasons continue to be among the most commonly cited (Rosenblum, 2015). In seeking healthcare services, undocumented Latinos may have fear regarding their immigration status (Ayón, Marsiglia, & Bermudez-Parsai, 2010; Berk et al., 2000; Ku & Waidmann, 2003; Sullivan & Rehm, 2005). This fear revolves around being reported to immigration authorities and deported. When asked if they were afraid of receiving health care services because of their immigration status, an average of 41% of undocumented Latinos across four U.S. cities responded affirmatively (Berk et al., 2000). In sum, foreign-born Latinos face higher barriers to care due to socioeconomic variables associated with immigration characteristics.

Lower prevalence of mental disorder among Latinos. Prevalence of mental disorder must be considered in understanding utilization trends in mental health services (U.S. DHHS, 2015). Latinos in general and foreign-born Latinos in particular experience significantly lower rates of diagnosed disorders compared to their White or U.S.-born counterparts (Abraído-Lanza, Dohrenwend, Ng-Mak, & Turner, 1999; Alegría et al.,

2008; Lara, Gamboa, Kahramanian, Morales & Bautista 2005; U.S. DHHS, 2015). This is an important consideration, as lower rates of mental disorder would naturally decrease the need for mental health services. Latinos demonstrated lower rates of any mental disorder diagnosis in the previous year (15%) compared to Whites (19%; U.S. DHHS, 2015). Alegría and colleagues (2008) adjusted for age and gender and found that Latinos demonstrated lower prevalence rates of having any diagnosis of a mental disorder in their lifetime (30%) compared to Whites (43%; see Figure 5). Considering depressive disorders, 15% of Latinos met criteria for a disorder compared to 22% of Whites. For anxiety disorders, Latinos also showed lower prevalence at 16% compared to 26% of Whites. Finally, 11% of Latinos versus 18% of Whites experienced a substance disorder in their lifetime. Separating out ethnic subgroups of Latinos and adjusting for age and gender, Mexicans showed similar rates of lifetime disorders (30%) as Cubans (28%) and other Latinos (27%), while Puerto Ricans showed the highest prevalence rates of lifetime disorders (37%; Alegría et al., 2008). However, all of these ethnic subgroups still showed lower rates of having a diagnosed disorder than Whites (43%).

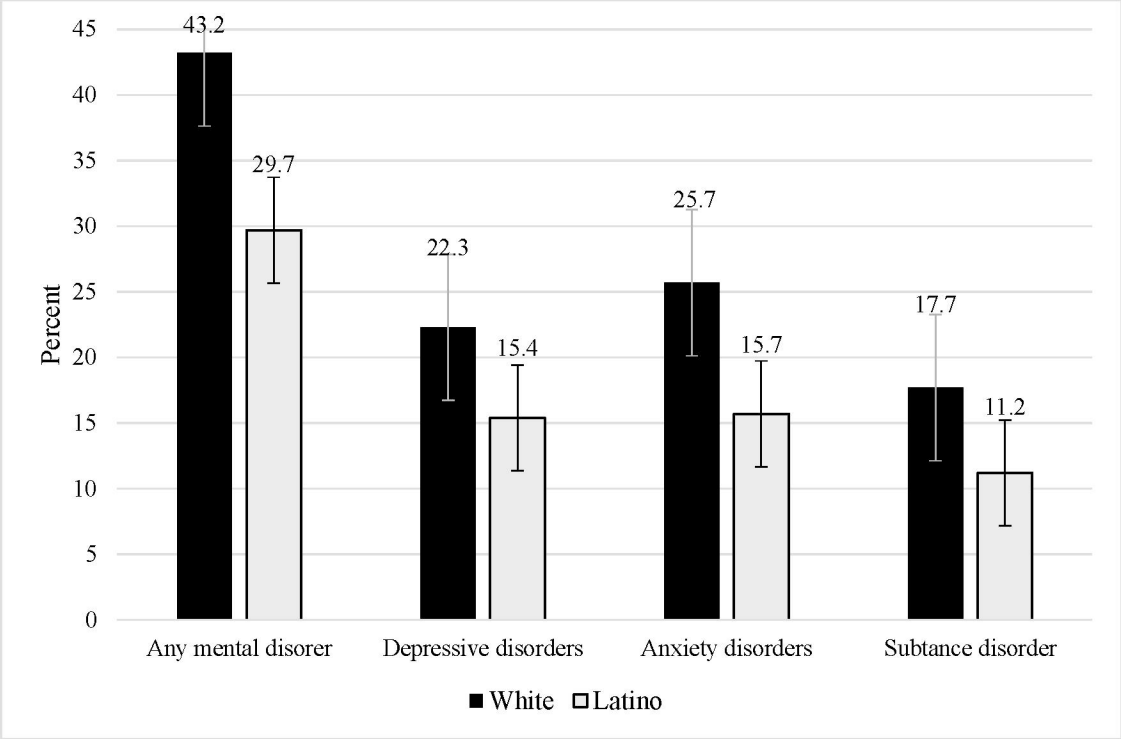

Figure 5. Lifetime prevalence of mental disorder among Whites and Latinos. Error bars represent standard errors. $N = 6{,}776$, $p < .001$ for all comparisons.

Lowest prevalence among foreign-born Latinos. Considering the data more closely, lower prevalence of a diagnosed mental disorder is more evident among foreign-born Latinos compared to U.S.-born Latinos and Whites. Alegría and colleagues (2007a) compared mental disorders among foreign- and U.S.-born Latinos (see Figure 6). Foreign-born Latinos experienced significantly lower rates of diagnosed mental disorders within the past 12-months (13%) compared to U.S.-born Latinos (19%). This difference was even greater for lifetime disorders among foreign-born Latinos (24%) in contrast to their U.S.-born counterparts (37%). Compared to U.S.-born Latinos, foreign-born men were about half as likely to have a lifetime disorder, while foreign-born women were 40% less likely (Alegría et al., 2007a). Compared to those with fair/poor English, having

excellent/good English increased the odds of any mental disorder by 2.12 times for men and 1.68 times for women.

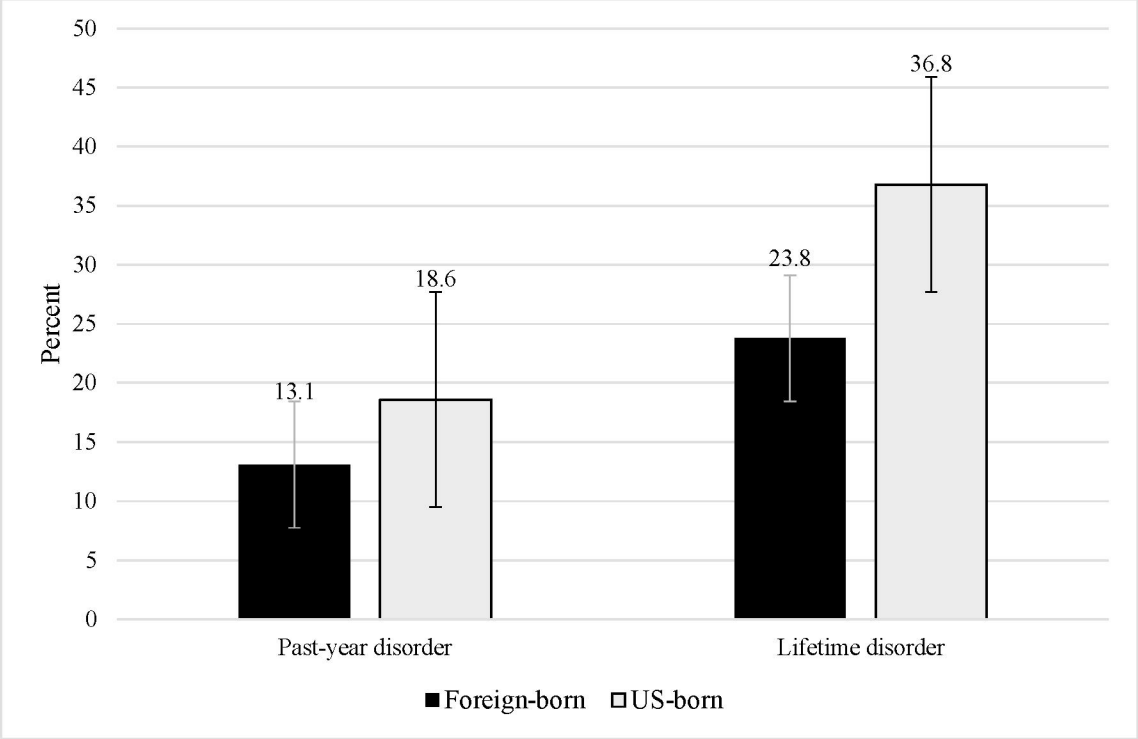

Figure 6. Mental disorder prevalence among foreign- and U.S.-born Latinos. Error bars represent standard errors. $N = 2{,}554$, $p < .01$.

Alegría and colleagues (2008) took comparisons a step further when they compared prevalence rates between foreign- and U.S.-born Latinos, and between foreign- and U.S.-born Whites. Controlling for age, gender, and socioeconomic status (including household income and education), foreign-born Latinos had fewer overall diagnoses of mental disorders (25%) compared to U.S.-born Latinos (37%), foreign-born Whites (31%) and U.S.-born Whites (53%; see Figure 7). Fewer substance disorders were noted among foreign-born Latinos (7%) compared to U.S.-born Latinos (20%), foreign-born Whites (14%) and U.S.-born Whites (26%). Anxiety disorders were significantly lower for foreign-born Latinos (15%) compared to U.S.-born Latinos (19%), foreign-born

Whites (23%) and U.S.-born Whites (31%). Finally, depressive disorders followed a similar pattern with lowest rates for foreign-born Latinos (15%) compared to U.S.-born Latinos (20%), foreign-born Whites (21%) and U.S.-born Whites (28%). They also found that with increasing residence in the U.S., rates of mental disorder went up dramatically, and this was particularly true for substance abuse disorders.

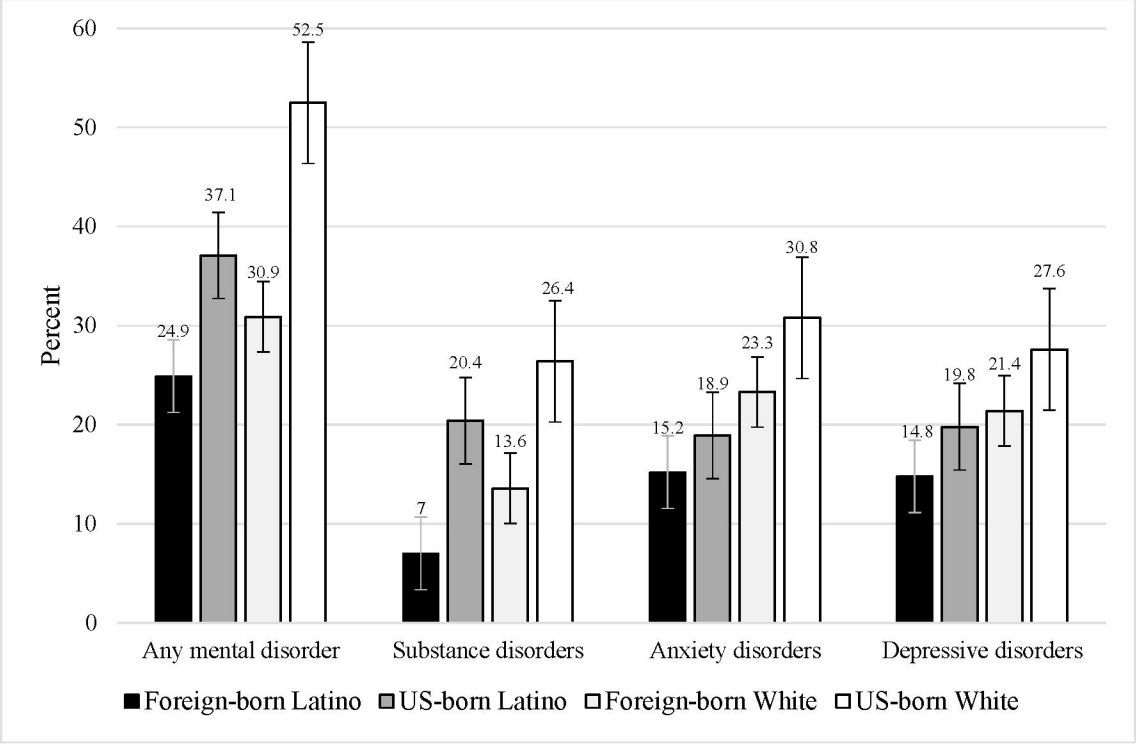

Figure 7. Lifetime prevalence of mental disorder among Latinos and Whites by immigrant status. Error bars represent standard errors. Comparisons were between foreign-born and U.S.-born Latinos, and between foreign-born and U.S.-born Whites. N = 6,776, all p values < .05 except for depressive disorders between foreign-born and U.S.-born Whites, $p < .089$.

These data highlight the significance of nativity as a factor related to the development of mental disorder given that foreign-born Latinos met diagnostic criteria for disorders at significantly lower rates than their U.S.-born counterparts and Whites.

Indeed, there is evidence that immigrants in general experience fewer chronic health conditions and longer life expectancy, and these benefits degrade with time as immigrants increasingly resemble U.S.-born individuals (The National Academies of Sciences, Engineering, and Medicine [NASEM], 2015). In sum, Latinos overall have fewer diagnoses of mental disorder than Whites (Alegría et al., 2008; Alegría et al., 2007a), while foreign-born show substantially lower rates of diagnosis than their U.S.-born counterparts (Alegría et al., 2008).

Controlling for confounding variables. Despite the above findings, when researchers controlled for rates of mental disorder through statistical analyses or sampling methods, disparities in use of mental health services remained between Whites and Latinos (Alegría et al., 2002; Cook et al., 2007; González et al., 2010; U.S. DHHS, 2015). The rationale in controlling for mental health functioning is to ensure that results reflect a true difference in service use rather than lower mental health needs (U.S. DHHS, 2015). In a sample of adults with any type of mental disorder, a disparity in past-year use of mental health services was still present between Latinos (27%) and Whites (46%; U.S. DHHS, 2015). Cook and colleagues (2007) statistically controlled for differences in rates of mental disorder in a database sample of 67,581 individuals including 15,181 Latinos and found that Latinos used mental health care significantly less than Whites. Among adults with a major depressive episode in the past year, Latinos were less likely to have received any kind of treatment compared to Whites (53% vs. 70%; U.S. DHHS, 2012). While prevalence of lifetime major depression was similar for Mexicans (including foreign- and U.S.-born) and Whites (8% each), treatment rates revealed significant differences (González et al., 2010). Only 12% of Mexicans received American

Psychiatric Association guideline-concordant treatment for depression compared to 23% of Whites (González et al., 2010). Guideline-concordant care was defined as pharmacotherapy for at least 60 days supervised by a prescriber over four visits for 1 year, and psychotherapy consisting of at least four 30-minute visits to a mental health professional over 1 year.

In addition to controlling for mental health status, some researchers have also controlled for insurance status and socioeconomic variables including income and education (Alegría et al., 2002; Alvidrez, 1999; Padgett et al., 1994). There is some rationale for including these variables in disparity determinations, as Cook and colleagues (2007) argued that insurance and socioeconomic factors remain an important part of understanding how racial/ethnic minorities access care. Despite this, results still revealed significant disparities for Latinos. Comparing poor Latinos and poor Whites (defined as being below the Federal Poverty Level), a disparity was still present. Eight percent of poor Latinos had used services, while 23% of poor Whites had (U.S. DHHS, 2015). Poor Whites with a mental disorder were still more likely to use services than poor Latinos with a mental disorder. Alegría and colleagues (2002) perhaps performed the most comprehensive statistical adjustment for presence of a mental disorder, disability, age, sex, marital status, insurance status, income, education, and geographical location. Poverty was defined as a family income of less than $15,000. Poor and non-poor Latinos were still 22% and 48% less likely, respectively, to use specialty mental health service than their poor and non-poor White counterparts. Considering insurance, uninsured Latinos had a lower rate of use (4%) compared to uninsured Whites (14%; U.S. DHHS, 2015). A disparity remained among uninsured Latinos with a mental disorder (19%)

compared to uninsured Whites with a mental disorder (34%). Latinos with government-sponsored insurance (Medicaid/Medicare) used less services (12%) compared to Whites with the same insurance coverage (26%). A disparity remained among Latinos insured by Medicaid/Medicare with a mental disorder (35%) compared to their White insured counterparts with a mental disorder (57%).

Padgett and colleagues (1994) controlled for insurance coverage in a database sample of 1.2 million medically-insured, non-poor federal employees, including ethnic minorities and Whites. They found that Latinos had fewer annual outpatient mental health care visits (8 on average) compared to Whites (13 on average). Similarly, Alvidrez (1999) found that despite comparable income level, insurance status, and current rates of mental disorder, Latina women sampled from an urban public hospital had low rates of exposure to the mental health care system: Latinas were less than one tenth as likely to make a mental health visit as White women.

There are very few studies considering within-group differences among Latinos. In a study using data from the 1990s, Vega and colleagues (1999) studied a sample of foreign- and U.S.-born Mexicans with pre-existing mental disorders. They found that foreign-born Mexicans with a mental disorder in the year prior reported less than half the use of any health care provider (15%) compared to their U.S.-born counterparts (38%). Contradicting these findings were results from a more recent study by Alegría and colleagues (2007b). They noted that service use disparities exist in the general population of Latinos, including those needing preventative care or with sub-clinical levels of distress, but not between Latinos who had mental disorders. This indicates substantial improvement since studies of the 1990s. The only significant difference in service use

among those with a mental disorder was related to health insurance: those without insurance used services significantly less than those with insurance. Further, longer residence in the U.S. and English proficiency increased the likelihood that Latinos who had not met criteria for a mental disorder would seek care. The researchers concluded that cultural and immigration characteristics play a significant role in service use, but only when use of mental health services is discretionary. They also emphasized the need to account for differences in presence of a mental disorder when comparing Latinos.

Many of these studies showed that even after minimizing or controlling for the effects of confounding variables of socioeconomic status, mental disorder, insurance coverage, and other demographic variables, Latinos were still less likely to utilize services. In other words, differences in these aforementioned variables have been insufficient in fully explaining disparities in mental health services utilization. Researchers emphasized that these findings support the conclusion that cultural and attitudinal factors, not solely socioeconomic, play a role in explaining differences in utilization of mental health services of Latinos (Alvidrez, 1999; Padgett et al., 1994; Sribney et al., 2010; U.S. DHHS, 2015). For within-group comparisons in particular, the risk for foreign-born Latinos is not necessarily in their rates of mental disorder, as rates are lower; it is in the pervasive lack of access to services for sub-clinical distress, preventative services, and lacking health insurance (Alegría et al., 2007b; Sribney et al., 2010). Thus, the disparity is not an issue of greater need, but of greater unmet needs (Sribney et al., 2010).

Underreporting of mental health needs. Despite apparent overall lower rates of mental disorders in the Latino population, a number of factors contribute to

underreporting of prevalence and thereby minimize true mental health needs (Alegría et al., 2007a). Prevalence rates for mental disorders among Latinos have historically come from epidemiological studies using diagnostic criteria in the DSM-IV (American Psychiatric Association, 1994; U.S. DHHS, 2001) or the International Classification of Diseases, 10th Revision (ICD-10; World Health Organization, 1990). Methodological limitations of these studies resulted in underreporting of prevalence rates, including overlooking psychological distress below the threshold for DSM diagnostic entities, mislabeling or failure to account for cultural manifestations of distress and disorder (called culture-bound syndromes in the DSM-IV; American Psychiatric Association, 1994), under-sampling of Latinos in general and Spanish-speaking Latinos in particular, use of household surveys which omit institutionalized or homeless persons, somatization of psychological distress, use of non-professional support, and conducting research only in English to the exclusion of less-acculturated Latinos (American Psychiatric Association, 2000; Alegría et al., 2002; Alegría et al., 2007a; Grant et al., 2004; Lopez et al., 2012; Ortega, Feldman, Canino, Steinman, & Alegría, 2006; U.S. DHHS, 2001; Vega et al., 1999).

Additionally, little is known about undocumented Latino immigrants who reside in the U.S., and even less is known about their mental health status, needs and use. This is because large scale epidemiological data on this population does not exist (Sullivan & Rehm, 2005). An estimated over 11 million undocumented immigrants reside in the U.S., 57% of which are from Mexico (Passel et al, 2012). Reasons for the scarcity of mental health data on this population include the sensitive nature of immigration status information, reluctance of participants, fear of incrimination, and mistrust of the research

process (Cornelius, 1982; Sullivan & Rehm, 2005). It is also difficult to determine the extent to which undocumented immigrants misrepresent birthplace or underreport symptoms due to concerns about their residency status (Vega et al., 1998). For these reasons, mental disorder associated with documentation status is a topic rarely addressed in research (Sullivan & Rehm, 2005). In conclusion, with evidence documenting lower prevalence of disorders for Latinos, data fail to represent the full magnitude of distress and disorder and minimize true mental health needs (U.S. DHHS, 2001).

Psychosocial challenges for foreign-born Latinos. This section is not intended to be an exhaustive review of the challenges immigrants face. Instead, the purpose is to highlight that foreign-born Latinos experience an apparent need for mental health services due to stress associated with circumstances prior to exit from their country of origin, upon entering the U.S., and in the subsequent adjustment process. These circumstances create variation in prevalence rates of mental disorder across Latino subgroups, as each group faces unique social and historical stressors (Gil et al., 2000; Guarnaccia, Martinez, & Acosta, 2005; Lopez et al., 2012). For Latino immigrants overall, rates of trauma are high. In a sample of 1,630 foreign-born Latinos of various ethnic identities, 75% reported having experienced a lifetime trauma (Fortuna, Porche, Alegría, 2008). Another 11% reported exposure to political violence, resulting in an increased likelihood of using mental health services (Fortuna et al., 2008).

Considering specific ethnic subgroups, a large proportion of Mexican and Central American immigrants in the U.S. reside on the West Coast (Ennis et al., 2011). For this reason, these ethnic subgroups will be highlighted. Mexicans and Central Americans come to the U.S. seeking refuge from civil war and violence from gangs and drug

traffickers (Rosenblum, 2015). In one study, the primary reasons for immigration were to escape violence, poor economic conditions, and to reunite with family already living in the U.S. (Rosenblum, 2015). Civil war during the 1970s and 1980s was a push factor for many Central Americans. More recently, the presence of gangs, drug cartels, corruption, and weak political infrastructure has created an atmosphere of uncertainty and danger, making women more prone to domestic violence and children vulnerable to gang recruitment (Rosenblum, 2015). Beginning in 2011, a surge of unaccompanied minors from El Salvador, Honduras, and Guatemala arrived to the U.S. and surrounding Central American countries (United Nations High Commissioner for Refugees [UNHCR], 2014). Reasons indicated via interviews with a sample of 404 unaccompanied children were violence in society, abuse in the home, deprivation and social exclusion, family reunification, and better opportunity (UNHCR, 2014). In Mexico, the drug war has incited conflict, shootings, homicides, and kidnappings (De Choudhury, Monroy-Hernandez, & Mark, 2014). As a response to prolonged exposure to violence in the media and in communities, Mexicans may show an affective desensitization, or *numbing*, including increased emotional intensity and anger (De Choudhury et al., 2014). Those who enter the U.S. in response to the detrimental impact of violence may need additional support to address trauma-related difficulties.

While in the U.S., Central Americans and Mexicans have the disadvantage of low educational attainment (an average of less than 10 years), which leads them to fill low-skilled and often demanding jobs that U.S.-born Americans are not willing to take (NASEM, 2015). Mexican immigrants tend to come from economically-impoverished, rural areas in Mexico and obtain fewer years of education, which limits economic and

social opportunities in the U.S. (Guarnaccia et al., 2005; Ennis et al., 2011). Most migration (an estimated 80% to 85%) from Mexico is undocumented (Passel et al., 2012), resulting in a host of social and economic challenges discussed below. Yet, for the first time in history, net migration of Mexican immigrants has reached zero (Passel et al., 2012). Suggested reasons include weakened job and housing construction markets in the U.S., heightened border enforcement, a rise in deportations, increased dangers in border crossing, and broader opportunities in Mexico (Passel et al., 2012).

Puerto Ricans are the second largest Latino ethnic subgroup (Ennis et al., 2011). Despite the advantage of being U.S. citizens, they experience the lowest socioeconomic status, as well as the highest prevalence of mental disorders and divorce rates of the major Latino subgroups (Alegría et al., 2007a; Guarnaccia et al., 2005). As the third largest ethnic subgroup, Cuban Americans tend to fare better with regard to mental health than Mexican and Puerto Rican Americans (Alegría et al., 2007a). Previous cohorts of Cubans immigrated to the U.S. to evade political and economic instability in Cuba, but faced challenges with lower levels of economic and educational status (Santiago-Rivera, 2003). Cubans in the U.S. experience higher rates of mental disorders than Mexicans and other Latinos, but lower rates than Puerto Ricans (Alegría et al., 2007a). From these trends, it is clear that risk factors for the development of mental disorder are present for Latinos.

As Latino immigrants often come to the U.S. for economic opportunities and improved quality of life (NASEM, 2015; Passel et al., 2012), many are not prepared for associated challenges. Magaña and Hovey (2001) interviewed migrant farmworker Latinos and found a relationship between symptoms of anxiety and depression and

reports of rigid work demands, poor housing conditions, and low family income/living in poverty. Waldstein (2008) described greater risk of illnesses, work-related injuries, depression, discrimination, and stress among migrants. In a review of literature, Sullivan & Rehm (2005) uncovered the following themes for undocumented Latino immigrants: failure to succeed in the country of origin, dangerous border crossing experiences, restricted mobility in the U.S, marginalization, stigmatization, exploitability, stress, and adjustment difficulties. Undocumented Latino immigrants come to the U.S. for employment and to reunite with family and friends, passing through dangerous border crossings and border patrol and risking detection in the U.S. and separation from social supports in the country of origin to do so (Berk et al., 2000; Sullivan & Rehm, 2005). Adding to these individual barriers to wellbeing are social and policy barriers. Anti-immigration policies commonly elicit stress and fear responses of being discovered and reported to Immigration and Naturalization Services (Ayón et al., 2010; Sullivan & Rehm, 2005). Since the 1990s, the U.S. immigration policy has become more restrictive and punitive toward undocumented immigrants (NASEM, 2015). Policies have been aimed to prevent employment, education, housing, and long-term residence of undocumented immigrants in the U.S. These policies pose as barriers to integration, as the reverberations are noted through not only first generation immigrants, but future generations as well (NASEM, 2015). These studies highlight the unique and various psychosocial stressors that many foreign-born Latinos face. These stressors have been enough to trigger the largest wave of immigration over the last four decades, primarily consisting of undocumented Mexicans (Passel et al., 2012).

Discrimination. As a whole, the Latino community experiences higher levels of perceived and actual discrimination, resulting in poorer personal and community wellbeing (Ayón et al., 2010), and limiting integration trajectories (NASEM, 2015). In a literature review of studies on perceived racial or ethnic discrimination and mental health, discrimination was correlated with increased psychological distress in 20 out of 25 studies (Williams, Neighbors, & Jackson, 2008). Psychological distress included measures of self-esteem, control or mastery, major depression, anxiety disorders and other mental disorders. Gee, Ryan, Laflamme, and Holt (2006) found that self-reported discrimination was associated with poorer mental health functioning among foreign- and U.S-born Latinos. Foreign-born Latinos who resided in the U.S. for longer periods of time reported higher levels of discrimination and lower mental health functioning compared to those who arrived more recently (Gee et al., 2006). Supporting these findings, Finch, Kolody, and Vega (2000) found that perceived discrimination was strongly correlated with depressive symptoms in a sample of Mexicans. However, another study showed that social support moderated the effects of discrimination, as perceived discrimination had relatively no effect on the self-reported physical health of individuals with higher social support (Finch & Vega, 2003). On a broader scale, racial discrimination, particularly against undocumented, can hinder social integration as demonstrated by educational attainment, language fluency, employment opportunities, income, occupation, poverty status, and integration into residential communities (NASEM, 2015).

Acculturation stress. Significant for foreign-born Latinos is the stress associated with the process of adjusting to U.S. culture, called *acculturation*. Recent immigrants are

more likely to experience unique psychosocial stressors associated with acculturating to the U.S. compared to U.S.-born or long-term Latino residents, including acquiring a new language, establishing supportive relationships, adjusting to cultural norms different from the country of origin, living in poverty, family conflict, changes in ethnic identity, and discrimination in education, housing, and employment (Gallo, Penedo, Espinosa de los Monteros, Arguelles, 2009; Nadeem et al., 2007; NASEM, 2015; Santiago-Rivera, 2003; U.S. DHHS, 2001). Acculturation alters one's relationship to the environment, which can lead to disruption in psychosocial functioning and well-being (Rogler, Cortes, and Malgady, 1991). In Finch and colleagues (2000), Mexicans who were highly acculturated and proficient in the English language were more likely to perceive discrimination than their less acculturated counterparts, but less likely to actually experience discrimination. Those who reported highest levels of discrimination were female, born in the U.S., and highly acculturated. Similarly, Cook and colleagues (2009) found that foreign-born Latinos perceived less discrimination compared to more acculturated U.S.-born Latinos. Finch and colleagues (2000) offered the explanation that Latinos born abroad are more likely to perceive discrimination as English usage and acculturation increase, while low English proficiency may contribute to less awareness of cultural nuances and discriminatory language.

Cultural and attitudinal factors in mental health care seeking. It is apparent that Latinos have legitimate mental health needs, but, as previously outlined, are less likely to seek care and are thus underrepresented in healthcare settings. It remains unclear why foreign-born Latinos with mental health concerns fail to initiate and engage in treatment, and do so to a much lesser extent than their U.S.-born counterparts. Factors

other than socioeconomic status, healthcare coverage, and mental health status contribute to the disparity, which provide a rationale for investigating the influence of cultural and attitudinal factors on mental health seeking behavior (Alvidrez, 1999; Cook et al., 2007; González et al., 2010; Padgett et al., 1994; Vega et al., 1999; Sribney et al., 2009; U.S. DHHS, 2015). For this reason, I consider the role of acculturation and stigma in explaining the service use gap between foreign- and U.S.-born Latinos. The following sections will provide an overview of literature on acculturation and stigma.

Acculturation. As noted in previous sections, significant differences in utilization of mental health care services exist between foreign-born and U.S.-born Latinos (Alegría et al., 2007b; Vega et al., 1999). Acculturation, the process by which foreign-born immigrants adopt the values, attitudes, customs, beliefs, and behaviors of their host culture, may explain this difference (Abraído-Lanza et al., 2006; Cook et al., 2007). Acculturation is a multidimensional process involving nativity, length of stay in the host country, age at immigration, language preference, years of education in the U.S., and proportion of life lived in the U.S (Abraído-Lanza et al., 2006; Ellison, Jandorf, & Duhamel, 2011). These factors result in socialization into the dominant culture. While acculturation is thought to have a detrimental effect on the mental health of Latinos (Grant et al., 2004; NASEM, 2015; Ortega et al., 2000; Sribney et al., 2009; U.S. DHHS, 2001; Vega et al., 1998; Waldstein, 2008), the specifics of this relationship remain unclear. Trends in literature reveal that as acculturation increases, mental health outcomes worsen while health care use increases (Lara, Gamboa, Kahramanian, Morales, & Bautista, 2005). Latinos who most underutilize mental health care services are first-generation/foreign-born with limited English-language proficiency (Alegría et al.,

2007a)—variables which are correlated with lower level of acculturation (Ellison et al., 2011; Marín & Marín, 1987), while U.S.-born Latinos use significantly more services (Alegría et al., 2007a). In a study measuring post-partum visit compliance among Latina women, less acculturated Latinas were 1.81 less likely than bicultural counterparts to participate in healthcare services (Bermúdez-Parsai, Mullins, Marsiglia, & Coonrod, 2012). The researchers attributed this difference to limited language abilities in communicating with healthcare providers, lack of knowledge about the dominant culture and healthcare system, and healthy behaviors rooted in cultural practices substituting for professional medical attention.

Racial and ethnic differences in utilization rates are a reflection not only of access to services, but also availability of culturally appropriate services and perceived need for treatment—particularly the type of treatment offered in the U.S. (U.S. DHHS, 2012). One problem in delivering culturally appropriate services is language dissimilarity between primarily Spanish-speaking Latinos and mental health clinicians. Very few mental health service providers are Latino or Spanish-speaking, which limits access to ethnically or linguistically similar providers for less acculturated Latinos (Alegría et al., 2007b; Alegría et al., 2002; Santiago-Rivera, 2003). If an individual cannot access a bilingual provider, he or she is less likely to seek specialty mental health care (Alegría et al., 2002). Latinos who spoke primarily Spanish reported significantly less use of specialty mental health care (8%) compared to bilingual Latinos (11%) and predominantly English-speaking Latinos (16%; Alegría et al., 2007b). Additionally, linguistic dissimilarity of the provider may result in less accurate assessments and diagnoses, resulting in inadequate

treatment and lack of understanding by both parties (Santiago-Rivera, 2003; U.S. DHHS, 2013b).

Fold and religious beliefs are also important to consider. Ethnic minorities in the U.S. more commonly endorse culture-specific beliefs that physical and mental health issues are caused by supernatural or spiritual or religious forces, hot-cold imbalances, lack of moderation, or character weakness (Alvidrez, 1999; Santiago-Rivera, 2003). For this reason, Latinos may be particularly likely to use culturally appropriate, non-clinical support such as traditional healers, called *curanderos*, spiritual guides, called *espiritistas*, worshippers of Catholic saints and African gods, called *santeros*, priests, pastors, family and social support (Ayón et al., 2010; Santiago-Rivera, 2003; Vega et al., 1999). As most Latinos are of Catholic faith, use of clergy is an important source of support, not only for the individual suffering from mental disorder, but also for the family system (Santiago-Rivera, 2003). These types of help-seeking traditions may cause the perception of little need for mental health services, lack of recognition of symptoms that may need attention from a specialist, concerns over efficacy, or irrelevance of the mental health system (U.S. DHHS, 2015).

The extent to which Latinos subscribe to cultural belief traditions is related to factors of income level, educational attainment, and place of origin (Santiago-Rivera, 2003). These factors, in addition to foreign nativity (Vega et al., 1999) and lower levels of acculturation (Waldstein, 2008), are also associated with use of non-clinical support or traditional medicine. In an ethnographic study of unacculturated Latino migrants, health was maintained by a variety of home remedies and traditional folk medicine over professional medical care (Waldstein, 2008). In a sample of Latinos with mental

disorders, use of curanderos, spiritualists, natural healers, psychics, astrologers, and massage therapists was more common among Latinos with less than seven years of education (7%) than those with 7-11 years of education (3%) and high school graduates (1%; Vega et al., 1999). Non-clinical support use was also associated with living in smaller towns (5%) and rural areas (6%) compared to urban areas (2%; Vega et al., 1999). Latinos with an annual family income of less than $12,000 were over 7 times more likely to use non-clinical mental health support than families with income of $12,000-$17,999 (Vega et al., 1999). Non-clinical support was also slightly higher among foreign-born Latinos (5%) than their U.S.-born counterparts (2%; Vega et al., 1999). Foreign-born Latinos with mental disorders had nearly the same level of use of non-clinical support (5%) as mental health professionals (5%), whereas U.S.-born Latinos with mental disorders were much less likely to use non-clinical care (2%) than a mental health professional (12%; Vega et al., 1999). Both groups, however, had higher use of medical care providers for mental health treatment, with U.S.-born showing over twice the rate of use compared to foreign-born (24% vs. 11%; Vega et al., 1999). In more recent data, foreign-born Latinos and those who spoke primarily Spanish reported significantly less use of specialty mental health services, but not general medical services for mental health problems. As these studies highlighted, higher use of medical professionals over mental health professionals is common. One reason is that the general medical and primary care sector is the first point of contact for most individuals with mental health concerns, particularly for minority and low-income patients (Sribney et al., 2012). This is because it is easier to access and less stigmatizing. Another reason relates to *somatization*, the phenomenon of psychological distress expressed via bodily

complaints. Somatic symptoms could reflect lack of problem recognition among Latinos (Alegría et al, 2007b). Somatization is more frequently reported among Latinos than Whites, and especially among foreign-born Latinos (Escobar et al., 1999; U.S. DHHS, 2001). Controlling for education and income, foreign-born Latinos reported more somatic symptoms but less psychiatric disorders than their U.S.-born counterparts (Escobar et al., 1999). Few researchers have examined the nuances of help-seeking behavior for mental health problems among Latinos, including various types of professional and non-professional help, and their relationship with acculturation level (Santiago-Rivera, 2003).

Stigma about mental disorder. In addition to acculturation, psychologists and mental health professionals seeking to understand the influence of culture and ethnicity in providing effective services may also consider stigma in explaining why the difference in use for foreign-born Latinos exists (American Psychological Association, 1993). *Stigma* involves a negative attitude toward mental health problems and fear of discrimination or rejection by family or society if one has a mental disorder (Gary, 2005). Stigma about mental disorders is a significant barrier to care and is associated with a reluctance to seek or continue treatment, even when there is a perception of need for services (Gary, 2005; Link, 1987; U.S. DHHS, 1999; U.S. DHHS, 2015). This reaction, in turn, leads to further impediments to psychological and social functioning (Link, 1987). Treatment avoidance is a troublesome pattern given the treatability of a variety of mental disorders, and considering that over half of individuals with psychiatric disorders do not seek treatment (Kessler et al., 2004). Treatment avoidance takes the form of choosing not to seek treatment at all, not to adequately participate in treatment, or to prematurely drop out of treatment (Corrigan, 2004). For these reasons, stigma is considered "the most formidable

obstacle" to improvement in mental health delivery systems for Latinos (U.S. DHHS, 1999. p. 29).

Stigmatization involves the phenomenon of prejudice and discrimination (Gary, 2005). Gary (2005) described prejudice as a cognitive and affective response of embracing negative stereotypes and unsubstantiated assumptions about individuals or groups. Discrimination, on the other hand, is the manifestation of prejudice. It involves disrespect and devaluation in terms of behaviors, language, interpersonal relationships, and decision-making. Further, stigma takes place on an individual and social level (Corrigan, 2004). *Self-stigma* involves what members of a stigmatized group do to themselves as they internalize negative stereotypes, consequently experiencing negative emotional reactions such as shame, embarrassment, and low self-esteem (Alvidrez, 2008; Corrigan, 2004). Stigma about mental illness was associated with reduced self-esteem in individuals who had serious mental disorders (Link, Struening, Neese-Todd, Asmussen, & Phelan, 2001), with lower adherence or discontinuation of pharmacological treatment in depressed patients (Sirey et al., 2001), and with lower perceived need for services for individuals with mood, anxiety, or substance use disorders (Mojtabai, Olfson, & Mechanic, 2002). *Public stigma*, on the other hand, is what the public does to a stigmatized group when they endorse prejudice and engage in discriminatory behaviors toward the group. Individuals may associate mental illness with eccentric behavior, lacking social skills, being "crazy," poor personal appearance, violence or incompetence, thereby blaming the sufferers for the onset and continuation of their disorder (Corrigan, 2004; Interian et al., 2010). This attitude results in limited social opportunities, restricted employment opportunities, difficulty finding housing, and even confinement to an

institution or jail (Corrigan, 2004; Gary, 2005). Individuals who reported higher levels of stigma also reported lower income and higher rates of unemployment (Link, 1987) and family shame (the belief that family members would have a negative reaction to their engagement in mental health service; Leaf, Bruce, Tischler, & Holzer, 1987).

While stigma has been identified as a barrier to treatment of mental illness, the role of stigma among Latinos has been largely overlooked (Interian et al., 2010). Most researchers have focused on specific mental disorders or have not differentiated between racial or ethnic groups in samples (Corrigan, 2003; Leaf et al., 1987; Link, 2001; Sirey et al., 2007; Wahl, 1999). Culturally for Latinos, mental illness is highly stigmatized, which may keep them from seeking help for common and treatable mental disorders like depression and anxiety (Interian et al., 2010; Nadeem et al., 2007). Possibly for this reason, foreign-born Latino are less likely to visit a specialty mental health care provider, but more likely to use a general medical provider (Alegría et al., 2007b; Alvidrez, 1999; Padgett et al., 1994; Vega et al., 1999). Gary (2005) proposed the idea that ethnic minorities face a "double stigma" when they suffer from mental disorder due to preexisting discrimination based on ethnic group membership. The potency of this combination can be a major impediment to those who would benefit from mental health services (Corrigan, 2004). Understanding how stigma affects Latinos is important in reducing barriers to care (Interian et al., 2010).

In a study by Nadeem and colleagues (2007), stigma and depression were measured in a sample of low-income foreign-born Latinas, U.S.-born Latinas, and White women. Compared to White women, foreign-born Latinas more strongly endorsed two out of three items measuring stigma: concerns about what others might think of them if

they engaged in mental health treatment, and embarrassment to talk about personal matters with others. The third item—concerns about family disapproval—was not significantly different among groups. Endorsement of these stigma-related concerns was unrelated to the presence of a mental disorder among Latinas. The study also compared U.S.-born Latinas to foreign-born Latinas. Researchers found that foreign-born Latinas had a more stigma-related concerns than U.S.-born counterparts, which was, in turn, associated with lower rates of wanting care. Another study contradicted these findings in which, after controlling for education, Latina women indicated the greatest disagreement with statements that mental disorder was stigmatizing compared to White and Black women (Alvidrez, 1999). However, in this same study, Latina women more strongly endorsed the beliefs that their family would disapprove of seeking mental health treatment and that problems should not be discussed outside the family. The researcher, however, did not differentiate between foreign- and U.S.-born Latinas. Considering men and women, Eisenberg, Downs, Golberstein, and Zivin (2009) found a significantly higher level of stigma in Latino men compared to Latina women, but nativity was not a variable measured. In sum, stigma is an important area of study as it relates to foreign-born Latinos and seeking mental health services, but further clarification of its role is needed.

Rationale

In order to better meet the needs of the Latino population, further research into disparities in mental health care is needed. Ignoring differences in culture and diversity can contribute to increased health care disparities, culturally-unresponsive services, and further underutilization (Kirmayer, Guzder & Rousseau, 2014). Given the knowledge of

mental health care disparities for foreign- and U.S.-born Latinos, psychologists should be aware that in its current state, Latinos are not equally accessing or benefitting from psychological services, nor is there equality in service delivery. The APA Ethics Code promotes the aspirational principle of justice, as psychologists acknowledge that all people are entitled to equitable access to and benefit from the contributions of psychology (Knapp & VandeCreek, 2003). Exploring the discrepancy of why foreign-born Latinos have minimal access to mental health care is an important ethical issue.

While prior research has improved the documentation of disparities in use of mental health care among Latinos, research that more closely considers the nature of that disparity has been lacking (U.S. DHHS, 2001; U.S. DHHS, 2015). The majority of researchers have focused on measuring disparities among racial/ethnic groups, while few have investigated the correlates of those disparities to begin working toward potential solutions (Lopez et al., 2012). Disparity research has largely focused on broad comparisons between Whites, Latinos, and other racial/ethnic groups (Alvidrez, 1999; Eisenberg et al., 2009), while very few have compared utilization trends within Latino samples based on nativity (Alegría et al., 2007b; Nadeem et al., 2007). Further, there exists a need for local assessment on the West Coast (Washington, Oregon, and California) of disparities among Latinos as their size and proportion is increasing rapidly. Researchers have focused on the role of mental health status, socioeconomic barriers, such as income or education, and health insurance, while the role of cultural and attitudinal barriers has lacked sufficient attention (Alvidrez, 1999; Cook et al., 2007; Padgett et al., 1994). It remains unclear why foreign-born Latinos most underutilize

services and how these cultural and attitudinal factors correlate with increased or decreased service use.

As potential explanations for the disparity in mental health services utilization between foreign- and U.S.-born Latinos, I examined the role of acculturation and stigma. Acculturation may explain why Latinos who most underutilize mental health services are foreign-born with limited English-language proficiency, fewer years of residence in the U.S., and no health insurance (Alegría et al., 2007a). Foreign-born Latinos may perceive incongruence with their mental health problems and treatment offered, while limited-English speakers may struggle to engage in linguistically-dissimilar services (U.S. DHHS, 2012; Santiago-Rivera, 2003). Further, stigma is negatively associated with help-seeking behavior, which may also in part explain the disparity. Stigma about mental disorder may result in not seeking or adequately participating in treatment, or premature termination (Corrigan, 2004). In this study, I seek to provide a better understanding of how the variables of acculturation and stigma interact with nativity and mental health services utilization.

Research Questions and Hypotheses

The purpose of this study was to examine the utilization of mental health services in a sample of West Coast Latinos. I considered the specific roles of acculturation and stigma about mental disorder in an attempt to explain a disparity in services use between foreign- and U.S.-born Latinos, accounting for mental health status as a potential confounding variable. I proposed the following hypotheses: (1) Foreign-born Latinos will report lower levels of acculturation and higher levels of stigma than U.S.-born Latinos;

and (2) lower levels of acculturation and higher levels of stigma will correlate with lower mental health services use.

Chapter 2

The purpose of this study was to compare mental health service utilization trends of Latinos on the West Coast within a sample of U.S.- and foreign-born individuals. Existing research has not adequately addressed the role of cultural and attitudinal barriers in seeking mental health care. It remains unclear how these cultural and attitudinal factors correlate with increased or decreased service use among Latinos, and how this relates to the greatest underuse of services by foreign-born Latinos. For this reason, I examined the role of acculturation and stigma, and how these correlate with mental health services use based on nativity. I accounted for the role of mental health status in services use and made the following hypotheses: (1) Foreign-born Latinos will report lower levels of acculturation and higher levels of stigma than U.S.-born Latinos; and (2) lower levels of acculturation and higher levels of stigma will correlate with lower mental health services use.

Participants

Participants included a convenience sample of 103 Latinos age 18 years or older residing on the West Coast (Washington, Oregon, and California). They were recruited individually and in groups from church settings, places of employment, public places, and referrals from my personal and professional network. Participants were not compensated for their involvement in this study. Participants received an informed consent form in English or Spanish (see Appendices A and B), which included parameters of confidentiality and potential risks of involvement in the study. Names were not collected, thus ensuring anonymity.

There were a similar number of male to female respondents (44% and 56% respectively), as well as a similar number of respondents reporting English language preference to Spanish language preference (54% and 46% respectively). Mean age was 36 years. The majority of participants were of the Mexican ethnic subgroup (63%). Over three-quarters (80%) were foreign-born/first generation to the U.S., while the remainder were second generation or later. Over half were married or living with their partner (57%). Most held some type of health insurance (74%), whether private or public, while 23% reported having no insurance. Regarding socioeconomic status, this sample was well-educated with 40% reporting a college degree or higher, 60% working full-time, and a mean annual income of $59,421. Most participants were U.S. citizens (52%), while 25% were U.S. residents, 4% had a current visa, 13% were undocumented, and nine participants opted not to provide a response to this question.

Materials and Procedures

Language preference. Prior to completing any materials, participants were asked to specify their preference for English or Spanish and received informed consent (see Appendices A and B) and materials in the language of their choice. A more detailed assessment of language use was encompassed in the acculturation measure (see Acculturation section below). All materials below were presented in questionnaire format on paper form or online via Google surveys.

Demographic information. Participants completed questions about socioedemographic and cultural characteristics (see Appendices C and D). These included age, sex, marital status, household income, insurance status (private, public/government-sponsored, no coverage), ethnicity (Mexican, Cuban, Puerto Rican,

other), educational attainment (less than a high school degree, high school graduate, some college, college graduate), employment status (full-time, part-time, unemployed, retired, disabled), nativity (U.S.-born or foreign-born), and generational status (not born in the U.S. [first], U.S.-born with at least one parent foreign-born [second], born in the U.S. and both parents born in the U.S. [third]). For participants indicating foreign nativity, they were asked for years lived in the U.S. (0 to 5 years 11 months, 6 to 10 years 11 months, 11 to 20 years 11 months, or 21 years or more), and age at arrival to the U.S. (12 years or less, 13-17 years, 18-34 years, 35 years or older; Alegría et al., 2007b). Information regarding the participant's citizenship status was explicitly voluntary and optional. Identifying information, such as name or date of birth, was not requested. Questions were translated into Spanish and back translated into English to ensure accuracy.

Acculturation measure. Marín and Marín's (1991) brief version of the Short Acculturation Scale for Hispanics (SASH) was used to assess level of acculturation of participants. As the scale is in the public domain, no permission is needed to use it. The scale is a shortened four-item version of the original 12-item measure and is available in English and Spanish (Marín, Sabogal, Marín, Otero-Sabogal, & Perez-Stable, 1987). The original scale was developed to assess acculturation in Latinos using language as the primary indicator of level of acculturation (Norris, Ford, & Bova, 1996). Language is suggested to be the most reliable indicator of cultural change as it accounts for the majority of variation in acculturation (Finch et al., 2000; Norris et al., 1996; Vega et al., 1993). The scale was also created in response to limitations of other scales, specifically the narrow use for members of particular ethnic subgroups and inclusion of validation

criteria in the actual scale (e.g., length of residence in the U.S. or generational status) rather than considering these correlates of acculturation.

The full scale includes five items measuring language use, three items related to media preference, and four items related to ethnic social relations. The scale produced an alpha coefficient of $\alpha = .92$ and explained 68% of the variance for Latinos (Marín et al., 1987). To establish validity, the authors correlated scores with generation ($r = .65$, $p < .001$), length of time lived in the U.S. ($r = .70$, $p < .001$), participant's self-evaluation of level of acculturation (as measured by Likert scale ranging from *very Latino/Hispanic* to *more American than Latino*; $r = .76$, $p < .001$), and age at the time of immigration ($r = -.72$, $p < .001$). The five items measuring language had nearly the same reliability ($\alpha = .90$) and validity coefficients as the entire 12-item scale, indicating that using an abbreviated language-based version of the scale could be effective in research.

The brief version of the SASH omits one of the five language items and maintains alpha coefficient levels similar to the original instrument ($\alpha = .90$) while minimizing respondent burden by reducing the number of questions (Norris et al., 1996). Items on the brief SASH are averaged to form a composite score ranging from 1 (*low acculturation, monolingual Spanish-speaking*) to 4 (*high acculturation, monolingual English-speaking*; Marín et al., 1987). Norris and colleagues (1996) assessed the reliability and validity of the measure in a sample of Latino (Puerto Rican and Mexican) adolescents. The reliability for the sample was $\alpha = .90$, meeting the criterion for respectable to very good scale reliability, which was comparable to other published scales. Regarding validity, scores were highly correlated with generational status ($r = .67$, $p <. 001$), length of residence in the U.S. ($r = .56$), country of birth (e.g., participants born in the U.S had

significantly higher mean acculturation scores than those born outside the U.S.; $p <$ .0001), language chosen for the interview (e.g., participants preferring English had significantly higher mean acculturation scores than those preferring Spanish; $p < .001$), and self-evaluation of acculturation (measured by 4-point Likert scale of how close participants felt to Latinos in their country of origin or to Whites and African Americans in the U.S.; $r = .25$ for Mexican youth, $r = .19$ for Puerto Rican youth). In another study, reliability for the measure among Latina women was $\alpha = .84$ (Alvidrez, 1999).

Stigma measure. Stigma was measured using an adapted version of Link (1987) Discrimination-Devaluation (D-D) Scale. Permission from the author was obtained. The D-D Scale is based on the notion that secondary negative outcomes follow the imposition of the label of having a mental disorder (Link, 1987). The scale consists of 12 statements with which participants rate their agreement on a 6-point Likert scale ranging from 1 (*strongly agree*) to 6 (*strongly disagree*). The scale measures the extent to which individuals believe that most people would devalue and discriminate against a person who had received mental health treatment (Link, 1987). Statements on the scale begin with "Most people believe…" or "Most people would…" followed by a discriminatory statement or accepting statement on reverse-scored items (Eisenberg et al., 2009). Responses are summed and divided by 12 to produce a scaled score from 1 to 4, with higher scores indicating a stronger perception of discrimination (Link et al., 2001). A wording adaptation by Eisenberg and colleagues (2009) was used in this study in which the phrase "mental patient" was replaced with "a person who has received mental health treatment." The former implies an institutionalized patient with severe mental illness, while the latter is conducive to a broader interpretation. An existing Spanish translation

of this measure was used in which the authors tailored the questionnaire for depressed patients (Interian et al., 2010), for which permission was obtained to use. I re-worded references to depression to reflect individuals who had received general mental health treatment (see Appendix E). The measure was translated by native Spanish speakers from Mexico and Central America using a back translation method performed to ensure accuracy.

Link and colleagues (1987) found the scale had adequate reliability of $\alpha = .78$ in a sample of community members and mental health patients, including Latinos. They later found reliability of $\alpha = .82$ in a sample of mental health patients (Link, Mirotznik, & Cullen, 1991), and α coefficients of .88, .86, and .88 at baseline, 6-, and 24-month follow ups, respectively, in another sample of mental health patients (Link et al., 2001). Eisenberg and colleagues (2009) found high reliability of $\alpha = .89$ in college students. While the scale has been used primarily among mental health patients, it can be administered to members of the community (Link, Yang, Phelan, & Collins, 2004). According to its author, the D-D scale's validity depends primarily on the face validity of items. In its creation, D-D scores were correlated with scores on another demoralization scale (Dohrenwend et al., 1980), income loss, and unemployment in a sample of patients diagnosed with a mental health disorder (Link, 1987). In another study, a significant positive correlation was found between scores on the D-D Scale and the Internalized stigma of Mental Illness Scale ($r = -.30$, $p < .001$; Ritsher, Otilingam, & Grajales, 2003).

Mental health status. Participants completed the Kessler Psychological Distress Scale (K6), a screening for non-specific psychological distress (Kessler et al., 2011). It is available in Spanish and English, and permission from the author was obtained. The scale

is based on DSM-IV diagnostic criteria (American Psychiatric Association, 1994). It was originally developed in a 10-item format (known as the K10) and was used in major epidemiological studies including the National Comorbidity Survey Replication (NCS-R; Kessler et al., 2004) and in the World Health Organization's Mental Health Initiative (Kessler et al., 2003). The K10 was followed by a shorter six-item scale known as the K6, which was developed for use in community epidemiological studies to provide rapid assessment of prevalence of serious mental illness (defined by the Substance Abuse and Mental Health Services Administration as a 12-month DSM-IV diagnosis and a Global Assessment of Functioning [GAF] score of less than 60, indicating serious impairments; Kessler et al., 2003). In the K6, four items of the K10 were eliminated, however it remains as sensitive to detecting psychological distress as the 10-item version, which led to the recommendation that the six-item version be used instead (Kessler et al., 2011). The measure is not designed to assess for specific mental disorders, making it appropriate for this study.

The scale includes questions about emotional states within the past 30 days, to which participants select an answer on a 5-point Likert scale ranging from 1 (*none of the time*) to 5 (*all of the time*). Scores range from 6 (*no distress*) to 30 (*severe distress*; Andrews & Slade, 2001). Despite taking only a few minutes to complete, the K6 had very good concordance with blinded clinical diagnoses of serious mental disorders using the World Health Organization's World Mental Health version of the Composite International Diagnostic Interview (WMH-CIDI; Kessler & Üstün, 2004), a fully structured diagnostic interview which takes over an hour to administer (median AUC = .83; Kessler et al., 2011), and very good concordance with the short form of the WMH-

CIDI (AUC = .87; Kessler et al., 2003). The K6 has been validated and used in a number of countries on continents including South America, Australia, Europe, and Asia (Kessler et al., 2011). It shows little bias regarding sex and education of participants (Baillie, 2005). The K6 and K10 outperformed other brief screenings, including the Mental Component Scale (MCS-12), RAND Mental Health Component Scale (RAND MHC-12), and General Health Questionnaire (GHW-12) in detecting depression and anxiety (Gill, Butterworth, Rodgers, & Mackinnon, 2007; Kessler et al., 2003). Kessler and colleagues (2003) reported a high internal consistency reliability of α =.89 for the K6. It was also highly correlated with the WMH-CIDI short form, a fully-structured diagnostic interview (r = .65, $p < .05$; Kessler & Üstün, 2004), and the WHO Disability Assessment Schedule (WHO-DAS), which measures functional impairment associated with mental disorders (r = .67, $p < .05$; Rehm et al., 1999). Neither of these commonly-used instruments improved prediction of serious mental illness significantly over the K6 scale (Kessler et al., 2003).

Mental health services utilization. Participants answered three questions regarding past-year mental health services use, regardless of mental health status (see Appendices F and G). The question is adapted from wording in the WMH-CIDI to assess service use for "problems with your emotions, nerves, mental health, or your use of alcohol or drugs" (Kessler & Üstün, 2004). The three questions were designed to assess mental health care seeking from (a) a medical provider (such as a family doctor, general practitioner, chiropractor, massage therapist, or nurse), (b) a mental health provider (such as a psychiatrist, psychologist, social worker, counselor, psychotherapist, mental health nurse, or other mental health professional), and (c) non-clinical sources (such as a religious or spiritual minister, pastor, or priest, or any other healer like an herbalist,

curandero/a, sobador/a, or self-help or support group). The number of visits from medical providers and mental health providers were summed to create a fourth variable to include any type of service visit. Participants were asked to specify the number of past-year visits to each source of care.

Debriefing statement. As an appendix the survey, I provided participants with a debriefing statement (see Appendices H and I). The statement outlined the purpose of the study and included a list of mental health and community resources serving Spanish-speakers as well as my contact information. The purpose of this debriefing statement was to offer resources for follow-up care in the case of an adverse reaction to survey questions or the realization of an emotional or mental health need.

Summary

The purpose of this study was to examine the utilization of mental health services among Latinos on the West Coast, including foreign- and U.S.-born, and the specific roles of acculturation and stigma about mental disorder. Acculturation was measured using the brief version of the SASH (Marín & Marín, 1991), and stigma was measured using Discrimination-Devaluation (D-D) Scale (Link, 1987). Mental health services utilization was measured via three questions assessing number of past-year service visits, which was adapted from the WMH-CIDI (Kessler & Üstün, 2004). Mental health status was measured using the K6 scale (Kessler et al., 2011). Language preference and demographic information was also collected. I accounted for the influence of mental health status as I evaluated a sample of U.S.- and foreign-born Latinos with the following hypotheses: (1) Foreign-born Latinos will report lower levels of acculturation and higher

levels of stigma than U.S.-born Latinos; and (2) lower levels of acculturation and higher levels of stigma will correlate with lower mental health services use.

Chapter 3

Data Analysis

In the following statistical analyses, stigma and acculturation were the independent variables. I also accounted for mental health status as a potential confounding independent variable. The primary dependent variable was all visits, reflecting the total number of service visits to both medical and specialty mental health providers for mental health reasons. To clarify this section on statistical analyses, Table 1 lists all independent variables, accompanied by their descriptions and whether the variable met the assumption of normality. One independent variable, mental health status, was slightly right skewed. Due to the central limit theorem, the sampling distribution in larger samples tends to be normal regardless of the shape of the data collected (Field, 2009), so this variable was analyzed as normal with parametric tests.

Table 1

Description of Independent Variables

Variable	Description	Assumption of Normality Met
Acculturation	Level of acculturation to U.S. as measured by SASH	Yes
Stigma	Level of mental health stigma as measured by D-D scale	Yes
Mental Health	Mental health functioning as measured by K6	No, slightly right skewed[a]

[a]Analyzed as a normally-distributed variable

Table 2 lists dependent variables, which were all extremely right skewed by a large number of participants (56%) who reported no past-year mental health service visits. Due to this, dependent variables were converted from continuous to binary format (e.g., whether or not any past-year service visit was made).

Table 2

Description of Dependent Variables

Variable	Description
All Visits	Number of past-year mental health service visits, including visits to specialty mental health and medical providers below
Specialty Mental Health Visits	Number of past-year service visits to specialty mental health providers (psychiatrist, psychologist, social worker, counselor, psychotherapist, mental health nurse, or other mental health professional)
Medical Visits	Number of past-year service visits to medical providers (family doctor, general practitioner, chiropractor, massage therapist, nurse) for mental health reasons
Non-Clinical Visits	Number of past-year service visit to non-clinical sources (religious or spiritual minister, pastor, priest, herbalist, *curandero*, *sobador*, and self-help or support group

Note. All dependent variables were converted into binary variables. There is one missing value across all dependent variables from a single participant who did not respond.

First, I sought to determine if there was a disparity in services use between nativity groups (e.g., foreign-born and U.S.-born). For this, I ran a chi-square test for association between nativity groups for having made any past-year mental health visit. Next, I sought to determine if mental health status was significantly different between U.S.-born Latinos and foreign-born Latinos using an independent-samples *t*-test. To test hypothesis 1 (foreign-born Latinos will report lower levels of acculturation and higher levels of stigma than U.S.-born Latinos), I conducted an independent samples *t*-test to determine mean differences in acculturation and stigma scores between foreign-born and U.S.-born Latinos. For hypothesis 2 (lower levels of acculturation and higher levels of stigma will correlate with lower mental health services use), I conducted a binomial logistic regression analysis to determine whether stigma and acculturation could be used to determine the probability of having made a mental health visit in the past 12 months.

After testing hypothesis variables, I entered mental health status, demographic, and socioeconomic variables into the logistic regression equation to identify which of

these were the best predictors of making a mental health visit. The forward method of variable selection was used to address multicollinearity between variables. Demographic variables included age, sex, marital status, language preference, years lived in the U.S., and age arrived to the U.S. Socioeconomic variables included income, insurance status (collapsed into any type of insurance or none), education level, employment status (collapsed into employed or unemployed), and citizenship status (collapsed into documented and undocumented).

As an exploratory analysis, I sought to assess the type of providers from which services were sought across nativity groups. I ran several chi-square tests for association for having made any past-year mental health visit to medical providers, specialty mental health providers, and non-clinical sources. Further, to expand upon primary findings for the purposes of discussion, I used a chi-square to investigate whether foreign-born participants had returned to specialty mental health providers after attending one visit. I also explored several demographic differences between foreign- and U.S.-born Latinos across insurance, education, and income using chi-square analyses for each comparison.

Results

Descriptive statistics. Table 3 shows descriptive characteristics of the Latino sample along variables of age, sex, ethnicity, nativity, language preference, generation, years lived in the U.S., age at arrival to the U.S., income, marital status, insurance type, education, employment, and citizenship status.

Table 3

Demographic Characteristics of Sample

Characteristic		*N*	%	*M*	*SD*
Age		103		36.29	12.49
Income		103		59,421	46,768
Gender[a]	Male	44	43.6		
	Female	57	56.4		
Ethnicity[b]	Mexican	64	62.7		
	Puerto Rican	1	1.0		
	Cuban	2	2.0		
	Other	35	34.3		
Nativity	Foreign-born	82	79.6		
	U.S.-born	21	20.4		
Language	English	56	54.4		
	Spanish	47	45.6		
Generation	1st	82	79.6		
	2nd	20	19.4		
	3rd	1	1.0		
Years lived in U.S.[c]	0-5 years	7	8.6		
	6-10 years	16	19.8		
	11-20 years	29	35.8		
	21+ years	29	35.8		
Age arrived to U.S.[d]	12 years or less	18	22.8		
	13-17 years	17	21.5		
	18-34 years	37	46.8		
	35+ years	7	8.9		
Marital status[e]	Single	28	27.7		
	Married/living with partner	58	57.4		
	Separated/divorced	14	13.9		
	Widowed	1	1.0		
Insurance type[f]	Private	55	53.9		
	Public	20	19.6		
	None	23	22.5		
	Other	4	3.9		
Education level	Less than HS	19	18.4		
	HS graduate	15	14.6		
	Some college	28	27.2		
	College or higher	41	39.8		
Employment status	Full-time	62	60.2		
	Part-time	17	16.5		
	Unemployed	20	19.4		

	Retired	2	1.9
	Disabled	2	1.9
Citizenship Status[g]	Citizen	49	52.1
	Resident	23	24.5
	Visa	4	4.3
	Undocumented	12	12.8
	Other	6	6.4

[a]Two missing values. [b]One missing value. [c]One missing value. Applies only to foreign-born participants. [d]Three missing values. Applies only to foreign-born participants. [e]Two missing values. [f]One missing value. [g]Nine missing values.

Overall, participants were moderately acculturated as indicated by a mean SASH acculturation score of 2.81 on a scale of 1 (representing *low acculturation/monolingual Spanish-speaking*) to 4 (representing *high acculturation/monolingual English-speaking*). Mean D-D-Scale stigma score was 2.32 on a scale of 1 to 4. The mean number of all mental health service visits in the prior 12 months was five, which includes a mean of two specialty mental health visits and three medical visits for mental health reasons. Over half (56%) of the participants reported not having made any mental health visit in the prior 12 months. The mean past-year number of non-clinical visits for mental health reasons was one. The mental health status mean was 12.23, with a score of 6 (representing *no psychological distress*) and 30 (indicating *severe distress*).

Inferential statistics. A chi-square test for association revealed there was no disparity in overall mental health service use between foreign-born (43%) and U.S.-born (48%) participants, $X^2(1, N = 102) = .13, p = .717$. In other words, both groups had used services to the same extent in the year prior. Next, an independent-samples *t*-test revealed no significant differences in mental health functioning between foreign-born ($M = 12.28$, $SD = 4.68$) and U.S.-born Latinos ($M = 12.05$, $SD = 6.44$), $t(101)=.19, p = .852, r = .02$.

Regarding hypothesis testing, results from an independent-samples *t*-test revealed that foreign-born Latinos reported lower acculturation scores ($M = 2.56$, $SD = 0.91$) than their U.S.-born counterparts ($M = 3.8$, $SD = 0.63$; see Figure 8), and this difference was statistically significant, $M = -1.24$, 95% CI [-1.66, -.82], $t(101) = -5.88$, $p < .001$, $r = .50$. However, foreign-born ($M = 2.33$, $SD = 0.77$) and U.S.-born Latinos ($M = 2.26$, $SD = 0.79$) did not differ significantly on stigma about mental disorder, $t(101)=.39$, $p > .05$, $r = .04$.

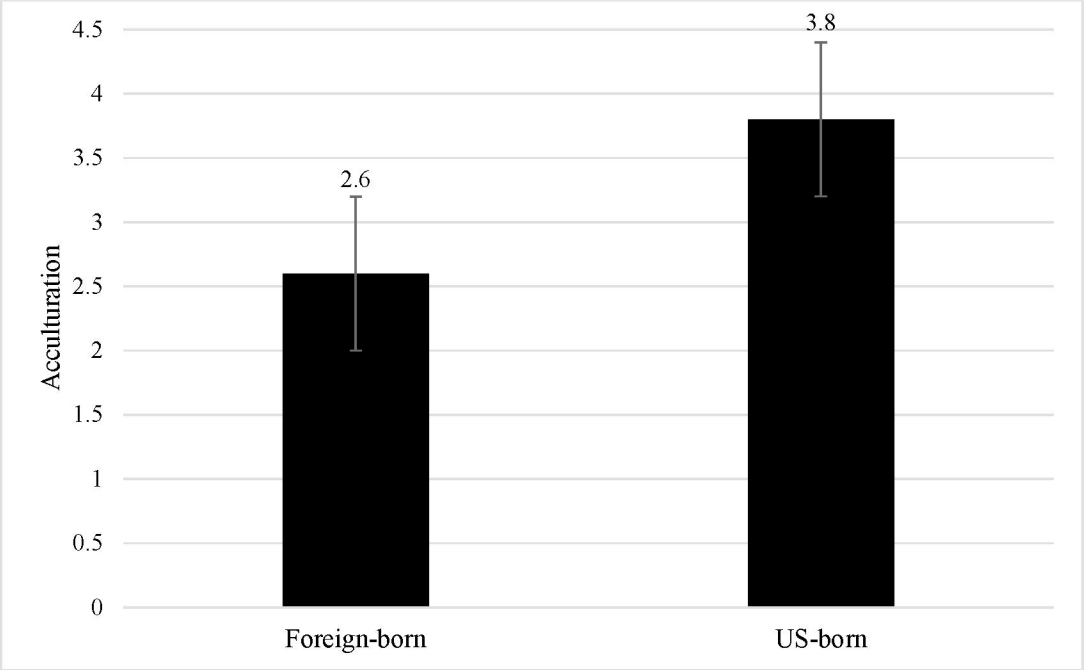

Figure 8. Mean acculturation scores for foreign- and U.S.-born Latinos. Error bars represent standard errors. $N = 103$, $p < .001$.

The logistic regression model, including predictor variables of acculturation and stigma, was not statistically significant, $X^2(2) = 1.55$, $p = .46$. Thus, neither acculturation nor stigma influenced the likelihood that participants had made a mental health visit. In the second logistic regression model using mental health status, demographic, and socioeconomic variables, two variables emerged as significant predictors: insurance and education level. This logistic regression model, including these two variables, was statistically significant, $X^2(2) = 8.575$, $p = .014$ (see Table 4). The model explained 18% (Nagelkerke *R2*) of the variance in mental health visits and correctly classified 65.6% of cases. Sensitivity was 33.3%, specificity was 86.5%, positive predictive value was 62% and negative predictive value was 67%.

Table 4

Logistic Regression Analysis Predicting Making a Mental Health Visit From Insurance and Education

Independent Variable	*B*	*SE*	Wald	*p*	OR
Insurance	1.49	0.69	4.68	.031	4.414
Education Level	-0.52	0.25	4.19	.041	.597

Thus, having health insurance increased the odds of making a mental health visit by 4.414 times. The relationship was negative with educational attainment: With each decreasing level of education (from college or higher, some college, high school/GED, to less than high school), the odds of making a mental health visit increased by .597 times.

Exploratory analyses on type of service visits. A chi-square test for association was insignificant between foreign and U.S. nativity for having made any past-year mental health visit to medical providers, $X^2(1, N = 102) = .78$, $p = .376$. Also insignificant was a chi-square test for visits to specialty mental health providers, $X^2(1, N = 102) = .003$, $p = .956$. Thus, there was no preference for one type of service provider over the other for foreign- or U.S.-born participants. However, there was a statistically significant

association between nativity and use of non-clinical support, $X^2(1, N = 102) = 5.29, p = .043$ (one cell had an expected cell frequency of less than 5, thus Fisher's exact test was used). This finding was in the opposite direction as expected as significantly more U.S.-born Latinos (33%) had at least one past-year visit to a religious or spiritual minister, pastor, priest, or other traditional healers than foreign-born Latinos (12%). The odds of making a non-clinical visit were .28 times higher for U.S.-born Latinos.

Secondary analyses. The sample size was small ($N = 19$) in a chi-square analysis to assess the return rate of foreign-born participants to their specialty mental health providers after having made one visit. While foreign-born Latinos (60%) did report lower return rates than U.S.-born (100%), results were not significant, $X^2(1, N = 19) = 2.34, p = .126$. Next, a chi-square revealed significant differences in insurance status between nativity groups, $X^2(1, N = 75) = 6.40, p = .011$. Foreign-born Latinos had a significantly higher rate of being uninsured (32%) compared to U.S.-born (5%). The following chi-square analysis showed that education between U.S.-born Latinos and foreign-born Latinos was significantly different, $X^2(3, N = 103) = 15.25, p = .002$. There were significantly larger proportions of foreign-born Latinos with less than high school (22%) and high school educations (18%) compared to U.S.-born Latinos (5% and 0% respectively). Furthermore, among foreign-born Latinos, 60% reported some college or higher compared to 95% of U.S.-born. Lastly, an independent-samples *t*-test to determine if there were differences in income between U.S.-born Latinos ($M = 66{,}390$, $SD = 50{,}570$) and foreign-born Latinos ($M = 57{,}512$, $SD = 45{,}855$) produced an insignificant result, $t(91) = -.75, p = .455, r = .078$.

Summary

In sum, foreign- and U.S.-born Latinos used services to the same extent in the year prior and reported similar levels of mental health functioning. Foreign-born Latinos reported lower levels of acculturation than U.S.-born Latinos, but the two groups did not differ significantly on stigma about mental disorder. In the logistic regression equation, neither acculturation nor stigma were significant predictors of making a mental health visit. However, in a separate analysis to identify the best predictor variables, health insurance status and education level did significantly predict making a mental health visit.

There was no differentiation between the two nativity groups based on type of visit, e.g., whether services had been received from medical providers or specialty mental health providers. However, significantly more U.S.-born Latinos had made at least one past-year visit to a non-clinical source than foreign-born Latinos. Results were not significant with regard to whether foreign-born participants had returned to mental health providers after their first visit. Lastly, there were significant differences between foreign- and U.S.-born Latinos in insurance status and education, but not in income.

Chapter 4

The purpose of this study was to examine the utilization of mental health care services among foreign-born Latinos on the West Coast, considering the specific roles of acculturation and stigma about mental disorder. Participants, including both U.S.- and foreign-born Latinos, completed surveys including the SASH acculturation measure (Marín & Marín, 1991), the (D-D) stigma measure (Link, 1987), the K6 mental health status measure (Kessler et al., 2011), and questions related to past-year mental health service visits. I accounted for mental health status as a potential confounding variable and proposed the following hypotheses: (1) Foreign-born Latinos will report lower levels of acculturation and higher levels of stigma than U.S.-born Latinos; and (2) lower levels of acculturation and higher levels of stigma will correlate with lower mental health services use.

Interpretation

An expectation upon which the hypotheses of this study were based did not occur: Foreign-born Latinos did not use significantly less mental health services than U.S.-born Latinos. In other words, there was not a significantly lower proportion of foreign-born Latinos who had sought mental health services compared to U.S.-born Latinos. Thus, in my sample, there was no disparity in mental health services use, which meant that the question of identifying whether stigma or acculturation were involved in service underutilization by foreign-born Latinos became somewhat irrelevant. Instead, the question shifted to identifying variables that were associated with service utilization in general, followed by determining if those variables were significantly different between foreign- and U.S-born Latinos. Further, my original intention in measuring mental health

status was to isolate its influence as a potential confounding variable—e.g., if one group had worse mental health functioning, this could influence mental health services utilization. In this case, both groups demonstrated similar levels of mental health functioning. This meant that one group did not have a greater propensity to access services over the other given a poorer mental state or higher mental health needs, which eliminated the need to control the influence of this variable.

Nevertheless, supporting hypothesis 1, foreign-born Latinos reported lower levels of acculturation than U.S.-born Latinos. This was to be expected given that acculturation, which is largely indicated by language (Finch et al., 2000; Norris et al., 1996; Vega et al., 1993), would offer an advantage to individuals born in the U.S. Contrary to what I predicted in hypothesis 1, foreign-born and U.S.-born Latinos did not differ significantly on stigma about mental disorder. Contrary to what I anticipated in hypothesis 2, neither acculturation nor stigma significantly predicted making a mental health visit. In other words, individuals with lower acculturation and higher stigma (representing higher barriers to care) reported they had accessed services to a similar degree as individuals with higher acculturation and lower stigma (representing lower barriers to care). Explanations for this will be discussed further in the Integration section below.

Beyond hypothesis testing, I conducted an analysis to identify the best predictors of making a mental health visit. Consistent with other research (Alegría et al., 2007b; Bustamante et al., 2009; Cook et al., 2007; Valdez et al., 1993), two variables emerged as significant: health insurance and education level. Thus, possessing health insurance and lower education level improved the odds of making a mental health visit. Lastly, I broke down the dependent variable of all mental health visits into categories of visits to a

medical provider or to a specialty mental health provider. There were no differences between foreign- and U.S.-born Latinos in type of service use, e.g., whether one group was more inclined to receive mental health care from a specialty mental health provider or medical provider. Unexpectedly, however, a significantly larger proportion of U.S.-born Latinos had at least one past-year visit to a non-clinical source of support than foreign-born Latinos. As the intent behind the secondary analyses was to explain findings from the primary analyses, these results will be discussed in their context in the Integration section below.

Integration

No disparity present. In this sample, there was no disparity in mental health services use. This failed to replicate numerous studies that demonstrated that there is a disparity in services utilization between nativity groups in the general Latino population (Alegría et al., 2002; Alegría et al., 2007b; Alvidrez, 1999; Cook et al., 2007; González et al., 2010; Padgett et al., 1994; U.S. DHHS, 2012; Vega et al., 1999), but not among those who have diagnosed mental disorders (Alegría et al., 2007b). I expected the proportion of foreign-born participants who had received mental health care to be lower than that of U.S.-born Latinos. My hypotheses were aimed at identifying factors involved in that disparity. Because there was no disparity, this could be one explanation as to why I did not find significance in the independent variables of acculturation and stigma.

The first possible reason for the lack of disparity relates to an under-sampling of U.S.-born Latinos, of which there were only 21 participants. This small sample may have been insufficient to ascertain true trends in mental health utilization. Second, there was an oversampling of well-educated, middle-income Latinos from metropolitan areas (for

details, see Limitations section below). Due to higher socioeconomic status, the sample overall may have experienced less psychosocial stress and thus, fewer mental health needs as a whole (Chen, Cohen & Miller, 2010; Gallo, 2009; Miller et al., 2009). Another explanation for the finding is that I could not consider the depth of service use given the need to convert the dependent variables from a continuous variable (number of past-year mental health visits) to binary format (whether or not a past-year visit was made). It is possible that foreign-born Latinos attended fewer follow-up visits than their U.S.-born counterparts. For example, a foreign-born Latino with a mental health concern may have initiated treatment, but may have terminated or prematurely dropped out of treatment due to lack of fit, a negative experience, language barriers, or other reasons.

Another potential reason relates to the use of highly specialized mental health workers. Despite equivalent use of mental health services, foreign-born Latinos may receive care from less skilled professionals. These may include social workers, case managers, masters' level therapists, and those available at free, low-cost, or community health clinics. U.S.-born Latinos, particularly those with health insurance plans, may have better access to specialized mental health professionals, including psychologists, psychiatrists, and psychiatric nurse practitioners. Thus, while it may appear both groups access care to the same extent, the quality of that care may be quite different.

Mental health status not a confounding variable. Poorer mental health status was not noted for U.S.-born Latinos compared to foreign-born, as was found in previous research (Alegría et al., 2007a; Alegría et al., 2008). This is important as poorer mental health functioning would naturally increase the inclination to seek mental health services, producing a confounding variable in attempting to isolate the influence of other variables.

For this reason, a number of researchers have controlled for the presence of mental disorder in sampling or in statistical analyses (Alegría et al., 2002; Alegría et al, 2007b; Cook et al., 2007; González et al., 2010; U.S. DHHS, 2015; Vega et al., 1999). In this sample, due to the finding that foreign-born Latinos demonstrated mental health functioning similar to that of their U.S.-born counterparts, there was no confound for which to control.

Acculturation. Foreign-born Latinos reported lower levels of acculturation than U.S.-born, which was as expected. The SASH (Marín et al., 1987) measures degree of acculturation through language, which accounts for the majority of variation in acculturation (Finch et al., 2000; Norris et al., 1996; Vega et al., 1993). So naturally, individuals born in the U.S. would be at an advantage for acquiring English language skills, even if he or she lives in a monolingual Spanish-speaking home. More importantly, acculturation level was measured to be used in the prediction of mental health service visits in hypothesis 2. It has been well-established in literature that Latinos who most underutilize health care services are first-generation/foreign-born with limited English-language proficiency (Alegría et al., 2007a; Alegría et al., 2007b; Alegría et al., 2002; Bermúdez-Parsai et al., 2012; González et al., 2010; Vega et al., 1999). These multiple factors can be summed up in the construct of acculturation, as attempted here.

Despite acculturation being associated with foreign nativity, it was not a significant predictor of mental health services use. Possible explanations include that most participants were recruited from metropolitan areas, where services are more accessible and available. Programs in the West Coast may be particularly effective at targeting Latinos with low acculturation levels with culturally relevant services. Services

may be made more relevant with Spanish-speaking providers, interpreter services, and specialized agencies targeting Latinos. Those with low acculturation may be recruited into services via outreach efforts through schools, churches, community medical clinics, and other agencies where Latinos already receive services. Notwithstanding insignificant findings in the present study, low acculturation is associated with increased barriers to accessing care and may continue to be a hindrance for receiving mental health services when needed. Reasons include language dissimilarity of providers (Alegría et al., 2007b; Alegría et al., 2002; Santiago-Rivera, 2003), lack of knowledge of the healthcare system (Alegría et al., 2007b; Bermúdez-Parsai et al., 2012), cultural relevance and appropriateness of services (Ayón et al., 2010; Santiago-Rivera, 2003; Vega et al., 1999), and perceived need for the type of treatment offered in the U.S. (Alvidrez, 1999; U.S. DHHS, 2012; Santiago-Rivera, 2003; Waldstein, 2008).

Stigma. Results of this study give the appearance that stigma is not a significant barrier in seeking mental health care. However, the negative relationship stigma maintains with help-seeking behavior continues to be worthy of further consideration (American Psychological Association, 1993; Gary, 2005; Link, 1987; U.S. DHHS, 1999). These present findings have a limited context to which to compare as little research exists on how stigma affects Latinos in general and foreign-born Latinos in particular. Previous literature demonstrated that foreign-born Latinas had more stigma-related concerns than their U.S.-born counterparts (Nadeem et al., 2007), but the present study did not consider gender differences. Results from studies considering Latinos as a whole are mixed: Latinos have been found to endorse both more (Nadeem et al., 2007) and less (Alvidrez, 1999) stigma-related concerns than Whites. The present study adds to the ambiguity,

leaving both the presence and role of stigma unclear in foreign-born and U.S.-born Latinos.

Because so little research exists for this population on stigma, it could be the case that foreign-born individuals truly do not significantly differ on attitudes toward mental health as their U.S.-born counterparts. Perhaps globalization and media influence have decreased stigma about mental disorder in Latin America. Or perhaps the result reflects a more accepting local culture around mental health in the greater Seattle area, from where most participants in the study were recruited. The region is quite progressive and attitudes toward mental disorder may be less stigmatizing or negative overall compared to other regions of the U.S. Further, in the northern latitude, the population experiences higher rates of seasonal affective disorder and depressive symptoms due to seasonal changes (Mersch et al., 1999). This may put mental health and wellbeing in a rather unique focus, making mental disorder less of an anomaly and more of a commonly-recognized phenomenon. For these reasons, it could be the case that foreign-born Latinos were evaluating stigma based on their local environment. For example, if foreign-born individuals perceive that the host culture around them normalizes mental health problems, they may be inclined to indicate more positive attitudes about such, even if they personally come from a culture where the opposite is true. These individuals may not maintain the beliefs from their cultures of origin. Lastly, due to informed consent, participants knew they were completing a survey from someone who was involved in psychology, and there could have been an experimenter effect. Due to the negative nature of stigma questions, perhaps participants did not want to offend the individual for whom they were taking the survey. In explaining the finding that stigma did not correlate with

lower mental health services use, it may be that healthcare consumers are aware that mental health and medical services are confidential, and despite negative attitudes toward treatment, know that their health information will not be made public.

Seeking specialty mental health services may be more stigmatizing than seeking medical services. Therefore, as a secondary analysis, I investigated whether foreign-born participants returned to their mental health providers after their first visit in the past year. Sample size ($N = 19$) was an issue for foreign-born participants who had attended at least one specialty mental health visit. However, results appeared to be in the hypothesized direction ($p = .126$), as foreign-born Latinos had lower return rates (60%) to specialty mental health than their U.S.-born counterparts (100%).

The measure used to assess stigma, the D-D Scale, may be imprecise at capturing the full essence of what it means to have a negative attitude about mental disorders. Questions on this measure begin with, "Most people would think," followed by a negative or positive statement about individuals with a mental disorder. This may capture the construct of public stigma (Corrigan, 2004), but may not sufficiently include the constructs of self-stigma (e.g., personal shame and failure, self-deprecation; Alvidrez, 2008; Corrigan, 2004), or family stigma (e.g., shame over family disapproval or rejection; Leaf et al., 1987; Nadeem et al., 2007). Further, questions on this measure may be difficult to answer for individuals with lower levels of education or lack of exposure to Likert-scale questions. For example, answers to the 12 items require the participant to mark one option on a 6-point scale ranging from 'Strongly Disagree' to 'Strongly Agree," which may be confusing or difficult.

Insurance. Having health insurance increased the odds of making a mental health visit by 4.41 times. This replicated findings from previous studies (Alegría et al., 2007b; Bustamante et al., 2009; U.S. DHHS, 2015; Valdez et al., 1993) and strengthened the conclusion that lacking insurance coverage is related to failing to seek healthcare services (Cook et al., 2007; Ku & Waidmann, 2003; U.S. DHHS, 2015; Woodward et al., 1992). Part of the correlation between service use and insurance is likely financial, in that health insurance significantly reduces the cost of service visits, making them less restrictive. Those with health insurance likely make more visits to primary care, where providers are able to treat and/or refer patients who display symptoms of psychological issues. Further, federal and state health insurance benefits are not available to undocumented immigrants, creating greater barriers for this group in accessing care (Ku & Waidmann, 2003).

In a secondary analysis, I found that foreign-born Latinos had a significantly higher rate of being uninsured (32%) compared to U.S.-born (5%). Quite interestingly, a new question emerged from this finding: If individuals who have health insurance are more likely to make mental health visits, and foreign-born Latinos have lower rates of being insured, why did they use mental health services to the same extent as U.S.-born Latinos? Several reasons may be involved. There could be an abundance of agencies offering direct services or referrals to Latinos, particularly in larger metropolitan areas, where most participants were recruited. Accessibility to these services is enhanced when transportation is available and when costs for services are low. In the Seattle area, some mental health services are available at little to no cost, and special grants may fund projects aimed at Latino health and wellbeing. These factors may make services available

to uninsured Latinos, bridging the gap between those who access services using health insurance plans.

Education. Lower levels of educational attainment were associated with making a mental health visit. For each decreasing level of education, the odds of making a mental health visit went up by .597 times. The inverse was also true: As education increased, individuals were less likely to have made a mental health visit. It is already apparent that education, employment, income, and health insurance are not only implicated in mental health services use (Bustamante, Fang, Rizzo, & Ortega, 2009; Cook et al., 2007; Marshall et al., 2005; Sribney, Elliot, Aguilar-Gaxiola, & Ton, 2012), but they are also correlated with one another. Higher educational attainment affords the opportunity for a wider range of employment opportunities offering better salary employer-sponsored health insurance. These factors are captured in the concept of socioeconomic status. Individuals with higher socioeconomic standing may have a lower need for mental health services, less mental health problems, less life stress in general, great financial stability, better coping and health habits, and fewer relational difficulties. The inverse is also true: Individuals of lower socioeconomic status may have more potential for psychosocial stress and harsher family environments, making them more susceptible to mental disorders, chronic disease, and an exaggerated physiological distress response, thereby more likely to seek out services (Chen, Cohen & Miller, 2010; Gallo, 2009; Miller et al., 2009).

Previous researchers have controlled for differences in rates of mental disorder and socioeconomic variables, including income, education, and insurance coverage (Alegría et al., 2002; Alegría et al., 2007b; Alvidrez, 1999; Cook et al., 2007; González et

al., 2010; Padgett et al., 1994; Vega et al., 1999). Despite this, Latinos in general and foreign-born Latinos in particular still displayed significant patterns of underuse. For this reason, the rationale behind the present study was to look beyond sociodemographic variables and mental health functioning to identify the role of cultural and attitudinal variables involved in the disparity.

Type of service visits. There were no significant differences between U.S.- and foreign-born Latinos in type of mental health visits—e.g., whether more visits had been sought from medical providers or specialty mental health providers. These results do not align with some studies that suggested that foreign-born Latinos were up to twice as likely to receive services from a medical provider (Alegría et al., 2007b; Alvidrez, 1999; Sribney et al., 2012; Padgett et al., 1994; Vega et al., 1999). Part of this may relate to stigma, wherein foreign-born Latinos may attach more stigma to specialty mental health settings, but use of a general medical provider may be more acceptable. I did, however, find an unexpected result: U.S.-born Latinos had higher utilization of non-clinical support. This was in the opposite direction as expected considering results from previous research (Vega et al., 1999). Foreign-born Latinos were thought to have a greater propensity to seek non-clinical sources of support in lieu of professional mental health services. The results align with another study by Sribney and colleagues (2010), which found that foreign-born Latinos reported lower use of all types of services compared to U.S.-born Latinos, including complementary and alternative medicine, prayer and spiritual practices, and human services.

There could be several explanations for the finding that U.S-born Latinos had higher non-clinical support use. Because a number of participants were recruited from

church settings, it is possible that an oversampling of U.S.-born participants who sought pastoral care, which is part of non-clinical services use, occurred. Also, because self-help and support groups were included in non-clinical support, the majority of community groups conducted in English, giving U.S.-born Latinos an advantage.

Limitations

Sample characteristics. Several limitations of this study need to be discussed, the most problematic of which is small sample size, and under-sampling of U.S.-born Latinos. Regarding recruitment method, participants were recruited via convenience sampling through my own personal contacts, who then distributed materials through their networks. Their affiliation with me, a doctoral student of psychology, may have inadvertently increased the likelihood that participants were affiliated with or had more exposure to psychology and mental health services, causing a selection bias. Additionally, most participants completed survey materials online as opposed to on paper. For these reasons, participants were more likely to be educated, tech-savvy, and potentially have more access to health insurance and higher socioeconomic status. Results may have looked quite different had participants been recruited through community health clinics or service agencies and taken the survey in paper format.

Sixty-seven percent of participants had at least some college education or a college degree. There were significantly larger proportions of foreign-born Latinos with less than high school (22%) and high school educations (18%) compared to U.S.-born Latinos (5% and 0% respectively). Among foreign-born, 60% reported some college or higher compared to 95% of U.S.-born. There were no significant differences in mean income between U.S.-born Latinos ($66,390) and foreign-born Latinos ($57,512). Based

on these data, the sample had an overrepresentation of well-educated, middle-income Latinos, which could have affected attitudes about mental disorder, acculturation, and mental health seeking. Further, U.S.-born Latinos made up 20% of the sample ($N = 21$), which may have been insufficient to detect a true pattern in their use of mental health services. With regard to geographical factors, most participants were recruited from metropolitan areas, so rural Latinos were likely underrepresented. The sample was not nationally representative, as only Latinos on the West Coast were eligible to participate. On the West Coast, Latinos tend to seek more health services compared to other regions of the U.S. (Bustamante el al., 2009). Mexican-origin participants may have been overrepresented as the largest ethnic subgroup at 62%. In other nationally-representative samples, Mexican-origin Latinos made up 39% of the sample (Alegría et al., 2004). Further, the total sample size was 103, which may have also been insufficient.

Relevance. There is also the issue of relevance of mental health services as they are offered in the U.S. Due to cultural interpretations of phenomena that would, in the U.S., be considered psychological in nature, the wording of the survey questions may have been problematic to some respondents. In Latino culture, alternate causes of psychological phenomena could be relational, spiritual, religious, or energy or balance-related (Alvidrez, 1999; Ayón et al., 2010; Santiago-Rivera, 2003). The questions on survey materials inquired about how many times the participant had sought help in an office or clinic "for problems with your emotions, nerves, or mental health (such as feeling sad, blue, anxious, or nervous), or your use of alcohol or drugs." Thus, for those who did not perceive their issues as emotionally- or mental health-based, these questions may have been irrelevant. In one study (Alvidrez, 1999), endorsement of western

psychiatric causes (trauma, genetics, childhood events) was not associated with mental health service use, while endorsement of balance-related causes (e.g., exhaustion, weather, diet) was positively associated, and endorsement of supernatural causes (e.g., sin, punishment by God, hexes) was negatively associated. I attempted to be inclusive with a question on seeking non-clinical support. Thus, the appearance of the term "mental health" in survey materials may have carried a connotation of severe mental illness, of being "crazy," or of being irrelevant if participants attributed their suffering to another cause. For these reasons, foreign-born participants may have found the question in this study aimed at gathering data on non-clinical service use inappropriate to their cultural interpretation of symptoms.

Method of survey delivery. One potential problem in the design of this study was that all surveys were administered by paper or electronically without the presence of live survey administrator. Other studies (Alegría et al., 2004; Kessler et al., 2003) used an interview format to administer questions, and it is unclear whether answers to questions about mental health may have been different had in-personal administration been used. Questions were all self-report, and there was no way to validate number of service visits. Also, regardless of assurances of anonymity, some participants may have found it daunting to provide personal information on paper or electronically, which could cause response bias.

Future Directions

The finding that acculturation and stigma did not predict mental health services use does not mean that researchers should discard these variables as irrelevant or move away from considering cultural and attitudinal factors in assessing barriers to care.

Instead, these variables are worth re-assessing in a broader, more representative sample. One of the primary weaknesses of this study was that the sample reflected a limited recruitment method and a particularly well-educated, higher income, metropolitan West Coast subset of the Latino population. Thus, it is worth revisiting the presence and role of acculturation and stigma, as well as exploring other cultural and attitudinal factors, to offer a more complete understanding of trends in mental health services utilization. Care should be taken to obtain a representative sample using a recruitment method that targets lower-income Latinos with less education and from rural dwelling areas.

Results from this study support and extend research demonstrating that lower levels of education and having health insurance contributes to mental health care use (Alegría et al., 2007b; Cook et al., 2007). Applying this finding to service delivery, since this study demonstrated that individuals without health insurance were still able to access mental health services, current efforts should be maintained and expanded. Service agencies are already doing well to target uninsured, foreign-born Latinos through free, low-cost, or grant-funded services. Quality of these services, however, should be assessed. Based on the grouping together of different mental health specialties in this study, it remains a question whether foreign-born or low-acculturated Latinos experience reduced access to highly-skilled mental health workers, like psychiatrists and psychologists. This question might be best answered in sample of Latinos with existing mental disorders. This study also demonstrated that individuals with lower education—and by extension, lower income and employment opportunities—need services more. Due to the psychosocial stressors of low socioeconomic standing, care should be taken to link these individuals into supportive and preventative services. These might include

high-school dropout prevention measures, case management services, financial education courses, parenting classes, and drug and alcohol education, to name a few. Regarding policy, it may also be advantageous to reduce barriers to obtaining education for lower-income or undocumented individuals.

In this study, visits to professional sources of mental health care was the primary outcome variable. In future studies, it is worth considering broadening the non-clinical visits variable. The variable measured here included a number of non-clinical specialties, such as traditional healers, clergy, and support groups. Separating out specialties would produce more distinct results. It would also be important to word the question carefully so that terms related to mental health are avoided. This is because individuals seeking this type of help may relate their suffering to other causes of supernatural or spiritual forces, hot-cold imbalances, lack of moderation, or character weakness (Alvidrez, 1999; Santiago-Rivera, 2003). As another future direction, beliefs about causes about mental disorder may add depth to the issue of service utilization, and has been attempted in the past (Alvidrez, 1999).

Beyond these recommendations, there is a wealth of social, cultural, and attitudinal factors worthy of further exploration. Since many Latinos are family-oriented (Ayón et al., 2010; Santiago-Rivera, 2003), need for mental health services may be displaced by seeking support through family and friends (Vega et al., 1999). Exploring ways to measure social support and how this relates to mental health services use may be worthy of investigation. Further, exploring how contact with the mental health system may be improved through the engagement of family members in mental health services is warranted, as this relationship has been demonstrated in past research (Padgett et al.,

1994). Immigrating to the U.S. may cause a breakdown in the family support structure, so it would be thought-provoking to compare groups sampled in the U.S. and in Latin America. Additionally, to offer a balanced view, protective and adaptive coping factors should also be explored (Padgett et al., 1994). Latinos as an ethnic minority group may have unique positive qualities, such as family connectedness or spirituality that buffer against stressors (Gallo et al., 2009; Hays, 2010). These adaptive qualities may effectively serve to reduce or at times even replace the need for mental health services.

Conclusions

This study found no evidence of a relationship between acculturation, stigma, and mental health care use. Having health insurance and lower educational attainment, however, were shown to be predictors of making a mental health visit. Further, this study demonstrated that foreign-born Latinos and U.S.-born Latinos had similar levels of mental health functioning and similar past-year use of services, including visits to medical providers and visits to specialty mental health providers. However, significantly more U.S.-born Latinos had made at least one past-year visit to a non-clinical source than foreign-born Latinos. Further research in cultural and attitudinal barriers to care is warranted in a larger and more representative, as the present sample included well-educated, middle-income Latinos from metropolitan West Coast areas. Ultimately, this study has shown that, while cultural and attitudinal factors did not play a significant role in the use of mental health services, socioeconomic factors of having health insurance and lower educational attainment did.

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Appendix A

Informed Consent

The Role of Stigma and Acculturation in Mental Health Services Utilization among U.S. Latinos

Consent Form

Northwest University
Joanne Bartos

Purpose: You are invited to participate in a research study conducted by Joanne Bartos, a psychology student in the Psy.D. program at Northwest University in Kirkland, WA. This study is being conducted as part of a dissertation to fulfill degree requirements. The purpose of this study is to better understand how acculturation, stigma about mental disorder, and nativity (whether an individual is born in the U.S. or abroad) relate to use of mental health services.

What is expected of you: If you agree to participate in this study, you will complete a questionnaire that will take around 10-15 minutes. Some individuals may be uncomfortable answering personal questions. You may choose not to participate in this research study. You will be asked questions about sensitive topics including mental health status, mental health service use, demographic information, and you have the option of revealing your citizenship status if you choose.

Risks and benefits: There are minimal risks associated with participation. If your survey information were to become associated with you as an individual, this could expose you to psychological, social, and/or legal risk. I have made every effort to keep your information anonymous. To ensure anonymity, I will *not* ask you for your name, signature, date of birth, or address. You will have the option to *voluntarily* share or withhold information about your citizenship status (i.e. whether you are a U.S. citizen/permanent resident, hold a visa, or are undocumented). **All responses are anonymous**; therefore it is important that you DO NOT put your name on your response sheet. The benefit of taking part in this study is the opportunity to participate in the research process and contribute to research on the issue of equitable access to mental health services. You will also be given a debriefing statement and list of mental health resources.

Participation in this study is voluntary: You may choose not to participate in this study at any time and for any reason. There will not be any negative consequences for you if you refuse to participate. You may refuse to answer any questions asked. You should keep this consent form for your records. By turning in this questionnaire, you are giving permission to use your responses in this research study.

Use of results: You will not get the results of your survey. The results from this study will be used in a doctoral dissertation, presented before a committee, and presented at a conference**.** All data forms will be destroyed by 12/31/2016.

Questions: If you have any questions about this study, contact Joanne Bartos at (425) 395-4481 or joanne.bartos11@northwestu.edu. If you have further questions, please contact my Dissertation Chair Dr. Kristin Mauldin at (425) 558-5753 or kristin.mauldin@northwestu.edu. You may also contact the Chair of the Northwest

University IRB, Professor Suzanne Barsness, at suzanne.barsness@northwestu.edu or 425-889-5763.

Thank you for your consideration of this request.

Joanne Bartos, Psy.D. Student at Northwest University

Dr. Kristin Mauldin, Dissertation chair and Faculty at Northwest University

Appendix B

Spanish Informed Consent

El papel del estigma y la aculturación en la utilización de servicios de salud mental entre los Latinos de Estados Unidos

Formulario De Consentimiento

Northwest University
Joanne Bartos

Propósito: Esta es una invitación para participar en un estudio de investigación realizado por Joanne Bartos, estudiante en el programa de Doctorado en Sicología de la Universidad Northwest en Kirkland, WA. Este estudio se está realizando como parte de una tésis doctoral para cumplir con los requisitos de graduación. El propósito de este estudio es obtener un mejor entendimiento del papel que juega la aculturación, el estigma a los trastornos mentales, y país de procedencia (si un individuo es nacido en Estados Unidos o en el extranjero) con relación a la frecuencia de uso de servicios de salud mental.

Qué se le pide a usted: Si está de acuerdo en participar en este estudio, usted completará un cuestionario que llevará unos 10-15 minutos. Algunas personas pueden sentirse incómodas con preguntas personales. Usted puede decidir no participar en este estudio de investigación. Se le harán preguntas sobre temas sensibles, incluyendo información demográfica, uso de servicios de salud mental, estado de salud mental, y usted tiene la opción de revelar su estado de ciudadanía si usted quiere.

Riesgos y beneficios: Existen mínimos riesgos asociados con la participación. Si la información que provee en la encuesta se asociará con usted individualmente, esto podría exponerlo a un riesgo sicológico, social o legal. Se han tomado todas las precauciones posibles para mantener la información anónima. Para asegurar su anonimato, no se le preguntará su nombre, fecha de nacimiento, dirección o se le pedirá su firma. Usted tendrá la opción de compartir voluntariamente o retener información acerca de su estado de ciudadanía (es decir, si es ciudadano permanente residente, posee una visa, o es indocumentado). **Todas las respuestas son anónimas**; Por lo tanto, es importante que usted NO escriba su nombre en su hoja de respuestas. El beneficio de participar en este estudio es la oportunidad de participar en el proceso de investigación y contribuir a la investigación sobre el tema relacionado con el acceso equitativo a servicios de salud mental. También se proporcionara una declaración interrogatoria y una lista de recursos de salud mental.

La participación en este estudio es voluntaria: Usted puede decidir no participar en este estudio en cualquier momento y por cualquier motivo. No habrá consecuencias negativas para usted si se niega a participar. Usted puede negarse a contestar cualquier pregunta. Usted debe mantener este formulario de consentimiento para sus registros. Al devolver este cuestionario, usted está dando permiso para usar sus respuestas en este estudio de investigación.

Uso de los resultados: Usted no recibirá los resultados de su encuesta. Los resultados de este estudio serán utilizados en una tésis doctoral, presentados ante una comisión, y

presentados en una conferencia. Todas las formas de datos serán destruidos en 31/12/2016.

Preguntas: Si usted tiene alguna pregunta acerca de este estudio, comuníquese con Joanne Bartos al (425) 395-4481 o joanne.bartos11@northwestu.edu. Si tiene más preguntas, por favor póngase en contacto con la catedrática de mi tésis doctoral Dr. Kristin Mauldin al (425) 558-5753 o kristin.mauldin@northwestu.edu. También puede comunicarse con el Presidente de la IRB de la Universidad Northwest, profesora Suzanne Barsness, en suzanne.barsness@northwestu.edu o 425-889-5763.

Joanne Bartos, Psy.D. Student at Northwest University

Dr. Kristin Mauldin, Dissertation chair and Faculty at Northwest University

Appendix C

Demographics Questionnaire

What is your preferred language for materials in this study?

___ English
___ Spanish

Are you of Hispanic/Latino origin? (**You must identify as Hispanic/Latino to participate in this study**).

___ No, not Hispanic/Latino (please **do not** continue further with this study)
___ Yes, Mexican, Mexican American, Chicano
___ Yes, Puerto Rican
___ Yes, Cuban
___ Yes, other Spanish/Hispanic/Latino ethnicity

What is your age? _____

(You must be 18 years or older to participate in this study)

Do you reside primarily on the West coast (Washington, Oregon, or California)? (**You must answer "yes" to participate in this study**).

___ Yes
___ No (please **do not** continue further with this study)

Were you born:

___ In the U.S. (proceed to **Section 1**)
___ Outside of the U.S./in your country of origin (proceed to **Section 2**)

Section 1

If you were born *in the U.S.*, how many of your parents were *also born in the U.S.*? Check one:

___ Neither parent
___ Only one parent born in the U.S.
___ Both parents born in the U.S.

Section 2

If you were born *outside of the U.S.*, how many years have you lived in the U.S.? Check one:

___ 0 to 5 years 11 months
___ 6 to 10 years 11 months
___ 11 to 20 years 11 months
___ 21 years or more

If you were born *outside of the U.S.*, how old were you when you arrived to the U.S.?

___ 12 years or less
___ 13-17 years
___ 18-34 years
___ 35 years or older

Sex:
___ Male
___ Female
___ Other

Marital status:
___ Single never married
___ Married or living with partner
___ Separated or divorced
___ Widowed

Annual family household income: How much did you earn last calendar year including *yourself and everyone* residing in your home? Include all sources of income (wages from employment, disability, retirement, unemployment, government financial assistance, *but not* food benefits, rent credits, student loans, etc.):

$_____/year

Insurance status:
___ Private insurance
___ Public/government-sponsored insurance
___ No insurance coverage
___ Other

Educational attainment:
___ Less than a high school degree
___ High school graduate
___ Some college
___ College graduate or higher

Employment status:
___ Full-time
___ Part-time
___ Unemployed/homemaker/student
___ Retired
___ Disabled

The following question is completely voluntary and optional. **You may choose to leave it blank**. What is your citizenship status to the U.S.? Remember: This study is anonymous and your response will not be associated with you.
___ U.S. citizen
___ U.S. permanent resident
___ Current U.S. visa holder
___ Undocumented
___ Other

Appendix D

Spanish Demographics Questionnaire

¿Qué idioma prefiere para los materiales que se ofrecen en este estudio?

___ Ingles
___ Español

¿Es usted de origen hispano/Latino? (**Usted debe de identificarse como hispano/latino para poder participar en este estudio**).

___ No soy Hispano/Latino (por favor **no** prosiga con este estudio)
___ Si, Mexicano, Mexicano/Americano, Chicano
___ Si, Puertoriqueño
___ Si, Cubano
___ Si, otro grupo étnico Español/Hispano/Latino

¿Cuántos años tiene? _____

(Necesita tener 18 años o más para participar en este estudio)

¿Reside principalmente en la costa oeste (Washington, Oregon, o California)? (**Debe responder "Sí" para participar en este estudio**).

___ Sí
___ No (por favor **no** prosiga con este estudio)

¿Dónde nació?

___ En los Estados Unidos (continúe a **Sección 1**)
___ Fuera de los Estados Unidos/En su país de origen (continúe a **Sección 2**)

Sección 1

Si nació *en los Estados Unidos*, ¿cuántos de sus padres *también nacieron en los Estados Unidos*? Marque uno:

___ Ninguno de mis padres nació en los Estados Unidos
___ Sólo uno de mis padres nació en los Estados Unidos
___ Ambos de mis padres nacieron en los Estados Unidos

Sección 2

Si nació *fuera de los Estados Unidos*, ¿cuántos años ha vivido en los Estados Unidos? Marque uno:

___ 0 a 5 años 11 meses
___ 6 a 10 años 11 meses
___ 11 a 20 años 11 meses
___ 21 años o más

Si nació *fuera de los Estados Unidos*, ¿cuántos años tenía cuando llegó a los Estados Unidos?

___ 12 años o menos
___ 13-17 años
___ 18-34 años
___ 35 años o más

Sexo:

___ Masculino

___ Femenino
___ Otro

Estado Civil:
___ Soltero nunca casado
___ Casado o viviendo con una pareja
___ Separado o divorciado
___ Viudo

Ingreso familiar anual: ¿Cuánto ganó el año pasado incluyéndose a *usted mismo y a todos los* que viven en su hogar? Incluya todas las fuentes de ingresos (salarios por empleo, discapacidad, fondos de retiro, desempleo, asistencia financiera del gobierno, *pero no* beneficios de alimentos, subsidio para la renta, préstamos escolares, etc.):

$_____/año

¿Tiene seguro médico?
___ Sí, seguro privado
___ Sí, seguro patrocinado por entidad pública/gobierno
___ No, no tengo seguro médico
___ Otro

¿Cuál es su nivel escolar?
___ Menos de preparatoria
___ Graduado de preparatoria
___ Universidad pero no me gradué
___ Graduado de universidad o superior

¿Cuál es su situación laboral?
___ Tiempo completo
___ Medio tiempo
___ Desempleado/ama de casa/estudiante
___ Jubilado
___ Discapacitado

La siguiente pregunta es completamente voluntaria y opcional. **Usted puede optar por dejarla en blanco**. ¿Cuál es su estado de ciudadanía de Los Estados Unidos? Recuerde: Este estudio es anónimo y sus respuestas no se asociarán con usted.
___ Ciudadano de Los Estados Unidos
___ Residente permanente de los Estados Unidos
___ Otro

___ Posee una visa válida
___ Indocumentado

Appendix E

D-D Scale Spanish

1. La mayoría de la gente aceptaría como un amigo cercano a alguien quien alguna vez haya recibido tratamiento de salud mental.
2. La mayoría de la gente cree que una persona que ha recibido tratamiento de salud mental es igual de inteligente que cualquier otra persona.
3. La mayoría de la gente cree que alguien quien ha recibido tratamiento de salud mental es igual de confiable que cualquier otra persona.
4. La mayoría de la gente aceptaría a alguien quien ha recibido tratamiento de salud mental como un maestro o maestra en una escuela primaria.
5. La mayoría de la gente piensa que recibir tratamiento para la salud mental es una señal de fracaso personal. (R)
6. La mayoría de la gente no contrataría a alguien quien ha recibido tratamiento de salud mental para cuidar a sus niños, aunque él/ella haya estado bien por algún tiempo. (R)
7. La mayoría de la gente piensa que una persona que ha recibido tratamiento de salud mental vale menos que los demás. (R)
8. La mayoría de empleadores contratarían a alguien calificado para el trabajo aunque esta persona haya recibido tratamiento de salud mental.
9. La mayoría de empleadores preferirían contratar a alguien quien no tiene historia de recibir tratamiento de salud mental. (R)
10. La mayoría de la gente que yo conozco trataría a alguien quien ha recibido tratamiento para la salud mental de la misma manera que tratan a los demás.
11. La mayoría de los jóvenes no se animarían a salir con alguien el cual ha sido hospitalizado por un desorden mental grave. (R)
12. Cuando se den cuenta que una persona ha recibido tratamiento de salud mental, la mayoría de la gente tomaría menos en serio sus opiniónes. (R)

Note. All items were answered on the following 6-point scale: 0) Muy en acuerdo, 1) En acuerdo, 2) Parcialmente en acuerdo, 3) Parcialmente en desacuerdo, 4) En desacuerdo, 5) Muy en desacuerdo. On items followed by an (R), the scoring is reversed.

Appendix F

Service Visit Questions

During the past 12 months, how many times did you see **a MEDICAL PROVIDER** such as a family doctor, general practitioner, chiropractor, massage therapist, or nurse in an office or clinic for problems with your emotions, nerves, or mental health (such as feeling sad, blue, anxious or nervous), or your use of alcohol or drugs?
Specify *number of distinct visits:* _____

During the past 12 months, how many times did you see **a MENTAL HEALTH PROVIDER** such as a psychiatrist, psychologist, social worker, counselor, psychotherapist, mental health nurse, or other mental health professional in an office or clinic for problems with your emotions, nerves, or mental health (such as feeling sad, blue, anxious or nervous), or your use of alcohol or drugs?
Specify *number of distinct visits:* _____

During the past 12 months, how many times did you seek support from **a NON-CLINICAL SOURCE** such as a religious or spiritual minister, pastor, or priest, or any other healer like an herbalist, curandero, sobador, or self-help or support group for problems with your emotions, nerves, or mental health (such as feeling sad, blue, anxious or nervous), or your use of alcohol or drugs?
Specify *number of distinct visits:* _____

Appendix G

Service Visit Questions Spanish

Durante los últimos 12 meses, ¿cuántas veces viste a un **PROVEEDOR GENERAL DE SERVICIOS MÉDICOS** como un doctor de familia, médico general, quiropráctico, masajista, o enfermero en un consultorio o clínica para problemas emocionales, de nerviosismo, o salud mental (por ejemplo, sentirse triste, deprimido, ansioso o nervioso) o por uso de alcohol o drogas?
Especifique *el número de visitas únicas*: _____

Durante los últimos 12 meses, ¿cuántas veces viste a un **PROVEEDOR DE SALUD MENTAL** como un psiquiatra, psicólogo, trabajador social, consejero, psicoterapeuta, enfermero de salud mental, u otro profesional de salud mental en una oficina o clínica para problemas emocionales, de nerviosismo, o salud mental (por ejemplo, sentirse triste, deprimido, ansioso o nervioso) o por uso de alcohol o drogas?
Especifique *el número de visitas únicas*: _____

Durante los últimos 12 meses, ¿cuántas veces usted buscó apoyo de fuentes **SIN FORMACIÓN CLÍNICA** como un ministro religioso o espiritual, pastor, o sacerdote, o cualquier otro sanador como un herbolario, curandero, sobador, o un grupo de autoayuda para problemas emocionales, de nerviosismo, o salud mental (por ejemplo, sentirse triste, deprimido, ansioso o nervioso) o por uso de alcohol o drogas?
Especifique *el número de visitas únicas*: _____

Appendix H

Debriefing Statement

Debriefing Statement

Purpose: This study is being conducted as part of a dissertation to fulfill degree requirements for the Psy.D. in Counseling Psychology program at Northwest University. The purpose of this study is to better understand how acculturation, stigma about mental disorder, and nativity (whether an individual is born in the U.S. or abroad) relate to use of mental health services.

After the study: You will not get your survey results from this study. This study is anonymous and I have no way of associating your survey responses with you as an individual. If concerns or emotional reactions to the questions came up for you and you need additional support, please contact me or a resource in your area below.

Resources

WASHINGTON

Consejo Counseling
Counseling services. No insurance needed. Low cost. Locations in Bellevue, Kent, Seattle, & Tacoma. 206-461-4880/ consejocounseling.org

SeaMar Community Health Centers
Healthcare and counseling services. No insurance needed. Low cost. Locations in Bellevue, Kent, & Seattle. 206-763-5277/ seamar.org

HealthPoint
Healthcare and counseling services. No insurance needed. Low cost. Locations in Bothell, Redmond, Auburn, Renton, Seatac, Kent, & Federal Way. 866-893-5717/healthpointchc.org

La Esperanza Health Counseling Services
Counseling services. No insurance needed. Low cost. Locations in Lynnwood, Burien, & Mt. Vernon. 425-248-4534/ laesperanzahcs.org

El Centro De La Raza
Immigrant Latina support group. Food, healthcare, housing, and legal resources. Seattle. (206) 329-9442/elcentrodelaraza.org

Centro Latino
Case management, youth & family resources, & counseling referrals. Tacoma. (253) 572-7717/clatino.org

Latino Bar Association of Washington
Free advice at Legal Clinic for Latinos with interpreters available. lbaw.org

Entre Hermanos
Support groups for gay and lesbian Latinos. Seattle. (206) 322-7700/entrehermanos.org

Seattle Area Emergency Housing
www.therainiervalley.com/emergency_shelters.html

King County Food Banks
www.seattle.gov/humanservices/emergencyservices/emergencyfood.htm

Frontier Behavioral Health
Counseling services in Spokane County. 509-838-4651/http://fbhwa.org/

Comprehensive Mental Health

Counseling services in Yakima, Ellensburg, Cle Elum, Pasco, Sunnyside, Goldendale, Walla Walla, White Salmon. 509-575-4084/ http://www.cwcmh.org/

CALIFORNIA

California Department of Healthcare Services

Counseling referrals. 916-322-7445 / http://www.dhcs.ca.gov/services/MH/Documents/CMHDA.pdf

OREGON

Oregon Health Authority

Counseling referrals and community resources in Oregon. 800-273-8255/www.oregon.gov/oha/amh/Pages/mentalhealth.aspx

NATIONAL

National Alliance for Hispanic Health

Healthcare referral hotline for Latinos. 1-866-783-2645/hispanichealth.org

Contact Information: If you have any questions, contact Joanne Bartos at (425) 395-4481 or joanne.bartos11@northwestu.edu. If you have further questions about this study, please contact my Dissertation Chair, Dr. Kristin Mauldin at (425) 558-5753 or kristin.mauldin@northwestu.edu.

Appendix I

Debriefing Statement Spanish

Declaración Interrogatoria

Propósito: Este estudio se está realizando como parte de una tésis doctoral para cumplir con los requisitos de graduación en el programa de Doctorado en Sicología de la Universidad Northwest. El propósito de este estudio es obtener un mejor entendimiento del papel que juega la aculturación, el estigma a los trastornos mentales y país de procedencia (si un individuo es nacido en Estados Unidos o en el extranjero) con relación a la frecuencia de uso de servicios de salud mental.

Después del estudio: Usted no recibirá los resultados de su encuesta de este estudio. Este estudio es anónimo y no es posible asociar sus respuestas en la encuesta con usted como individuo. Si tiene preocupaciones o reacciones emocionales a las preguntas dadas y necesita ayuda adicional, póngase en contacto conmigo o a la entidad más apropiada de las mostradas abajo.

Recursos

WASHINGTON

Consejo Counseling
Servicios de consejería. No necesita seguro médico. Bajo costo. Oficinas en Bellevue, Kent, Seattle, & Tacoma. 206-461-4880/ consejocounseling.org

SeaMar Community Health Centers
Servicios de salud y consejería. No necesita seguro médico. Bajo costo. Oficinas en Bellevue, Kent, & Seattle. 206-763-5277/ seamar.org

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El Centro De La Raza
Grupo de apoyo para Latinos Inmigrantes. Alimentación, salud, vivienda y recursos legales. Seattle. (206) 329-9442/elcentrodelaraza.org

Centro Latino
Manejo de casos, recursos para la juventud y la familia, y referencias de asesoramiento. Tacoma. (253) 572-7717/clatino.org

Latino Bar Association of Washington
Clínica de consejeros legales para los latinos con intérpretes disponibles. lbaw.org

Entre Hermanos
Grupos de apoyo para latinos homosexuales. Seattle. (206) 322-7700/entrehermanos.org

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www.therainiervalley.com/emergency_shelters.html

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CALIFORNIA

California Department of Healthcare Services
Referencias para consejería. 916-322-7445 /
http://www.dhcs.ca.gov/services/MH/Documents/CMHDA.pdf

OREGON

Oregon Health Authority
Referencias para consejería y recursos de la comunidad. 800-273-8255/
www.oregon.gov/oha/amh/Pages/mentalhealth.aspx

NACIONAL

National Alliance for Hispanic Health
Línea de ayuda y referencia para latinos. 1-866-783-2645/hispanichealth.org

Información: Si usted tiene alguna pregunta acerca de este estudio, comuníquese con Joanne Bartos (425) 395-4481 o joanne.bartos11@northwestu.edu. Si tiene más preguntas, por favor póngase en contacto con la catedrática de mi tésis doctoral Dr. Kristin Mauldin al (425) 558-5753 o kristin.mauldin@northwestu.edu.