AN ECOLOGICAL MODEL OF MEXICAN IMMIGRATION

AND MENTAL HEALTH

A DISSERTATION PROPOSAL IN
Counseling Psychology

Presented to the Faculty of the University
Of Missouri-Kansas City in partial fulfillment of
The requirements for the degree

DOCTOR OF PHILOSOPHY

By
MARTI TRUMMER
M.A., University of Missouri-Kansas City, 2013
B.A. Northwest Missouri State University, 2007

Kansas City, Missouri
2017

AN ECOLOGICAL MODEL OF MEXICAN IMMIGRATION

AND MENTAL HEALTH

Marti Trummer, Candidate for the Doctor of Philosophy Degree

University of Missouri-Kansas City, 2017

ABSTRACT

The literature on the relationship between cultural factors and mental health outcomes for immigrant groups has been extensive (e.g., Berry, 1976; 1997; 2004; Sam & Berry, 2006). The complex nature of interacting factors in the immigration and migration processes, however, have just begun to be explored within a broader ecological framework (Acevedo-Garcia et al., 2012; Coatsworth, Maldonado-Molina, Pantin, & Szzapocznik, 2005). In light of this, scholars have called for ecological models that incorporate mental health related factors (Coatsworth et al., 2005; Glick, 2010; Yakushko, Watson, & Thompson, 2008). This study explored sociocultural influences as well as engagement with macro systems influencing mental health symptoms.

An ecological framework was used to examine the relations among immigration status vulnerability, deportation fear, U.S. acculturation, active coping, social justice advocacy, and mental health symptoms of 214 Mexican and Mexican American adults in the United States. The results showed deportation fear mediated the relationship between immigration status vulnerability and anxiety and depression, such that the more fearful individuals are for deportation, the more mental health problems they will experience. The data did not support the hypothesis that endorsement of U.S. acculturation moderates the relationship between immigration status vulnerability and deportation fear, or that social

justice advocacy moderates the relationship between deportation fear and mental health symptoms of depression and anxiety.

These results support assessing the influence of immigration status vulnerability and deportation fears related to mental health in research with immigrant groups (Massey & Bartley, 2005; Sullivan & Remh, 2005). Findings indicate the importance of understanding the distal system mechanism(s) by which mental health symptomatology may occur. In practice, results of this study point to holistic assessment of distal variables that may have proximal impacts on symptoms of depression and anxiety for Mexican Americans (Bronfenbrenner, 2005). Limitations of this research study and for understanding cultural influences on mental health for Mexicans and Mexican Americans are discussed.

APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Education, have examined a dissertation titled "An Ecological Model of Mexican Immigration and Mental Health" presented by Marti Trummer, candidate for the Doctor of Philosophy degree, and hereby certify that in their opinions it is worthy of acceptance.

Supervisory Committee

Johanna Nilsson, Ph.D.
Counseling and Educational Psychology
University of Missouri-Kansas City

Uzziel Pecina, Ed.D.
Curriculum and Instruction Leadership
University of Missouri-Kansas City

Jake Marszalek, Ph.D.
Counseling and Educational Psychology
University of Missouri-Kansas City

Chris Brown, Ph.D.
Counseling and Educational Psychology
University of Missouri-Kansas City

Laurel B. Watson, Ph.D.
Counseling and Educational Psychology
University of Missouri-Kansas City

CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

CHAPTER 1

LITERATURE REVIEW AND PURPOSE STATEMENT

Introduction

"Undocumented and unafraid!" and other chants could be heard outside the Office of Immigration Customs and Enforcement (ICE) and across the airwaves as live coverage of protesters streamed from a demonstration in Phoenix, Arizona via Youtube on August 21, 2013 (Sherman, 2012). Like this group protesting, many have been fighting against the deportation and detainment of undocumented immigrants. While many protesting were citizens or have immigration documentation, other community members courageously protested without documentation and risked detainment by federal and local officers. Yet, they show up at the doors of ICE to proclaim injustice for their family members, friends, and for themselves. Although seemingly fearless in their tone, many immigrants and their loved ones must adapt and cope with the fear and stress of deportation (Arbona, Olvera, Rodrigues, Hagan, Linares, & Wiesner, 2010).

The United States is currently home to more than 40 million immigrants with statuses somewhere between documented and undocumented. Immigrants without documentation are those living in the United States without a visa, green card, or documentation of citizenship. According to the 2012 U.S. Census Bureau, 11.7 million undocumented immigrants live in the United States. While a growing number originate from Central America, this group is largely (57%) made up of individuals of Mexican or Mexican American decent (Gonzalez-Barrera & Krogstad, 2014). Much of current mental health research focuses on how undocumented immigrants adjust to and cope with living in a new cultural environment (Campos, Schetter, Walsh, & Schenker, 2007; Sullivan & Remh, 2005). Less attention,

however, has been directed at how mental health symptoms may vary across immigration groups based on the immigration status of Hispanic adults in the United States. Fewer have specifically assessed fear of deportation or detainment (Arbona et al., 2010; Cavazos-Rehg, Zayas, & Spitznagel, 2007), although socially apparent (Lopez, Morin, & Taylor, 2010). Given this gap, the present study will examine the roles of immigration status vulnerability and deportation fear on the degree of depression, anxiety, and stress experienced by Hispanics living in the United States, and the potential moderating influence of coping and acculturation on these relationships. The study is conceptualized within Bronfenbrenner's (2005) ecological theory, which provides a framework for understanding how characteristics of an individual and cultural contexts of the environment interact to influence the experience of mental health symptoms.

Chapter one will address ecological theory as the foundation for this research endeavor, followed by a discussion of the history and current state of Mexico to United States immigration trends and laws, which provides a historical and political backdrop for this study. Thereafter, cultural characteristics including immigration status, deportation fear, acculturation, active coping, and social justice advocacy are reviewed within the research on mental health of Mexican and Hispanic immigrant adults living in the United States. The purpose of the study is then conceptualized with model that examines the interacting relationships between cultural variables predicting mental health symptoms for Mexican and Mexican Americans. In line with previous research (Abrona et al., 2010; Cavazos-Rehg, et al., 2007; Sullivan & Rehm, 2005), immigration status vulnerability, along with reported fear of deportation for a loved one, are hypothesized as predictors of mental health symptoms within the model. A mediated relationship is proposed from immigration status vulnerability

to mental health symptoms through fear of deportation. Acculturation, social justice advocacy, and coping, conceptualized as ways individuals interact with the environment, and are assessed as moderators of the relationships between immigration status deportation fear and mental health symptoms.

Theoretical Foundation

Bronfenbrenner's (1994) model has been conceptualized as a framework for understanding environmental influences on individual development. Also included in this framework are the influences of the individual's action taken to alter the environment. The traditional model emphasized direct connections to development through proximal systems (microsystem, mesosystem) and merely noted indirect influences from distal systems called the exosystem and macrosystem (Bronfenbrenner, 1979). Bronfenbrenner (1999) revised the ecological model (Figure 1) by postulating interdependence of four principle components: process, person, context, and time (PPCT). This ecological model of human development lends itself to the current study by providing a framework for understanding how cultural characteristics of an individual and sociopolitical environmental influences may interact to affect mental health symptoms including depression, anxiety, and stress.

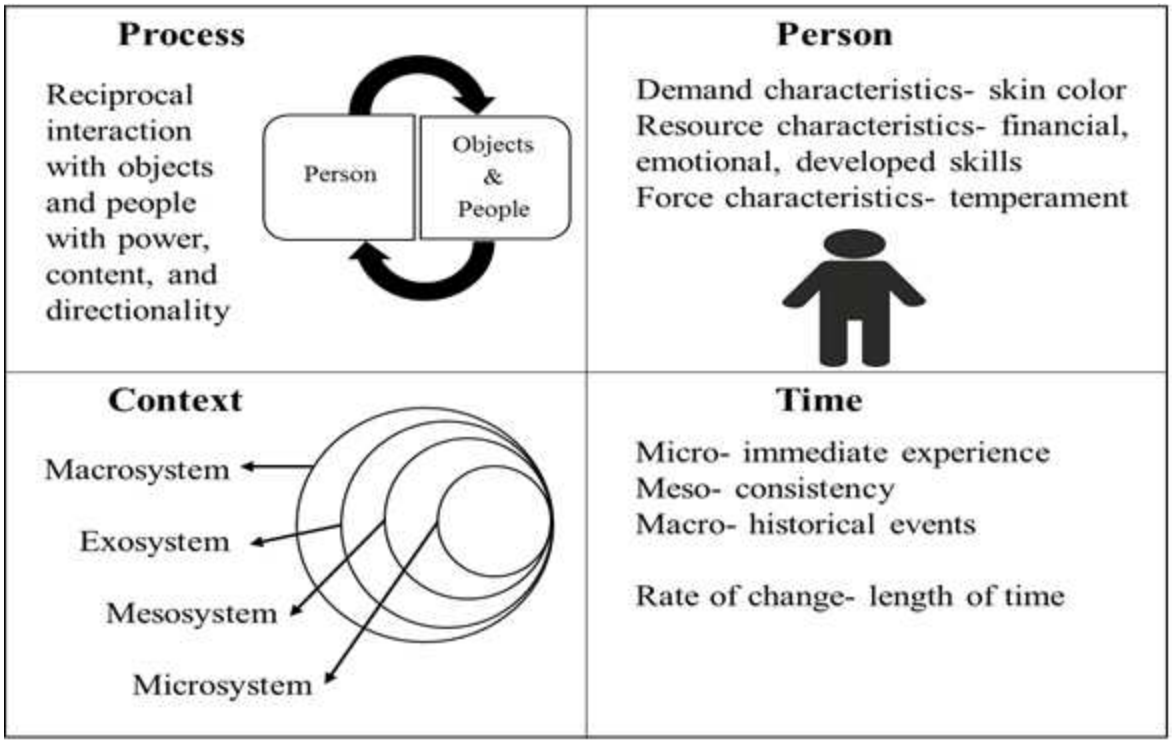


Figure 1. Process, Person, Context, Time Model developed from Bronfenbrenner, 2005.

The process component overrides the PPCT model, which describes the increasingly complex and reciprocal interactions between a person and the environment (i.e., persons, objects, and symbols). Proximal processes include those biological, psychological, social, and cultural experiences that influence the action and development of individuals, while simultaneously considering the influences individuals have on the environment. Parent-child interactions illustrate proximal process and are found frequently in developmental research (Ashiabi & O'neal, 2015; Bronfenbrenner, 2005; Hembree-Kigin & McNeil, 1995). The reciprocal interaction of parenting styles and infant temperament, which influences the development of attachment styles, is one example of the process component occurring within a microsystem (Fraley, Roisman, Booth-LaForce, Owen & Holland, 2013). While proximal processes direct development, they vary systematically in relation to the three other

components in the model: person, context, and time (Bronfenbrenner & Morris, 2006). For instance, changes in child behavior has been noted after the detainment of a parent, including generalized fear of law enforcement (Chaudry et al., 2010). The direct behavioral changes studied frequently in child-parent relationships also occur for adults, but with greater intricacy. Considering the complexity of processes between person, context and time factors for Mexican and Mexican American adults, cultural characteristics are reviewed in the current study: mental health symptoms, immigration status vulnerability, U.S. acculturation, deportation fear, and social justice advocacy. Mental health symptoms are of key interest in this study as related to person components of immigration status vulnerability and deportation fear.

Occurring over time, process interactions differ as a function of the person component. The person component of the PPCT model is categorized into demographic or demand characteristics (e.g. age, gender and race), resources, and behavioral dispositions (Bronfenbrenner & Morris, 2006). An individual's demand characteristic, such as age, race, or gender, immediately influence expectations of others in her or his environment. Demand characteristics can be helpful such as providing age-appropriate responses, but can be harmful when immediate negative judgements lead to discrimination. Demand characteristics of age, nationality, and gender are controls in the proposed cultural model of mental health symptoms.

Resource characteristics are another part of the person component with the PPCT model, and are divided further into external and internal resources. Unlike demand characteristics, resources are generally not known straightaway to others. External resources include factors such as education, housing, and health care. The internal resource

characteristics encompass previous experiences, intellectual capacity, and developed skills. Resource characteristics of particular interest in the current study are immigration status and mental health symptoms. Lastly, behavioral dispositions or force characteristics include motivational drive, determination and temperament. Given two individuals with equal demand and resource characteristics, Bronfenbrenner recognized that force characteristics, such as social justice advocacy and fear of deportation, may alter developmental trajectories much like resilience in the face of difficulty (Bronfenbrenner, 2005).

The process and person components of development also occur interactively within socially defined contexts (Bronfenbrenner, 1979). The context component of the PPCT model includes four interrelated, nested systems.(Figure 2) The first system is the microsystem that include particular contexts for development, such as home, school, or friend groups. This is where developing individuals spend a lot of time engaging in face to face interactions. As individuals spend time in more than one microsystem context, interrelations among these systems form, and then are referred to as mesosystems. Outer contexts where individuals may not actually be situated also have important indirect influences on their development (i.e., exosystems and macrosystems). Exosystems are contexts that indirectly influence development through microsystems; for example, increases in deportation by local or federal law enforcement that indirectly cause fear or anger for an individual or their undocumented loved one. The outer most system, the macrosystem is comprised of the norms and values of a particular culture usually passed generationally and carried out through institutional systems and resource allocation (Bronfenbrenner, 1979). For example, the United States does not have an official national language, however, speaking

English is a cultural norm established through use in educational, political, and business institutions.

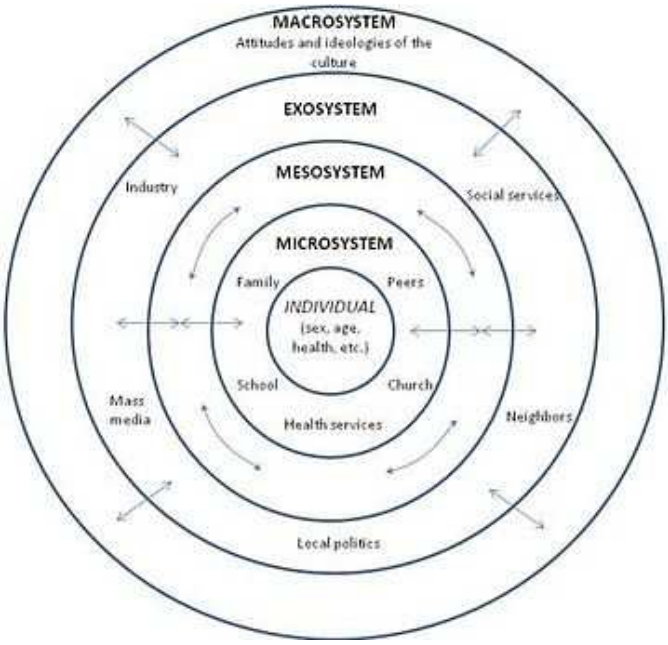


Figure 2. Context Component of the Ecological Model (Bronfenbrenner, 1979).

Lastly, the amount of time individuals spend in a process or context generally increases the magnitude of influence that process or context has on development. The time component of the PPCT model (Bronfenbrenner, 2005) is sorted into macro-time, meso-time, and micro-time. General history represents macro-time, encompassing social, cultural, and political events occurring previous to and throughout the lifespan of a person. For instance, through the Bracero Program (1942-1964), the U.S. government actively recruited and brought thousands of Latino and Asian immigrant men to address the country's labor needs, effectively establishing large communities of immigrants. This changed the opportunities available to Mexicans by bringing large numbers to settle in the United States (Golash-Boza & Hondagneu-Sotelo, 2013). Meso-time refers to the regularity in which an activity occurs

over time. The consistency and frequency that individuals speak in English would fall into the meso-time category. For instance, speaking English frequently in many contexts affects the level of engagement with the United States as a host culture. Micro-time is what occurs during some specific interaction or activity, such as entry into a new country or an act of discrimination. Additionally, the time component incorporates rate of change (Bronfenbrenner, 2005). This temporal aspect is important to consider when conceptualizing this study in light of consistently changing immigration policies as well as acculturation to U.S. norms and expectations.

Conceptualizing the complexity of adjustment within numerous systems and components does not go without limitation. As such, I acknowledge that the conceptual model used in this research study is an oversimplification. This research study relies on self-report of contextual influences and does not directly measure contextual factors such as percentages of immigrants detained and deported in a particular area or numbers of applications for permanent residency or citizenship. In addition, the cross-sectional nature of this research does not allow for the direct inclusion of the time component in the PPCT model. Rather, the past and current socio-political aspects of immigration between Mexico and the United States are presented to inform understanding of the Mexican immigrant community development. Whereas the time component of the PPCT model would ideally be assessed by measuring adjustment longitudinally. In accordance with Trudge, Mokrova, Hatfield, and Karnik's (2009) suggestion regarding the use of Bronfenbrenner's theory in research, I identify this research study as a partial test of the PPCT model. Bronfenbrenner (1999) also acknowledged that "various components of the ecological model cannot all be dealt with in a single analysis" (p. 24).

Mexican Migration in the United States

The historical trends of migration from Mexico to the United States represent macro-time in the PPCT model (Bronfenbrenner, 1999), highlighting the specific events occurring during the development of people and their environment. Despite restrictions in the current study to include longitudinal methods, the significance of migration and changes in the environment remain pertinent to the current study. Specifically, the course of immigration and legislation during the past century created variation in individual experiences, immigration status, deportation fear, acculturation, coping and mental health symptoms; all explored in the current study. This is particularly important for Mexicans and Mexican Americans due to the proximity of the relationship with the United States.

Mexicans and Mexican Americans have inhabited the United States far longer than any other Hispanic national group. The teaching of American history generally portrays colonization of the United States from East to West with little mention of the significant presence of previously established communities and cultures in the South and Southwest. Until the Mexican War in 1848, the South and Southwest regions were occupied by Spanish-speaking people with a distinct heritage and customs. After the war, a 2,000 mile-long border delineated the countries. Many stayed in the region that was no longer part of Mexico, and became some of the first Spanish-speaking citizens in the United States. Substantial economic, social, and political instability during the Mexican Revolution from 1910 to1917 added to the growth of the Mexican population in the United States. Since then, Spanish-speaking individuals have come to live in the United States generally for economic opportunity and to escape political persecution (Guisepi, 2007). The push to escape political persecution and the draw towards economic opportunities reflect macro-time in the PPCT

model as generations of Mexican and Mexican Americans established communities in the United States.

Over the last century, Mexico to U.S. migration has been described in four phases. In the first phase, beginning just before the 1920's and lasting into the 1930's, Mexicans were admitted freely as guest workers and allowed return home to Mexico. Migration especially increased during WWI, but quickly declined in 1929 after tight restrictions on admissions reduced the number of Mexicans allowed to enter the country. At the start of the second phase, legal migration was on the rise again as employment opportunities became available. The second phase, occurring between 1942 and 1964, is referred to as "Bracero" meaning "manual laborer." It has been referred to as such to reflect the 4.6 million temporary visas issued during that time coinciding with WWII and the Korean War. The third phase of migration increased numbers of undocumented immigrants as a result of the economic decline of Mexico and availability of work in the United States. This occurred in conjunction with the 1965 amendment preventing laborers from receiving visas (Rosenblum, Kandel, Seelke, & Wasem, 2012).

Beginning in the 1970's, other immigration policies and media attention created a tense climate for Mexican immigrants. Post WWII, legislation was put into effect allowing legalization of Vietnamese, Cambodian, and Laotian refugees and citizens (Odo, 2002). Shortly after, Cubans sought and were granted asylum in the United States by the passage of a refugee act (Kanstroom, 2012). Between 1970 and 1990, Mexicans accounted for 14%, 23%, and 25% of total legal immigration each decade. The 1980 census documented publicly that several million illegal immigrants resided in the United States. It was publicized as an economic problem with Mexican migration draining resources meant for citizens (Warren &

Passel, 1987). Around the same time, Texas law-makers disallowed children of undocumented immigrants from attending public school and sought to withhold other public services from the Mexican immigrant population. The Supreme Court ruled in 1982, however, that excluding immigrant children from public school created far more harm to society compared to the resources it may save. California, Illinois, and Alabama legislators have all made efforts to disallow funding for education of undocumented students—similarly to Texas (American Immigration Council, 2012).

The third phase of immigration ended with the Immigration Reform and Control Act of 1986. While nearly 2.1 million Mexicans received documentation through this legislation, it also called for penalties against businesses employing undocumented immigrants, and it tightened border control (Rosenblum et al., 2012). The fourth and current phase of migration shows growing numbers of undocumented immigrants in the United States, with the exception of a short-lived stagnation during the 2008 U.S. recession. In 2001, President George W. Bush and Mexican President Vicente Fox discussed migration and a framework was agreed upon. The plan included effort from both countries to decrease illegal migrations and recidivism, legalization for most undocumented immigrants, and border enforcement increases. After the September 11th terrorist attacks, this agenda was no longer given priority (Rosenblum et al., 2012).

Current Immigration Policy: **Phase Four Continued**

Under the Obama administration, there has been increased discussion regarding immigration reform in the United States. Plans for reform have largely reflected the Immigration Reform and Control Act of 1986, but with more focus on the enforcement of penalties against businesses employing undocumented immigrants and tightening border

control. Although presidential promises included allowing some immigrants to pursue the "American dream," actions taken by the Obama administration have resulted in a historic number of immigrants being deported. Deportations resulting from border control has increased as assured by the Obama administration (Gonzalez-Barrera & Krogstad, 2014). At the same time, several federal and state actions have provided some relief to undocumented immigrants and communities.

At the federal level, memorandums issued by the Department of Homeland Security allow immigration enforcement (i.e., U.S. Customs and Border Protection, U.S. Citizenship and Immigration Services, and U.S. Immigration and Customs Enforcement) to use prosecutorial discretion when detaining and deporting undocumented immigrants. This discretion essentially directs enforcement personnel to refrain from deporting most immigrants, especially women with children, those who have not committed a crime, those who arrived at a young age, and those who have served in the military (American Immigration Council, 2012; U.S. Immigration and Customs Enforcement, 2011). Certain regions in the United States exercise reasonable treatment of immigrants when enforcing the law and using prosecutorial discretion (i.e., sanctuary cities). Other areas carry out strict enforcement of federal law, creating a tense political climate and resulting in marginalization of undocumented immigrants.

Fluctuation in levels of enforcement occur despite this memorandum. For instance, an undocumented, college-bound man was apprehended by Immigration and Customs Enforcement after appearing in court for driving a car with stolen licensing tags. While the misdemeanor charge is non-violent, the man was jailed and sent into detainment proceedings (Sherman, 2012). This instance highlights the low level of judicial power a federal

memorandum holds in actual cases. In fact, according to the Pew Research Center an estimated 240,000 immigrants who did not have a criminal conviction previously were deported in 2013, an increase of 20,000 from the year prior (Gonzalez-Barrera & Krogstad, 2014). A large number of deportations come from expedited orders for apprehended immigrants who recently arrived to the United States to be deported without appearing before a judge. Immigrant advocates have been vocal in opposition to the deportation of immigrants without proper court proceedings, and call for stronger legislation to ensure the review of detainment cases (Gonzalez-Barrera & Krogstad, 2014).

The Deferred Action for Childhood Arrivals (DACA) program was created in late 2012. This federal program provides relief from deportation and a possible work permit to immigrants between the ages of 15 and 30, brought to the United States illegally as children. The DACA program was created to stop deportation of students and young people who primarily grew up in the United States. In the first year of the program's existence, over half of those who were estimated as eligible applied for this program (Pew, 2013). While about 70% were approved, the number of individuals who participated is a testament to the impact a program like this can provide to undocumented youth. However, relief from deportation only lasts for a period of two years, and after this period individuals must request and pay for a renewal to ensure protection from deportation (American Immigration Council, 2012). In November, 2014 executive action was taken to implement a new program, Deferred Action for Parents of Americans and Lawful Permanent Residents (DAPA), which would allow undocumented parents to apply for work authorization and protection from deportation if they have a child who is a U.S. citizen or legal permanent resident. A lawsuit filed by the state of Texas and 25 other states blocked the implementation of the program, and access of

4.1 million parents who would have qualified for deportation relief and employment eligibility in early 2015. The lawsuit prevented the expansion of the DACA program, leaving immigrant statuses and the future of many immigrants undecided until the Supreme Court was to render a decision in July 2016. Before the decision was made Justice Antonin Scalia passed away resulting in a four to four vote, since another Supreme Court Justice member had not been appointed. Ultimately, the court decisions that blocked the expansion have been upheld. With the recent confirmation of Neil Gorsuch, it is unlikely the DACA program will continue (National Immigration Law Center, 2016).

Prior to the lawsuit being filed, 14 states enacted local legislation granting state residency to undocumented immigrants pursuing secondary education or participating in military service. Several private education systems have also granted access to undocumented immigrants when state institutions would not (American Immigration Council, 2012). Additionally, "sanctuary cities" beginning in the 1980's separated themselves from federal enforcement by creating ordinances that ban city employees—including police officers—from asking about immigration status. Sanctuary cities continue to increase across the United States, despite the federal Illegal Immigration Reform and Immigrant Responsibility Act of 1996 that designated local officers to perform immigration law enforcement duties. These local and state movements toward immigration reform have set the stage for larger federal action. With the recent change in the presidential administration, the tide will likely shift toward tighter restrictions on undocumented individuals (Center for Immigration Studies, 2016). On January 25th of 2017, an executive order was signed by the U.S. President entitled Enhancing Public Safety in the Interior of the United States. Section nine of this order directed the Attorney General to withhold all federal

funding to sanctuary cities and the Office of Management and Budget to report on federal money currently granted to sanctuary cities (Executive Order No. 13768, 2017).

For decades, differences in federal and local policies underscore the need for a unified directive in order to ensure the fair treatment of immigrants in various parts of the nation. Until this occurs, the health of undocumented immigrants and their loved ones remain vulnerable to variable and uncertain enforcement systems. With chronic unknowns in immigration legislation, law, and the potential consequences looming, a considerable number of individuals are influenced in a proximal way (increased fear) by a seemingly distal system (government). In considering the sociopolitical events over time and tension regarding immigration from Mexico, I explore the cultural characteristics of individuals as they relate to mental health symptoms in the Mexican community. From the perspective of Bronfenbrenner's ecological theory (1979), it can be presumed that immigration status changes and generations of variations in deportation sentiment interact over time to affect the development of individuals.

Cultural Characteristics

Characteristics explored in the current study fall within the person and process components of the PPCT model. The cultural characteristics explored in the current study were selected to expose contextual, macrosystem influences on mental health symptoms of Mexican and Mexican Americans in the United States. Immigration status, designated through legislative processes, is indicative of material resources for individuals living in the United States. Mental health symptoms --including stress, depression, and anxiety (the proposed outcome variables) along with the mediating experience of deportation fear--are classified as emotional resources within the proposed model. Acculturation and active coping

behaviors represent the process component of the PPCT model, capturing engagement with the environment. The context and time components of the model are represented, but not directly measured in the current study.

Immigration Status Vulnerability

In a country comprised of immigrants like the United States of America, migration trends are followed by descriptive survey research. The Pew Research Hispanic Trends Project and American Community Survey estimated there were 11.1 million undocumented immigrants in the United States in 2014, compared with an estimated 11.5 million in 2011 (Pew, 2016; U.S. Census Bureau, 2015). Current estimates suggest that almost one fourth of the foreign-born population are undocumented. Recently, immigration into the United States has shifted from Mexico to other Central American Countries, although immigrants from Mexico living in the United States largely outnumber other Latino immigrants (Gonzalez-Barrera & Krogstad, 2014). Yet, of the one-fourth undocumented individuals, 57% originate from Mexico (Pew, 2013). The latest national data highlights the length of time many immigrants have lived in the United States. More than half of undocumented immigrants have resided in the U.S. for at least 10 years and many have children who are U.S. citizens (U.S Census Bureau, 2015).

The history of Mexico to U.S. migration has been shaped by exosystems like legislation and social inequities exacerbated by cultural ideas about undocumented immigrants in the United States. Immigration status, also referred to in research as legal status, is part of the person component within the PPCT model (Bronfenbrenner, 1999), and is conceptualized as a material resource characteristic in this study. Material resources like education, housing, income, and health care access, interact with other components of the

model, to influence development. Immigration status, unlike demand characteristics (e.g., ethnicity), does not serve as an immediate stimulus to others with whom the individual interacts. Although closely tied with ethnic indicators (e.g., skin color, facial structure, accent), immigration status is not visibly apparent.

Many scholars have examined differences in material resources between documented and undocumented immigrants. In comparison to those who are documented, undocumented immigrants have less education, with less than half (46%) of those aged 25-65 years old completed high school. On average, the income for undocumented immigrants is around 40% lower than those who have documentation. Households headed by undocumented immigrants are 56% larger in number by comparison (Pew, 2013). Data also show that immigrants with documented status utilize health care services at higher rates than undocumented immigrants (Ortega et al., 2007). For Mexicans specifically, those who were undocumented had 1.6 fewer physician visits, significantly less than their counterparts with documentation. (Bustamante et al., 2012). With nearly 11 million undocumented immigrants, and millions more with immigration statuses falling somewhere between undocumented and citizenship, differential experiences exist (Pew, 2013).

Legal permanent residents and DACA recipients make up over 8 million adult individuals living in the United States. Permanent residents are able to work in the United States with what is known as a "green card," which is an identification card to document their status. Unlike citizens, legal permanent residents and DACA recipients cannot vote and permanent residents have limits on yearly requests granted for family members to also live and work in the United States. At this point, DACA recipients are not allowed to request for family to live in the United States. Permanent residents, just like undocumented individuals,

are subject to being deported if they commit certain crimes and for even small violations such as failing to report a change of address. Money and grassroots efforts have been amassed to support legislation that would allow for parents of DACA recipients to be protected from deportation. After Congress blocked executive action to pass Deferred Action for Parents of Americans (DAPA) in 2014, the volunteer and financial efforts to be utilized on DAPA implementation were then directed toward helping legal permanent residents obtain citizenship. Additionally, a noticeable increase in naturalization applications came between June 2015 and January 2016, just after Donald Trump announced his candidacy. Similar increases due to political and legislative threats to immigrant security occurred in 1994, when California proposed the denial of social services to noncitizens. As immigration reform continues to be shaped by legislation, it is of interest here to note that Hispanics with legal permanent status —those who complete the naturalization process— vote in local and national campaigns at much higher rates than U.S. born Hispanics (Linthicum, 2016). The naturalization process takes time and money. DACA, while only temporary, costs less and is quicker for individuals to obtain. Moreover, since 2012 and the implementation of the DACA program, well over a half million undocumented immigrants have been granted deportation relief. More specifically, around 92% of DACA recipients identified as Latino/x or Hispanic, and of those 92%, Mexicans comprised 78% (National Immigration Law Center, 2016).

A small but growing amount of research has been devoted to exploring changes in material resources when the immigration status changes from undocumented to documented. The advocate group United We Dream surveyed DACA recipients three years into the passing of the DACA program. In over 2,300 respondents, three quarters obtained a new job and half have obtained a higher paid position. Over 90% reported obtaining a driver's license

or state identification card, and nearly 60% obtained health insurance independently or through their employer (National Immigration Law Center, 2016). Interviews with 55 Mexican immigrant women filing for deportation protection through the Violence against Women Active petition, more commonly known as a U-visa, showed a need for more information regarding this process. The women interviewed reported increases in short-term resource needs and establishment of long-term supports such as counseling (Ingram et al., 2010). Initial reports on changes in documentation exhibit how elevations in immigration status can open access to material resources. In terms of the context model of concentric circles (Bronfenbrenner, 1999), elevations in immigration status by obtaining documentation appear to extend to opportunities in community and other institutional settings, namely obtaining jobs and resources (Ingram et al., 2010; Perez et al., 2015; Sullivan & Rehm, 2005).

Immigration status and mental health symptoms of individuals within the Hispanic community illustrate the interdependence of person component characteristics in the PPCT model (Bronfenbrenner, 1999). Sullivan and Rehm (2005) were among the first to review the literature to better understand whether immigration status and mental health were related and the nature of the relationship. To assess the psychological implications of "illegal identity" for Mexican immigrants living in the United States, the authors identified 14 peer reviewed articles that (a) had a focus on immigration documentation, (b) were specific to mental health, and (c) were published between 1980 and 2003. Five of the total 14 studies identified were classified as theoretical research and/or clinical guidelines. These articles addressed themes of discrimination across contexts, limitations in access of services, along with feelings of exclusion and fear. In the six qualitative studies, results revealed feelings of stress

and/or depression associated with not having documentation. Participants across the six qualitative studies identified as Mexican or Mexican American, had immigrated to the United States of America, and/or were undocumented at the time of the interview. Early researchers (Bach-y-Rita, 1985) demonstrated that work instability created stress and demoralization much more so than an "illegal" status, and described that being undocumented was normalized over time. Stress and demoralization lessen over time as immigrants developed relationship within established communities. In Chavez's (1998) study of 2,000 interviews with Mexican immigrants, more time in the United States was linked with decreased stress and depression. Vega, Kolody, and Valle (1987) recruited a group of undocumented immigrant women who met criteria of depression (DSM-III), and found that those with fewer years in the United States reported the highest symptoms.

Based on their review, Sullivan and Rehm (2005) concluded that legal status is a "major concern [and] source of prolonged stress" for Mexicans and Mexican Americans living in the United States (p. 244). It is important to note that sampling in most of the 14 studies focused on undocumented immigrants only, limiting the ability to draw conclusions on how variations in immigration status are associated with personal emotional resources. Although one of the quantitative studies (i.e. Finch & Vega, 2003) included documented and undocumented Mexican and Mexican Americans, it did not directly measure legal status. Finch and Vega examined fear and avoidance of officials, accessing legal services, and limited contact with family to assess "legal status stress." This manner of assessing legal status stress incorporates microsystem factors, such as family and exosystems like enforcement and legal officials. With this information, they found legal status to have a high positive association with depressive symptoms (Finch & Vega, 2003). Yet, it remains unclear

how personal immigration status is associated with those psychological experiences of distress or to larger clinical concerns such as depression and anxiety.

Specifically, for the present study immigration status vulnerability is a proxy measure that implies material resources like education, housing, and job security. In the model for the current study, immigration status vulnerability is an exogenous variable that is not directly influenced by other proposed variables, but is hypothesized to affect the other variables in the model. Immigration status vulnerability, as measured in the current study, incorporates personal reactions to this factor shaped by law, as an individual enters and settles in the United States. Emotional resources such as depression, anxiety, and stress have been related to immigration status (Finch & Vega, 2003; Sullivan & Rehm, 2005; Vega et al., 1987), and thus are explored further in the proposed model. One mechanism by which immigration status may relate to mental health symptoms is through deportation fear. With limited research regarding immigration status, researchers explore fear of deportation in order to assess emotional implications for being without documentation or knowing a loved one is without documentation.

Deportation Fear

Fears of being deported or having a family member deported or detained are related to several components of the PPCT development model. Deportation fear experienced by an individual is conceptualized as a behavioral disposition associated with macrosystem processes like legislation and enforcement, as well as microsystem interactions (Arbona et al., 2010; Dreby, 2012; Fussell, 2011). According the Pew Research Center (Lopez, et al., 2010), a majority (57%) of Latino/xs living in the United States reported feeling worried about deportation for themselves, a family member or a close friend. As of 2014, nearly one

third of undocumented immigrant adults live with a child under the age of 18 (U.S. Census Bureau, 2015). This means that detention and deportation may strain family relationships and leave some documented children without caregivers.

It appears that immigration status is an activating factor in the development of deportation fear (Sullivan & Rehm, 2005). Several studies have examined how fear of being deported or detained manifests for Hispanic immigrant individuals and families (Arbona et al., 2010; Brabeck & Xu, 2010; Cavazos-Rehg et al., 2007; Cervantes, Mejia, & Mena, 2010; Letiecq, Grzywacz, Gray, & Eudave, 2013). Cavazos-Rehg et al. (2007) surveyed participants' sense of vulnerability to deportation by using a single item; that is, whether they thought that visiting a social or government agency for assistance would lead to deportation or detained. The study did not address immigration status specifically, but described the sample as Mexican or Mexican American adult immigrants living in the United States between 2 and 16 years. The results showed that fear of deportation significantly predicted 10% of subjective health status of the participants, after controlling for gender, age, and years lived in the United States. Those participants who reported feeling concerned about deportation also felt more stress related to exosystem and microsystem factors. The stress was related to feeling forced to accept low-wage jobs or not reporting criminal victimization to police for fear of being arrested. Additionally, this group endorsed being angry more frequently than those who had lower levels of deportation fear (Cavazos-Rehg et al., 2007). The measurement was limited in that deportation fear was assessed only in relation to social and government agencies and with only one item. . This study highlights the need to further understand how deportation fear relates to mental health of Hispanic immigrants.

In another study, Arbona et al. (2010) concluded that fear of deportation was a unique and significant factor for Hispanic immigrants' extra-familial stress. Deportation fear was measured with seven items assessing whether participants personally avoided day-to-day activities due to fear of deportation or detention. After controlling for gender, immigration status, family status, English proficiency, and traditionality (which refers to endorsement of Hispanic extended family dependence and gender-role expectations), fear of deportation explained an additional 21% of the variance in stress. Stress was also related to feeling worried at the workplace and in situations with enforcement individuals and agencies (Arbona et al., 2010). Participants, both documented and undocumented immigrants, reported avoiding at least one activity for fear of detainment or deportation for a family member. This research demonstrates how deportation fear may be a mediating factor to consider in the relationship between immigration status and distress in the Hispanic community. While stress was not assessed in terms of clinical symptoms in this study, the current study expands this line of research by exploring stress, depression and anxiety symptomology.

A third study that addressed deportation fear did so in over 130 interviewer-assisted surveys with Mexican immigrant men. Letiecq et al. (2013) evaluated depressive symptoms and four items to assess situational stressors, including fear and worry. Participants were asked to rate their fear of living in the recruitment area, worry about police confrontation, perceived treatment of Latino/xs, and social support. However, the researchers did not directly measure immigration status of the participants. Responses from the participants were collapsed dichotomously into positive and negative categories. Stepwise regression analyses showed fear of police was strongly related to depressive symptoms beyond the family

separation stress and economic stress. The authors revealed a need to gain further understanding of macrosystem factors, like the culture in the area, and specific exosystem factors, like being confronted by the police, in relation to reported depressive symptoms for Mexican men. In the current study, understanding of the relationship between deportation fear and depressive symptoms is expanded to include both men and women.

In addition to individuals fearing their own deportation or detainment, a growing body of quantitative research has examined the implications for the five million aging children with at least one parent without documentation in the United States. In the research on Hispanic youth mental health symptoms, risk of deportation for self or for a parent has shown positive associations with shame, anxiety, depression, and subjective stress (Androff, et al., 2011; Ayón & Baccera, 2013; Capps, Castañeda, Chaudry, & Santos, 2007; Potochnick & Perreira, 2010). Abrego (2011) argued developmental differences exist for adults, whose primary experience of undocumented life is manifested in fear. Reports from case studies in the health care and legal fields corroborate findings by showing low use of mental and physical health resources due to worries about detention or deportation for oneself as well as for family members (Abrego, 2011; Dreby, 2012). The interlocking contexts that influence fear of deportation span macrosystems, where cultural precedents are in in place (e.g., sanctuary cities), exosystems where laws are created and enforced, and meso- and microsystems where direct interactions with an individual influence levels of deportation fear. In the proposed study, deportation fear is assessed individually and for loved ones in order to capture the important microsystems and mesosystems built by adults in immigrant communities.

In summary, the literature demonstrates evidence for a positive relationship between being undocumented status and mental health symptoms (e.g. Arbona et al., 2010; Cavazos-Rehg et al., 2007; Finch & Vega, 2003; Letiecq et al., 2013; Vega et al., 1987). To add to this line of research, this study will further examine the links from immigration status to stress, depression, and anxiety. In addition, this study will explore how deportation fear may mediate the relationship between immigration status vulnerability and mental health symptoms.

While many previous studies assessed stress as it is associated with experiences related to immigration status and deportation fear (Caplan, 2007; Vega et al., 1987), this study will also assess anxiety and depression symptomology to explore relationships with immigration status vulnerability and deportation fear. Several research studies allude to feelings of anxiety when measuring stress (Arbona et al., 2010; Cavazos-Rehg et al., 2007), but do not measure manifestation of symptoms specifically. In the current study, anxiety is assessed by measuring physiological manifestations like breathing, trembling, and heart racing, and stress is assessed my measuring trauma responses like hypervigilance and arousal (Lovibond & Lovibond, 1995). Depression in the current study includes symptoms similar to those found in previous research with Mexican Americans (Finch & Vega, 2003; Letiecq et al., 2013; Vega et al., 1987), such as negative affect.

U.S. Acculturation

Acculturation is related to adjustment and mental health for immigrants in the United States (Coatsworth et al., 2005; Koneru, et al., 2007; Lopez-Class, Castro, & Ramirez, 2011). Acculturation strategies, proposed by Berry (1997), developed out of a framework explaining how individuals' beliefs, attitudes, values, and behaviors change after living in a culture

differing from their own. The oldest formal definition of acculturation comes from anthropological researchers and is stated as, “those phenomena which result when groups of individuals having different cultures come into continuous first-hand contact, with subsequent changes in the original cultural patterns of either or both groups” (Redfield et al., 1936, p. 149). This group level phenomenon interested psychologists at the turn of the twentieth century, but it was not until 60 years later when acculturation was researched on an individual level in the field of psychology. The term “psychological acculturation” was used to describe individuals’ changes when encountering another culture, or when an individual is part of a group undergoing changes after continuous contact with another culture (Graves, 1967). Reflective of the engagement with the U.S. culture measured by U.S. identity and English language use, acculturation in this study is situated in the PPCT model (Bronfenbrenner, 1999) as a process component.

Early theory described acculturation as a linear process, in which the two cultures were polar ends of a continuum. Generally, movement from the culture of origin toward the dominant culture was believed to be indicative of healthy adaptation. In contrast, those who did not adopt the dominant culture were thought to have poor outcomes in comparison (Gordon, 1964). More recently, studies point to mental health benefits of retaining alignment with the culture of origin or enculturation strategies; in this case Mexican identity and Spanish language use (Sam & Berry, 2006; Koneru, et al., 2007). While research shows strong support for the relationship between higher levels of enculturation and positive mental health outcomes (Phinney, 1992; Umaña-Taylor, 2004; Umaña-Taylor & Updegraff, 2007), the current study focuses on acculturation toward U.S. identity and use of the English language.

Research regarding the relationship between U.S. acculturation and mental health symptoms has shown somewhat conflicting results (Alamilla, Kim, & Lam, 2009; Koneru, et al., 2007; Lara et al., 2005; Torres, Driscoll, & Voell, 2012). Lara et al. (2005) conducted a review of over 150 journals and book chapters that included acculturation as it related to health in samples of Hispanic individuals living in the United States. Specifically, the authors assessed how acculturation toward U.S. norms along with English language use related to selected behaviors (e.g. exercise, substance use), access/use of health care, and perceptions and outcome of health. In the breadth of research reviewed, literature on mental health symptoms generally showed U.S. acculturation having a negative or no relationship to symptomatology or greater U.S. acculturation the less mental health symptoms experienced. Five studies demonstrated detrimental outcomes positively related to greater levels of U.S. acculturation or assimilation. For instance, Acevedo (2000) compared 331 Mexican American women to European American women living in the United Stated and found less mental health problems for Mexican Americans. Within the group of Mexican American women, those who spoke Spanish were at lower risk for mental health problems than those who preferred speaking English. While language is only part of acculturation, this study supports claims that less acculturation toward U.S. norms is associated with less mental health problems (Acevedo, 2000). Another three studies showed no significant relationship between U.S. acculturation and mental health symptoms (Lara et al., 2005).

In contrast, other research points to an inverse relationship between U.S. acculturation and mental health symptoms; in other words, these study have found that higher levels of acculturation are related to *less* adverse mental health symptoms. Lara et al.'s (2005) review included one study that revealed that higher levels of U.S. acculturation were related to

significantly less depressive symptoms for Mexican American college students. Torres, Driscoll, and Voell (2012) tested a moderated mediation model to assess relationship between discrimination and psychological outcomes through acculturative stress in a sample of 669 Latino/x adults. They found that acculturation, but not enculturation, served as a moderator of the relationship between acculturative stress and psychological outcomes of depression, anxiety, and somatization. The conditional indirect effect was significant in that lower levels of U.S. acculturation (1 standard deviation below the mean) in the context of discrimination augmented the pathway from acculturative stress and psychological outcomes. In other words the research supported that low levels of acculturation toward U.S. culture also referred to as low assimilated groups experience greater negative psychological outcomes (Torres, Driscoll, & Voell, 2012).

The construct of acculturation has been challenged by several researchers (Andrews, Bridges, & Gomez, 2013; Broesch & Hadley, 2012; Horevitz & Organista, 2012). David Sam (2006), co-author of Acculturation Psychology, noted, "The elusive nature of the concept has, no doubt, limited the scientific exchange of information and meaningful discussion around research findings and theory development" (p.11). Due to the dynamic nature of the construct, acculturation has been measured several ways possibly leading to the differences in outcomes regarding the mental health symptoms of immigrants (Broesch & Hadley, 2012; Lara, et al., 2005; Miller, et al., 2013). In the five studies, reviewed by Lara and colleagues (2005) that found that greater levels of U.S. acculturation, or assimilation, were related to detrimental outcomes used proxy measure to assess acculturation (e.g. birth place, language). Those who did use acculturation measures (e.g., Burman et al., 1987; Moscicki, Locke, Rae, & Boyd, 1989) reported greater anxiety-related and depression

symptoms for Mexican and Mexican Americans who expressed high levels of U.S. acculturation. In contrast, Torres, Driscoll, and Voell (2012) found those with low levels of U.S. acculturation reported higher psychological symptoms of depression, anxiety, and somatization. In summary, research on how U.S. acculturation relates to mental health symptoms has shown mixed results, and findings also vary depending on community samples.

Specific immigration experiences likely shape individuals' acculturation strategies. Psychological acculturation strategies are based on the premise that Hispanic immigrants within the United States have the freedom to choose the strategy of engaging in intercultural adaptation. Berry (1976) noted that dominant culture constraints can dictate the chosen acculturation strategy. As a process component of the PPCT model (Bronfenbrenner, 2007), orientation towards U.S. culture is hypothesized to interact with immigration status as Mexican and Mexican American individuals adapt to United States culture. As individuals acculturate in the United States, knowing the expectations and understanding processes may lower mental health symptoms despite immigration status. Collecting data from individuals with a similar national heritage is one way to decrease the variability due to culture of origin differences, as Mexican immigrants experience similar contextual factors pushing immigrants to enter the United States (Rosenblum et al., 2012; Schwalbe, 2010). Specifically, I hypothesize that Mexican immigrants and Mexican Americans with higher levels of alignment with the U.S. culture (e.g., greater comprehension and use of the English language and sense of U.S. identity) will have lower levels of deportation fear. While previous research studies have not directly measured immigration status in relation to acculturation, the literature does point to decreases in symptoms as immigrants spend more

time in the United States. This study extends this finding by looking at variations in immigration status in relation to U.S. acculturation and extends Arbona et al.'s (2010) research on the relationship between acculturation and deportation fear. As suggested by the proposed model in this study, greater reports of U.S. identity and English language use may ameliorate deportation fear.

Social Justice Advocacy

Social justice has been described as a value for the equitable distribution of resources, rights, and treatment for marginalized individuals and groups who experience power inequity in society (Constantine, Hage, Kindaichi, & Bryant, 2007). It has been defined as "engaging individuals as co-participants in decisions, which directly affect their lives; it involves taking some action, educating individuals in order to open possibilities, acting with value and respect for individuals and their group identities, and considering power differentials," (Blustein, Elman, & Gerstein, 2001, p. 9).

Social justice advocacy is found in many facets of mental health research, dating back to ethical treatment of individuals. Cacari-Stone and Avila (2012) liken the treatment of immigrants to that of the African American men of the Tuskegee experiments. Only in this case, the immigrants are the participants in a government policy study on immigration reform. From this perspective, the DACA and other immigration policies would be testing differences that occur when some immigrants are allowed to attend college or work while a control group does not. Policy changes, restrictions, and reforms made by the government impact access and rights to resources, which have created divisions in the community and within families (Cacari-Stone & Avila, 2012). For the general population, these exosystem and macrosystem changes may be considered distal influences, having an indirect impact on

mental health and development. Specifically, for immigrants living in the United States, these seemingly distal systems create proximal processes that influence and perhaps alter the development.

On a more personal level, social justice for undocumented immigrants has long been a humanitarian concern. This is largely due to the dire circumstances individuals' experience in their home countries. For young immigrants, the United States is their home country and having to leave may mean returning to a place they have never known (Henderson & Baily, 2013). Some of these young immigrants have been extremely vocal in advocating for citizenship for these reasons. Several groups have been formed to ensure that immigration reform remains a top priority at state and federal levels. The current study investigates awareness of and engagement in the legislative process. Social justice advocacy specifies the action taken to address a specific perceived threat to well-being such as fear of deportation. Increasing behavioral and cognitive activity related to a potential threat would relate to higher levels of stress and anxiety (Eysenck, Derakshan, Santos, & Calvo, 2007), and higher levels of social justice advocacy would decrease depressive symptoms due to increases in behavioral and cognitive engagement (O'leary & Romero, 2011; Yakushko et al., 2008).

Opponents of undocumented immigrant equal rights have argued against such legislature, which is based largely on capitalistic economic grounds (Negy, 2011). This argument focuses on the unfair consumption of resources by undocumented immigrants at the expense of the lower and middle class legal citizens. These resources are available through the tax dollars paid by citizens. In this perspective, social justice advocacy pins working class U.S. citizens against undocumented immigrants in a race for health and educational resources, stating that it is unjust for undocumented immigrants to flood public

services largely used by working and lower classes. While this perspective was partially supported by data, it brings about contention for undocumented immigrant advocates (Negy, 2011). The rationale given that other countries are not providing citizenship to undocumented immigrants largely ignores where the United States fits within the historical context or chronosystem. The past treatment of Mexican immigrants and immigration laws do contribute to current advocacy efforts for a specific group of individuals (Bronfrenbrenner, 1994). This current economic and cultural processes could be argued as formidable macrosystem consideration for sociologists and psychologists in the extensive research supporting acculturative stress and race-based discrimination. In the current study, political and social awareness of the cultural conditions occurring over time are explored along with behavioral action toward equality in resources and treatment.

Individual and group advocacy efforts demonstrate how macrosystem factors can stir grass roots reactions from individuals and communities. The Latino Victory Project, a national organization of business leaders and other similar groups, plan to spend millions of dollars to oppose legislators who do not support equitable reform, especially those with large numbers of Hispanic constituents (Stolberg, March 2013). Perhaps the largest of the subgroups at the forefront of immigration reform are the DREAMers. This group is generally referred to as the DREAMers because they comprise most (though not all) of the individuals who meet the general requirements of the Development, Relief, and Education for Alien Minors (DREAM) Act. The DREAM Act is legislation directed at granting immigration status and in some cases citizenship to individuals brought to the United States as minors (American Immigration Council, 2012).

A recent surge in interest and literature regarding social justice and advocacy related to mental health outcomes has occurred (e.g. Constantine et al., 2007; Norsworthy, Abrams, & Lindlau, 2012). This could be the result of broadening multidisciplinary approaches to mental health and/or a realization that mental health concerns may need to be addressed on a larger societal level (Vera & Speight, 2003). There has been, a growing discussion in the collective action literature on involvement with social justice and advocacy, and the impact of such involvement on their mental health. Collective action is the extent to which individuals in a minority group engage in activities with the goal of improving the condition of the group as a whole (Duncan, 2012). Researchers contend that when individuals perceive that mobility is illegitimately blocked (or threatened), they will be more likely to identify with their group and pursue collective strategies to improve their status, such as collective action (Ellemers, 1993; Mummendey, Kessler, Klink, & Mielke, 1999; Verkuyten & Reijerse, 2008). Velez and Moradi (2016) found collective action was related to well-being but not related to distress. They found the influence of heterosexist discrimination on well-being though internalized heterosexism was buffered by collective action.

In other words, it remains unknown about how the social justice efforts of many Hispanic individuals interact with deportation fear to affect overall mental health. Thus, exploring the relationship between a specific coping strategy, such as social justice advocacy, and mental health outcomes is warranted. Social justice advocacy is explored in this study as a moderator of the relationship between deportation fear and mental health outcomes. Positive correlations between depression, anxiety, and stress suggest that decreases may be seen across these mental health outcomes as a function of high social justice advocacy and deportation fear. Increasing behavioral and cognitive activity related to a potential threat may

increase stress and anxiety (Eysenck et al., 2007). Therefore in this study, I hypothesize that high levels of social justice advocacy and deportation fear increase levels of reported anxiety and stress.

Active Coping

In traditional stress and coping theories, coping strategies are techniques that include cognitive or behavioral efforts made to manage situations perceived as taxing such that it exceeds individuals' resources (Lazarus & Folkman, 1984). Active coping is conceptualized in the PPCT developmental model as a process component that also incorporates contextual and personal components of the model (Bronfenbrenner, 1999). It involves individuals' efforts to engage with and alter their environment (i.e. microsystems, exosystems) in a way that influences mental health outcomes (i.e., emotional resources).). The focus on coping efforts is directed at legislative and cultural (exosystem and macrosystem) engagement. Social justice and active coping are process components that involve awareness as a cognitive effort and behavioral effort as action (i.e. civic engagement, confronting discrimination) that increase equity. Here they are tested as moderators of the relationship between deportation fear and mental health outcomes.

Although stress is an inevitable aspect of adaptation, Mexicans and Mexican Americans face particularly stressful life situations (Farley, Galvez, Dickinson, & Perez, 2005). Legislation, media, and policy enforcement create a tense and tumultuous climate for immigrants attempting to establish identities and communities in the United States of America (Golash-Boza & Hondagnue-Sotelo, 2013). Coping strategies have a significant role in the relationship between stress and adjustment (Carver & Scheier, 1994). Some coping researchers have made a conceptual distinction between problem-focused coping and

emotion-focused coping (Compas, Malcarne, & Fondacaro, 1988; Lazarus & Folkman, 1984). Others have classified coping as either having an active focus or passive focus (e.g. Billings & Moos, 1981; Ebata & Moos, 1991). These dichotomous conceptualizations have been challenged in factor analysis research, and four higher order dimensions of coping were found, including active, avoidance, distraction, and support seeking (Ayers, Sandler, West, & Roosa, 1996; Brittan, Toomey, Gonzales, & Dumka, 2013). While debates exist between these theoretical distinctions, coping strategies involving direct behavioral and cognitive problem solving—referred to as active coping strategies—have shown positive associations with psychological adjustment (Ebata & Moos, 1991; Edwards & Romero, 2008).

Coping research within Hispanic communities has focused on social support and general means of active coping techniques used with acculturative stress and discrimination (Farley, et al., 2005; Umaña-Taylor, Vargas-Chanes, Garcia, & Gonzales-Bracken, 2008). One study assessed active coping and self-efficacy as mediators between acculturative stress and depression among a sample of over 450 Hispanic adults. Results indicated that active coping served as a significant partial mediator in the positive relationship between acculturative stress and depression symptom severity, although self-efficacy was not a significant mediating variable. Other researchers have found that when active coping strategies have been used by individuals to deal with concerns out of their control, active coping may in fact increase mental health symptoms (Liu, Gonzales, Fernandez, Millsap, & Dumka, 2011; Pina et al., 2008). Immigration status may be considered beyond individuals' ability to control, depending on the individual's status and the immigration statuses of those within the person's network. To explore the influence of active coping on the relationship

between deportation fear and mental health outcomes, a short active coping measure on social justice advocacy as a specific type of active coping strategy are used.

Differences in acculturation and gender have also been explored with regard to coping strategies in groups of Hispanics. Brittian et al., (2013) found three way interactions between reported problems, coping strategies, and cultural orientation. Their analysis of 189 Hispanic adolescents showed that individuals low in Anglo-orientation who used distraction were protected from internalizing problems, but not those who were high in Anglo-orientation. Those who did not feel a strong affiliation with mainstream culture may have felt problems were not within their control, thus leading to use of distraction. Gender differences were noted only for externalizing behaviors; when men used avoidance coping, lower levels of externalizing behaviors were reported. . Women were more likely than men to use support seeking behaviors and to internalize problems when using this coping strategy.

The variations in strategies used for coping and cultural influences can have quite different implications for adaptation. Regarding active coping strategies used by vulnerable groups, "future research may benefit from examining active coping strategies that are more directly related to culture and ethnicity" (e.g., engagement in ethnicity-related social justice; Brittian et al., 2013, p. 14). The research suggests that active coping may be used to manage acculturative stress, which in turn may be related to less mental health concerns (Driscoll & Torres, 2013). For this reason, social justice advocacy is explored as a specific type of active coping that individuals may use to cope with feelings of stress, anxiety, and depression. In line with previous research, increases in active coping in the form of social justice will serve as a mental health protective factor (O'Leary & Romero, 2011).

Purpose Statement and Study Hypotheses

This research study is grounded in the PPCT model (Bronfenbrenner, 2005) and will assess the indirect relationships between immigration status and mental health outcomes. Aspects of process, person, and context components of the PPCT model are represented in deportation fear, acculturation and social justice advocacy, and this study will examine how these variables are associated with mental health symptoms, including depression, anxiety, and stress. Furthermore social justice advocacy may be operationalized as an active coping strategy that will serve as a moderating variable. The following hypotheses address the model relationships of interest:

Hypothesis 1

Deportation fear will mediate the positive relationship between immigration status vulnerability and mental health outcomes (i.e., depression, anxiety, and stress), such that when accounting for deportation fear the relationship between immigration status and mental health symptoms is significantly decreased (partial mediation) or is no longer significant (full mediation).

Hypothesis 2a

Psychological acculturation will moderate the relationship between immigration status and deportation fear. Specifically, those with statuses that create more vulnerability to deportation along with low U.S. acculturation will report more deportation fear than those who report higher levels of acculturation. Within the context of the proposed moderated mediation, this relationship is hypothesized to influence mental health outcomes through a second moderator.

Hypothesis 2b

Social justice advocacy will moderate the relationship between deportation fear and mental health symptoms, such that those who have higher levels of deportation fear and higher levels of engagement in social justice advocacy will report less depressive symptoms. Furthermore, individuals who have higher levels of deportation fear and higher levels of engagement in social justice advocacy will report more stress and anxiety.

Hypothesis 3

Active coping will moderate the relationship between deportation fear and mental health symptoms, such that those who have higher levels of deportation fear and higher levels of engagement in active coping will report less depressive, stress and anxiety symptoms.

CHAPTER 2

MANUSCRIPT

Abstract

The literature on the relationship among cultural factors and mental health symptoms for immigrant groups is extensive (Berry, 1976; 1997; 2004; Sam & Berry, 2006). The complex nature of the migration process, however, has only recently been explored in an ecological framework (Acevedo-Garcia et al, 2012), along with its association with specific coping strategies. The present study examined the relationships among immigration status vulnerability, deportation fear, U.S. acculturation, social justice advocacy, active coping and mental health outcomes among 214 Mexican and Mexican American adults. The results demonstrated that deportation fear fully mediated positive link between immigration status vulnerability to both anxiety and depression, indicating that the more fearful a person is of deportation or detainment for a loved one, the more mental health problems they experience. Acculturation toward the U.S. culture did not moderate in the relationship between immigration status vulnerability and deportation fear. Similarly, social justice advocacy and active coping did not moderate the relationship between deportation fear and mental health symptoms of anxiety and depression. The moderated mediation model predicting stress symptoms indicated social justice advocacy moderated the relation between deportation fear and stress. Results from this study indicate the importance of understanding deportation fear as a sociocultural mechanism, by which mental health symptomology may occur. Understanding the impact of sociocultural factors may assist practitioners when exploring mental health symptoms. When exploring mental health symptoms in research, including

sociocultural factors can provide additional information to understand the holistic experience of an individual (Massey & Bartley, 2005). Limitations of the research is discussed.

Key words: immigration status, deportation, Mexican American, mental health, advocacy

Ecological Model of Mexican Migration and Mental Health

A growing amount of interdisciplinary research conducted to understand the complexities of Spanish-speaking immigrants' and descendants' adjustment experiences in the United States comes from fields including Latino studies (Glick & Park, 2016; Majumdar & Martínez-Ramos, 2012), law (Street, Zepeda-Millan, & Jones-Correa, 2015), health care (Andrews, A. R., Bridges, A. J., & Gomez, D. 2013; Stylianos & Kehyayan, 2012), education (Kao, Vaquera, & Goyette, 2013), and economics (Cacari-Stone & Avila, 2013; Negy, 2011). This study explores the sociocultural and psychological experiences of Mexican and Mexican American adults living in the United States. I examine relationships among cultural factors that influence mental health, especially for adults, as they are often more complex than simple predictor and criterion correlations (Bronfenbrenner, 2005). Cultural factors including immigration status vulnerability and deportation fear are assessed, along with the moderating roles of acculturation, social justice advocacy, and active coping in relationship to mental health symptoms. This study proposes a model of sociocultural adjustment to elucidate the complex relationships among personal characteristics, cultural processes, and mental health symptoms.

This study is grounded in Bronfenbrenner's (1999) four component, ecological model. The four components of the model—process, person, context, and time (PPCT)—each have varying and interdependent influence on individual development (Figure 1). The person component has three characteristics; demand, resource, and force. Demand characteristics (e.g., race, age) act as immediate stimuli and are incorporated into the proposed model as control variables. Person component resource characteristics serve particular importance in this study and are conceptualized as internal (i.e., emotional) and

external (i.e., material). A personal resource characteristic, such as immigration status, includes, according to Bronfenbrenner (2005), both external-material and internal-emotional resources.

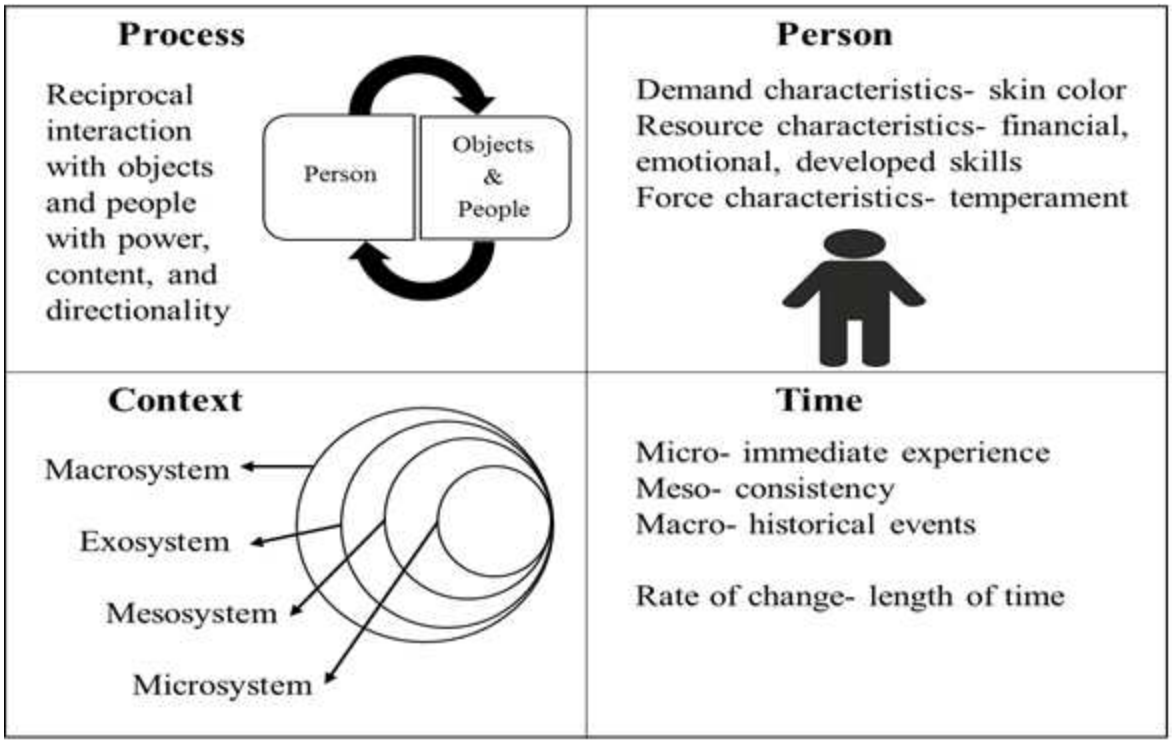


Figure 1. Process, Person, Context, Time Model developed from Bronfenbrenner, 2005

Equality, opportunity and increasing equity with regard to external resources is a central ideology of social justice advocacy explored in this study (Cohen, 2001; Constantine et al., 2007). Social justice advocacy is highlighted here in relation to differences in external resources exist based on immigration status. For instance, data showed that Mexican immigrants without documentation are significantly less likely to have access to health care compared with documented counterparts (Bustamante et al., 2012; Heyman, Nunez, & Talavera, 2009). In contrast, a recent survey of nearly 2,300 Deferred Action for Childhood

Arrivals (DACA) recipients showed 60% reported obtaining health insurance since receiving DACA (Perez, Luna, Reyna, & Silva, 2015). The individuals who have obtained DACA also reported having a driver's license (90%) and 75% reported gaining a new job. Yet, income for undocumented immigrants in United States is nearly 40% lower than those with documentation, and less than half (46%) of undocumented adults (25-65 year olds) have completed high school (Pew, 2013). External resources including income and education are included as controls in this proposed model. In terms of resources, indicators including immigration status are strongly related to mental health symptoms (Sullivan & Rehm, 2005).

Mental Health Symptoms

Mental health symptoms, in the current study, also are conceptualized within the person component of the PPCT model as emotional resources. Symptoms such as depression, stress, and anxiety may occur as a result of interacting components of the cultural model. In a review of 14 articles published between 1980 and 2003, Sullivan and Rehm (2005) concluded that immigration status was a key concern and source of prolonged distress. Depressive symptoms, such as experiences of dysphoria, devaluation of life, and self-deprecation, were reported by Mexican and Central American individuals in relation to their immigration status in previous research (Sullivan & Rehm, 2005; Henderson & Bailey, 2013). Additionally, a positive relationship has been reported between those with undocumented statuses and mental health outcomes, such as worry, anxious affect, chronic arousal and irritability (Arbona, 2010; Sullivan & Rehm, 2005). In addition, data supports that documented immigrants worry for their community members and loved ones without documentation (Arbona et al., 2010; Henderson & Baily, 2013, Yoon et al., 2013). In this study, immigration status is hypothesized as an indirect influence on mental health symptoms

through fear of deportation. There are only two quantitative studies to date (Arbona et al., 2010; Cavazos-Rehg et al., 2007) that have assessed fear related to deportation or detainment.

Deportation Fear

Cavazos-Rehg et al. (2007) assessed the sense of vulnerability to deportation in relation to mental health. The results suggested that Hispanic immigrants concerned about deportation felt more stress related to economic and occupational issues. Another study showed that fear of deportation explained an additional 21% of the variance in extra-familial stress after controlling for gender, immigration status, English proficiency, family structure, and traditionality (Arbona et al., 2010). Findings from these empirical studies show that immigration status may be directly related to psychological distress and mental health symptoms immigrant individuals (Arbona et al., 2010; Cavazos-Rehg et al., 2007). Several other research studies support acculturative stress as a mediator between adjustment experiences and psychological outcomes (Torres, Driscoll, & Voell, 2012). However, these studies do not directly address deportation fear. Arbona and colleagues (2010) concluded that fear of deportation was a unique and significant factor for Hispanic immigrants' extra- and intra-familial stress beyond immigration status. In the current study, deportation fear is explored as a mediator between immigration status and mental health symptoms including stress, anxiety and depression.

It may be that differences in material resources are not limited to those who are undocumented, but also impact a person's social networks, including loved ones who may share in the distress associated with the threat of being detained or deported. Moreover, worries and preoccupation with one's detention or deportation can heighten emotional

distress, and hence impact mental health (Arbona, Olvera, Rodriguez, Hagan, Linares, & Wiesner, 2010; Cavazos-Rehg, Zayas, & Spitznagel, 2007). The interlocking contexts that influence the activation of fear of deportation or detainment span macrosystems, where cultural precedents take shape (i.e., sanctuary cities), and are included by exosystems where laws are created and enforced (O'leary & Romero, 2011). Mircrosystems where direct interactions with an individual occur impact levels of deportation fear as well. For the purpose of this research study, deportation fear reflects worry about and avoidance to engage in daily and social activities, which may also impact emotional well-being. Deportation fear is influenced by legislation changes (Galindo, 2012; O'leary & Romero, 2011), geographic enforcement variation (Santos & Menjivar, 2013), and discriminatory face-to-face interactions (Lopez, et al., 2010). Therefore, the fear of deportation fear in this study can be for one's self but also for a loved one.

Contextual environments in which individuals may not situated have important indirect influences on development (i.e., exosystems and macrosystems), and are less frequently attended to in psychological research (Acevedo-Garcia et al, 2012; Coatsworth et al., 2005; Sullivan & Rehm, 2005). Exosystems, such as government and legal systems, work through microsystems that directly influence the experience of mental health symptoms among people. Government imposed immigration statuses create inequities in resources and vulnerability for immigrant communities (Fussell, 2011). Deportation fear is measured to reflect individuals' experiences resulting from an exosystem influence, namely legal regulations.

The process component of the PPCT model captures interactions between person and environment that occur in contexts to influence individual development. Acculturation,

coping, and social justice advocacy represent individual processes of adjustment to change, and in the present study illustrate the process component of the PPCT model (Bronfenbrenner, 2005). Acculturation involves cultural and behavioral changes that occur as an individual interacts with a new cultural environment. This process generally entails learning another language, sharing food preferences, and adopting forms of dress and social interactions that form individual identities (Sam & Berry, 2006). Coping is another multidimensional process involving efforts made to handle or deal with situations that drain personal resources (Folkman & Moskwitz, 2004; Lazarus & Folkman, 1984). Social justice advocacy is explored a specific coping strategy of interest in the current study because it is thought to target sociocultural stressors. Acculturation, coping and advocacy processes mark ways an individual interacts with the environment to manage and create change, and are explored in the current study.

Acculturation

As suggested by the PPCT model, relationships between factors are complex and interactive, such that when the environment influences an individual, the individual also engages with the environment. Following immigration, generations engage and adapt with cultural expectations, beliefs, attitudes, values, and behaviors (Sam & Berry, 2006). Acculturation is used to conceptualize how individuals engage cognitively and behaviorally with the U.S. culture (Graves, 1967). Some scholars have found that aligning one's identity with at least one culture (dominant or minority) predicts positive outcomes (Miller et al., 2013), whereas other studies have noted the opposite (Ward & Kus, 2012). Along with personal or cultural identity, consistency of the language used by an individual is undoubtedly an important consideration when acclimating to a new culture, as it directs the

level of engagement available to immigrants. Generally, those with greater English language understanding have positive outcomes when adjusting to U.S. culture (Altarriba & Santiago-Rivera, 1994; Meyler, Stimpson, & Peek, 2006).

Acculturation strategies proposed by Berry (1997) are based on the premise that Hispanic immigrants in the United States have the freedom to choose the strategy of engaging in intercultural relationships. Berry (1976) recognized that this is not always the case, though, especially if the dominant culture enforces constraints related to the selection of these strategies. The assumption of freedom in this case can be restricted by the immigration status vulnerability in combination with language and cultural identity. Feeling aligned with U.S. American identity and English language may ameliorate negative outcomes related to immigration status vulnerability (Meyler, Stimpson, & Peek, 2006). It is important to explore the relationship between acculturation and immigration status in order to understand the influence of social restrictions and development on deportation fear and mental health symptoms (Berry, 2004). U.S. acculturation has not been explored as a predictor of deportation fear, and I predict that those with greater immigration status vulnerability and who are closely aligned with United States culture will have lower reports of deportation fear and ultimately lower stress and negative mental health symptoms.

Active Coping and Social Justice Advocacy

Like acculturation, active coping represents an interactive process highlighting individuals' cognitive and behavioral engagement with systems, and in particular when demands become taxing on individual resources (Lazarus & Folkman, 1984). In traditional stress and coping theories, coping strategies or techniques are cognitive or behavioral efforts used to manage stressful situations (Lazarus & Folkman, 1984). Active coping is

conceptualized in the PPCT developmental model as a process component that also incorporates contextual and personal components of the model (Bronfenbrenner, 2005). That is, it requires individuals' efforts to engage with and alter their environment (i.e. microsystems, exosystems) in a way that is intended to reduce mental health symptoms (i.e. person component emotional resources).

Active coping and social justice advocacy are explored in this study as a means of addressing stressful events. Coping research within the Hispanic population previously has focused on social support and general means of active coping techniques used with acculturative stress and discrimination (Farley et al., 2005; Umaña-Taylor et la., 2008).

Multicultural, feminist, and systems approaches direct mental health professionals to work more broadly in order to affect social change (Constantine et al., 2007; Vera & Speight, 2003). Social justice has been described as an underlying value for the equitable distribution of resources, rights, and treatment for marginalized individuals and groups who experience power inequity in society (Constantine et al., 2007). Advocacy is a way to promote social justice through attitudes and actions that increase equity and access (Cohen, 2001). Some developments in coping research have emphasized skills that move individuals toward challenging goals rather than focusing on negative reactions to events perceived as stressful (Aspinwall & Taylor, 1997). Social justice advocacy, conceptualized as a specific type of active coping, may moderate the negative influences on mental health symptoms. At this point, there has been little discussion in the literature on how this specific type of active coping interacts with deportation fear in contributing to the mental health and well-being of Mexican and Mexican American immigrants (Padilla, Cervantes, Maldonado, & Garcia, 1998).

Researchers have linked active forms of coping to decreases in depression and stress symptoms and positive long-term adjustment of immigrant populations in the United States (Ebata & Moos, 1991; Edwards & Romero, 2008). Even though distress is an inevitably important part of life, Mexicans and Mexican Americans face particularly distressful circumstances (Farley et al., 2005). Active coping skills that enable cultural connections are thought to be a vital determinant to immigrant mental health (LaFromboise, Coleman, & Gerton, 1993). Research has shown that active coping skills are associated with lower reported depression among Latino/xs in the United States (Crocket et al., 2007; Torres & Rollock, 2007).

Research indicates that active coping may ameliorate harmful mental health outcomes; however, it may be that increasing behavioral and cognitive activity related to a potential threat can also increase stress and anxiety (Eysenck et al., 2007). For instance in the social justice advocacy measure, engagement with issues related to the Hispanic cultural group may increase anxiety due to the instability and uncertainty of the rules regarding immigration status. Similarly if individuals were to actively address a problem they may put themselves or someone they love at risk, suggesting that active coping or social justice advocacy may also increase anxiety or stress. Like active coping, social justice advocacy is expected to moderate the relationship between deportation fear and mental health symptoms. Therefore, high levels of social justice advocacy and deportation fear may relate to higher levels of reported anxiety and stress is explored in this study.

To summarize, grounded in the PPCT theory (Bronfenbrenner, 2005), this study will investigate mental health symptoms of Mexican or Mexican American individuals in the United States, with a specific focus on how immigration status may indirectly relate to

individuals' mental health symptoms through deportation fear. Acculturation will be explored as a moderator of the relationship between immigration status vulnerability and deportation fear. It may be that the relationship between immigration status vulnerability and deportation fear is altered by individuals' personal identity as a U.S. American. Lastly, to address or cope with indirect distal system influences (i.e., immigration status, deportation fear), I will explore social justice advocacy and active coping as cognitive and behavioral engagement in the distal systems. The following hypotheses are proposed.

Hypothesis 1a. Deportation fear mediates the relationship between immigration status and mental health symptoms, such that when accounting for deportation fear the relationship between immigration status and depression, would significantly decrease (partial mediation) or would no longer be significant (full mediation).

Hypothesis 1b. Deportation fear mediates the relationship between immigration status and mental health symptoms, such that when accounting for deportation fear the relationship between immigration status and anxiety, would significantly decrease (partial mediation) or would no longer be significant (full mediation).

Hypothesis 1c. Deportation fear mediates the relationship between immigration status and mental health symptoms, such that when accounting for deportation fear the relationship between immigration status and stress, would significantly decrease (partial mediation) or would no longer be significant (full mediation).

Hypothesis 2a U.S. acculturation moderates the relationship between immigration status and deportation fear, such that the interaction of higher immigration status vulnerability and higher U.S. acculturation are associated with lower deportation fear.

Hypothesis 2b. The interaction of deportation fear and social justice advocacy would result in lower reported depressive symptoms, and higher reported anxiety and stress.

Hypothesis 3. Active coping is also assessed in the model in place of social justice advocacy as a moderator of the relationship between deportation fear and mental health outcomes. Like social justice advocacy, the interaction of deportation fear and active coping is hypothesized to result in lower reported depressive symptoms, and higher reported anxiety and stress.

Methodology

Participants

The initial sample was comprised of 403 individuals solicited from local colleges, Hispanic serving organizations, and web-based social media sites. Of the 403 cases obtained 33% *(n* = 152) were deleted as a result of significant missing data; specifically 111 participants completed only the first item asking about language preference. The other 41 participants completed 2-5 items on the DASS measure and discontinued the survey. Missing values in the immigration status variable resulted in a final sample of 214 participants.

Participants were recruited from two urban metropolitan areas (Kansas City, Missouri and Houston, Texas) and were asked to share the survey with others. Demographic variables are described here and shown in Table 1. The ages of participants in the sample ranged from 18 to 74 years (*M* = 32, *SD* = 11.42), with 24% (*n* = 61) not reporting age. Two-thirds of the sample identified as women (66.9%, *n* = 168), a fifth (20.7%) as men, and 12.4% failed to report gender identification. Of those who reported income (46.6%, *n* = 117), 61.6% (*n* = 72) grossed $50,000 per year or less, and 38.4% (*n* = 45) reported over $50,000 annual income. In terms of education, nearly half (49%, *n* = 123) of the participants did not respond, 9.2% (*n* = 18) reported no college education, 15.9% (*n* = 40) reported some college education, 13.5% (*n* = 34) completed a Bachelor's degree, 10.8% (*n* = 27) completed a Master's degree, and 3.6% (*n* = 9) completed a Doctorate degree. Only 49.8% (*n* = 125) reported their zip code, partially because of an entry error resulting in no responses from participants who chose to complete the survey in Spanish. Regional data based on zip code showed residents from Missouri (14.7%, *n* = 37), Texas (14.3%, *n* = 36), Kansas (7.6%, *n* = 19), California (7.6%, *n*

= 19), New York (1.2%, *n* = 3), Wisconsin (1.2%, *n* = 3), Arizona (.8%, *n* = 2), Washington (.8%, *n* = 2), Illinois (*n* = 1), Minnesota (*n* = 1), Nebraska (*n* = 1), and North Carolina (*n* = 1).

Cultural identifiers were also collected to describe the sample. Fifty-two participants (20.7%) failed to respond to the question regarding ethnicity. Of the options listed, 71.3% (*n* = 179) identified as Hispanic American or Latino/x, 5.6% (*n* = 14) as White and Hispanic, 2% (*n* = 4) as White, one participant as Hispanic and Native American, and one participant as Hispanic, White, and Native American. When asked about country of origin, half of participants (*n* = 127) did not provide a response, and those who did primarily reported Mexico as their country of origin (39%, *n* = 98), followed by 13 (5.2%) who reported the United States, five (2%) who reported Mexico and the United States, and seven participants (2.8%) who listed Mexico and one other country including Guatemala, Argentina, Ecuador, Nicaragua, El Salvador, and Cuba. One participant listed Mexico, Spain, and Germany as their countries of origin. The majority of participants (78.1%, *n* = 196) opted to complete the survey in English, and the remaining 55 participants (21.9 %) selected Spanish. Specific percentages of missing demographic data are described for each item in Appendix A.

Table 1

Descriptive Statistics for Demographic Items

Variable	*M*	*SD*	Range	*N*	% Missing
Age	32.20	11.45	18-74	186	13.08
Years in U.S.	27.43	11.64	2-74	111	48.13
Immigration Status Vulnerability	1.27	.44	1-2	214	0
Low (*n* = 157)					
High (*n* = 57)					
Language	1.75	.44	1-2	214	0
Spanish (*n*= 54)					
English (*n*= 160)					
Gender	.76	.43	0-1	201	6.07
Men (*n*= 48)					
Women (*n*= 153)					
Education	4.70	1.26	1-7	125	41.59
Income	4.43	2.77	1-10	116	45.79

Notes. N = 214, Immigration Status: 1= Low, 2= High; Language:1= Spanish, 2= English; Gender: 0= Male, 1 =Female; Education: 1= Elementary, 2= Middle School, 3= High School, 4= Some College, 5= Bachelor's Degree, 6= Master's Degree, 7= Doctoral Degree; Income: 1= $0-$20,000, 2= $20,001-$30,000, 3= $30,001-$40,000, 4= $40,001-$50,000, 5= $50,001-$60,000, 6= $60,001-$70,000, 7= $70,001-$80,000, 8= $80,001-$90,000, 9= $90,001-$100,000, 10= $100,000+

Missing values. The demographic data have a great deal of missing values, likely as a result of the demographic questionnaire being positioned last within the survey sequence, demographic responses not being required, and possible errors due to spam-ware. An analysis of missing values was conducted with Little's MCAR test for each of the five continuous scales (see Appendix A). The results of the Deportation Fear scale analysis were significant, indicating that responses may not be missing at random. Upon inspection of the scale, three cases were missing responses for the item, "I would be concerned if a loved one was applying for a driver's license", and three separate cases were missing item, "I would be concerned if a loved one was seeking employment at a particular place", and one case was missing five items from the Deportation Fear measure. Missing data from the Deportation Fear scale was replaced with the mean scores of that item in the scale. In the results for the

remaining variables there was no evidence of a pattern of missing values, and therefore these data points were handled with the expectation maximization algorithm (Kline, 2011; Schlomer, Bauman, & Card, 2010). A total of 48 responses were imputed using these methods.

The four cultural characteristics items; (a) country of origin, (b) ethnicity, (c) years in the United States, and (d) immigration status also showed a large amount of missing data, and analyses were conducted to explore possible non-response patterns. I created two comparison groups, responders and non-responders, to examine differences in these items. Some items (e.g., education, income) showed highly unequal comparison groups, potentially violating the assumption of equality of groups and invalidating the results. In circumstances where groups violated, Levene's tests of equality of variances, t-test analyses where equal variances are not assumed were used and the number of participants in both groups are reported.

For ethnicity, responders and non-responders groups evidenced unequal variances on education and language preference. Education and language preference were also the only variables to show significant difference between the response groups. Non-responders *(n* = 52) to the item asking about participants' ethnicity were significantly more likely than responders (n = 199) to prefer English, $t(129.90) = 3.70$, $p < .05$. Responders (n = 120) to the item asking about participants' ethnicity were more likely than non-responders *(n* = 8) to have completed more education, $t(11.10) = -3.47$, $p < .05$. However, applying the Bonferroni correction to the 14 significance tests conducted inflates Type 1 error, thus .004 is the critical alpha value needed to indicate differences between groups. None of the tests reached this value indicating similar responses for responders and non-responders for ethnicity. No other

significant differences were found between responders and non-responders for ethnicity (Table 2). Given assumptions violations in equality of variances, significant differences between response groups on education and language cannot be verified statistically.

Table 2

Group Comparisons between Responders and Non-responders for Ethnicity

Variable	Ethnicity	*N*	*M*	*SD*	*t*	*df*	*P*
Stress	NonResponder	52	1.84	.70	.38	249	.71
	Responder	199	1.80	.74			
Anxiety	NonResponder	52	1.47	.58	-.99	249	.32
	Responder	199	1.56	.60			
Depression	NonResponder	52	1.56	.71	.99	249	.32
	Responder	199	1.46	.59			
SIAS	NonResponder	52	2.74	1.17	-1.13	249	.26
	Responder	199	2.92	1.00			
Active Coping	NonResponder	52	2.93	.95	-1.06	249	.29
	Responder	199	3.07	.82			
US Acculturation	NonResponder	52	3.68	.45	1.70	249	.09
	Responder	199	3.55	.52			
Deportation Fear	NonResponder	50	1.67	.78	-1.91	239	.06
	Responder	191	1.94	.92			
Immigration Status	NonResponder	26	1.27	.45	.04	212	.97
	Responder	188	1.26	.44			
Gender	NonResponder	32	.81	.40	.70	218	.48
	Responder	188	.75	.43			
Income	NonResponder	4	3.00	1.41	-1.03	115	.13
	Responder	113	4.45	2.80			
Education	NonResponder	8	3.88	.64	-3.47[a]	11.10	.01
	Responder	120	4.75	1.27			
Language	NonResponder	52	1.92	.27	3.70[a]	129.90	.00
	Responder	199	1.74	.44			
Age	NonResponder	10	30.40	1.77	-.46	9.97	.66
	Responder	180	32.16	1.43			
Years in the U.S.	NonResponder	1	18.00	N/A	-.79	110	.43
	Responder	111	27.35	1.74			

Notes. N = 214, SIAS = Social Issues Advocacy Scale; Immigration Status: 1= Low, 2= High; Language:1= Spanish, 2= English; Gender: 0= Male, 1 =Female; Education: 1= Elementary, 2= Middle School, 3= High School, 4= Some College, 5= Bachelor's Degree, 6= Master's Degree, 7= Doctoral Degree; Income: 1= $0-$20,000, 2= $20,001-$30,000, 3= $30,001-$40,000, 4= $40,001-$50,000, 5= $50,001-$60,000, 6= $60,001-$70,000, 7= $70,001-$80,000, 8= $80,001-$90,000, 9= $90,001-$100,000, 10= $100,000+

[a] Violated Levene's test of equality of variance

When assessing differences between participants' responses to the question about the number of years living in the United States (see Table 3), groups evidenced violations of Levene's test for unequal variances on active coping, deportation fear, ethnicity, education, and language preference. Significant differences between the response groups were evidenced on social justice advocacy, deportation fear, education, and language preference. With the exception of social justice advocacy, variables that demonstrated significant difference between response groups also violated assumptions of equal variance. Those who responded ($M = 2.70$, $n = 111$) to the item asking for the number of years lived in the United States showed significantly greater endorsement of social justice advocacy in comparison to non-responders for the item ($M = 3.11$, $n = 139$), $t(249) = -3.23$, $p < .001$.

Table 3

Group comparisons between responders and non-responders for Years in the United States

Variable	Years in the United States	*N*	*M*	*SD*	*t*	*df*	*p*
Stress	NonResponder	139	1.78	.70	-.86	249	.39
	Responder	112	1.86	.77			
Anxiety	NonResponder	139	1.57	.63	.78	249	.46
	Responder	112	1.51	.54			
Depression	NonResponder	139	1.49	.65	.07	249	.95
	Responder	112	1.48	.57			
SIAS	NonResponder	139	2.70	1.04	-3.23	249	.001
	Responder	112	3.11	.99			
Active Coping	NonResponder	139	3.01	.92	-.70[a]	248.78	.48
	Responder	112	3.08	.76			
US Acculturation	NonResponder	139	3.62	.52	1.42	249	.16
	Responder	112	3.53	.50			
Deportation Fear	NonResponder	133	1.76	.81	-2.42[a]	205.78	.02
	Responder	108	2.05	1.00			
Immigration Status	NonResponder	103	1.26	.44	-.13	212	.89
	Responder	111	1.27	.45			
Ethnicity	NonResponder	88	1.08	.38	-1.91[a]	177.85	.06
	Responder	111	1.23	.69			
Gender	NonResponder	109	.78	.42	.60	218	.58

Group comparisons between responders and non-responders for Years in the United States

Variable	Years in the United States	*N*	*M*	*SD*	*t*	*df*	*p*
	Responder	111	.75	.44			
Income	NonResponder	8	3.75	2.49	-.69	115	.49
	Responder	109	4.45	2.80			
Education	NonResponder	19	3.95	.97	-3.51[a]	29.68	.001
	Responder	109	4.84	1.26			
Language	NonResponder	139	1.71	.45	-3.06[a]	247.92	.002
	Responder	112	1.87	.34			
Age	NonResponder	79	31.01	11.20	-1.07	188	.29
	Responder	111	32.81	11.57			

Notes. N = 214, SIAS = Social Issues Advocacy Scale; Immigration Status: 1= Low, 2= High; Language:1= Spanish, 2= English; Gender: 0= Male, 1 =Female; Education: 1= Elementary, 2= Middle School, 3= High School, 4= Some College, 5= Bachelor's Degree, 6= Master's Degree, 7= Doctoral Degree; Income: 1= $0-$20,000, 2= $20,001-$30,000, 3= $30,001-$40,000, 4= $40,001-$50,000, 5= $50,001-$60,000, 6= $60,001-$70,000, 7= $70,001-$80,000, 8= $80,001-$90,000, 9= $90,001-$100,000, 10= $100,000+
[a] Violated Levene's test of equality of variance

For country of origin (see Table 4), violations of Levene's test for unequal variances in the response groups were evidenced on depression, social justice advocacy, active coping, deportation fear, and language preference. Although significant differences between response groups were evidenced on depression, active coping, deportation fear, and language preference, violation of the equality of variance assumption may invalidate those results. However, significant differences between response groups for country of origin were found on the U.S. acculturation scale, $t(249) = 2.26$, $p < .05$. Non-responders ($M = 3.65$, $n = 127$) for country of origin showed significantly higher mean scores for U.S. acculturation than responders ($M = 3.50$, $n = 124$).

Table 4

Group Comparisons between Responders and Non-Responders for Country of Origin

Variable	Country of Origin	*N*	*M*	*SD*	*t*	*df*	*p*
Stress	NonResponder Responder	127 124	1.80 1.83	.70 .77	-.37	249	.72
Anxiety	NonResponder Responder	127 124	1.49 1.60	.57 .61	-1.50	249	.14
Depression	NonResponder Responder	127 124	1.40 1.57	.55 .67	-2.10[a]	236.87	.037
SIAS	NonResponder Responder	127 124	2.72 3.05	1.10 .95	-2.49[a]	245.66	.013
Active Coping	NonResponder Responder	127 124	3.01 3.07	.93 .76	-.58[s]	240.82	.56
US Acculturation	NonResponder Responder	127 124	3.65 3.50	.48 .54	2.26	249	.025
Deportation Fear	NonResponder Responder	120 117	1.59 1.84	.64 .91	-2.47[a]	208.39	.01
Immigration status	NonResponder Responder	92 122	1.25 1.28	.44 .45	-.47	212	.64
Ethnicity	NonResponder Responder	79 120	1.17 1.16	.61 .55	.08	197	.94
Gender	NonResponder Responder	99 121	.77 .76	.42 .463	.13	218	.90
Income	NonResponder Responder	6 111	4.33 4.41	1.75 2.82	-.06	115	.95
Education	NonResponder Responder	15 113	4.33 4.75	1.047 1.28	-1.22	126	.23
Variable	Country of Origin	*N*	*M*	*SD*	*t*	*df*	*p*
Language	NonResponder Responder	127 124	1.72 1.84	.45 .37	-2.21[a]	242.12	.028
Age	NonResponder Responder	73 117	30.34 33.14	10.87 11.66	-1.65	188	.10

Notes. N = 214, SIAS = Social Issues Advocacy Scale; Immigration Status: 1= Low, 2= High; Language:1= Spanish, 2= English; Gender: 0= Male, 1 =Female; Education: 1= Elementary, 2= Middle School, 3= High School, 4= Some College, 5= Bachelor's Degree, 6= Master's Degree, 7= Doctoral Degree; Income: 1= $0-$20,000, 2= $20,001-$30,000, 3= $30,001-$40,000, 4= $40,001-$50,000, 5= $50,001-$60,000, 6= $60,001-$70,000, 7= $70,001-$80,000, 8= $80,001-$90,000, 9= $90,001-$100,000, 10= $100,000+

[a] Violated Levene's test of equality of variance

For response groups compared on the item assessing immigration status (see Table 5), violations of Levene's test of equality of variances were found on active coping, deportation fear and language preferences. Significant differences between non-responders and responders were evidence on social justice advocacy, deportation fear and language

preference. However, insufficient equality among comparison groups indicates difference on deportation and language preference may not be valid. Participants, who did not respond to questions regarding immigration status (*M*= 2.55, *n*= 37), showed significantly lower mean scores on social justice advocacy, than responders (*M*= 2.94, *n*= 214), $t(249) = 2.26$, $p < .05$ (Table 5). In light of these analyses, ethnicity is used as the primary cultural description for the sample since no significant differences were found between responders and non-responders with regard to the factors assessed in this study. The final sample is described as Mexican or Mexican American as reported for the majority of responders and non-responders in this study.

Table 5

Group Comparisons between Responders and Non-responders for Immigration Status

Variable	Immigration Status	*N*	*M*	*SD*	*t*	*df*	*p*
Stress	NonResponder	37	1.84	.68	.27	249	.79
	Responder	214	1.81	.74			
Anxiety	NonResponder	37	1.63	.69	.93	249	.35
	Responder	214	1.53	.57			
Variable	Immigration Status	*N*	*M*	*SD*	*t*	*df*	*p*
Depression	NonResponder	37	1.51	.69	.26	249	.80
	Responder	214	1.48	.60			
SIAS	NonResponder	37	2.55	1.20	-2.11	249	.04
	Responder	214	2.94	1.00			
Active Coping	NonResponder	37	2.81	1.04	-1.48[a]	43.722	.15
	Responder	214	3.08	.81			
US Identity	NonResponder	37	3.69	.41	1.42	249	.16
	Responder	214	3.56	.53			
Deportation Fear	NonResponder	35	1.50	.60	-2.14[a]	58.08	.04
	Responder	202	1.75	.82			
Gender	NonResponder	19	.79	.42	.276	218	.78
	Responder	201	.76	.43			
Income	NonResponder	1	1.00	-	-	-	-
	Responder	116	4.43	2.77			
Education	NonResponder	3	4.67	1.15	-.05	126	.96
	Responder	125	4.70	1.26			
Language	NonResponder	37	1.97	.16	5.60[a]	141.16	.00
	Responder	214	1.75	.44			

Group Comparisons between Responders and Non-responders for Immigration Status

Variable	Immigration Status	*N*	*M*	*SD*	*t*	*df*	*p*
Age	NonResponder	4	25.75	8.73	-1.12	188	.27
	Responder	186	32.20	11.45			
Ethnicity	NonResponder	11	1.18	.41	.172[a]	12.554	.87
	Responder	188	1.16	.58			

Notes. N = 24, SIAS = Social Issues Advocacy Scale; Immigration Status: 1= Low, 2= High; Language:1= Spanish, 2= English; Gender: 0= Male, 1 =Female; Education: 1= Elementary, 2= Middle School, 3= High School, 4= Some College, 5= Bachelor's Degree, 6= Master's Degree, 7= Doctoral Degree; Income: 1= $0-$20,000, 2= $20,001-$30,000, 3= $30,001-$40,000, 4= $40,001-$50,000, 5= $50,001-$60,000, 6= $60,001-$70,000, 7= $70,001-$80,000, 8= $80,001-$90,000, 9= $90,001-$100,000, 10= $100,000+

[a] Violated Levene's test of equality of variance

Measures

The measures described in this section represent theoretical constructs for immigration status vulnerability, U.S. acculturation, deportation fear, social justice advocacy, active coping, and mental health symptomatology (including depression, stress, and anxiety). Measures were chosen based on prior use with Spanish-speaking samples. In cases where translations were unavailable, (i.e. SIAS, active coping subscale) measures were translated and back translated for validity purposes using Brislin's (1986) recommendations.

Immigration status vulnerability. The Immigration Status Vulnerability (ISV) measure consisted of eight dichotomously scored "true/false" questions that assess participants' immigration statuses. Participants who provided responses (85.3%, *n* = 214) fell into the following eight broad categories: U.S. citizens (62.5%, *n* = 157), legal U.S. resident (6.8%, *n* = 17), U.S. citizen with a family member deported or detained (6.4%, *n* = 16), DACA recipient (6%, *n* = 15), non-citizen with a family member deported or detained (2%, *n* = 5), non-citizen previously deported or detained (.8%, *n* = 2), undocumented non-citizen (.4%, *n* = 1), and citizen with a family both detained or deported and family with DACA (.4%, *n* = 1). Those who marked both DACA recipient and U.S. resident (*n* = 6) were reported under DACA recipient category only. In comparison, national data on Mexicans

with legal residency (11%) was similar to the percent found in the current sample (6.8%). In comparison, national data on Mexicans with legal residency (11%) was similar to the percentage found in the current sample (6.8%). National data from a 2011 survey (Pew Hispanic Center, 2011) also reflect greater numbers of undocumented individuals (18%) of Mexican origin in the general population than what was reported in the current study.

Due to a large majority of participants identifying as citizens with a loved one who had been detained or deported, categories were collapsed. Citizens who did not indicate a deported or detained loved one *(n* = 157) were coded "1" in the low vulnerability group. In the high vulnerability group coded "2" were residents, undocumented individuals, and citizens who indicated a vulnerable loved one *(n* = 57). The creation of these groups was based on the premise that people without legal authorization, who have a family member(s) detained/deported, and who have personally been previously detained/deported will experience greater vulnerability to detention/deportation policies than individuals with documentation and who have not experienced detention/deportation personally or in their family. While this measure has been used previously, no reliability or validity data was available (Brabeck & Xu, 2010).

Deportation fear. The original fear of deportation measure used seven items, which asks respondents whether they avoided or did not engage in activities because of fear or concerns of being deported or detained (Arbona et al., 2010). Items were rated dichotomously (no, yes), and scored with a 0 or a 1 (0 = no avoidance of the activity for fear of deportation; 1 = avoidance of the activity for fear of deportation). Responses from the seven items were added together to create a continuous variable for this construct, with a possible range of scores from 0 to 7, and higher scores indicating greater fear of deportation.

Kuder–Richardson 20 reliability coefficient was .91 for the original Hispanic sample. This scale was positively correlated with the Hispanic Stress Inventory Immigrant form (Cervantes et al., 1991) and negatively correlated with English language proficiency (Arbona et al., 2010), providing beginning evidence of convergent validity.

With permission from the original author (C. Arbona, personal communication, October 15, 2013; See Appendix K), changes were made to the original measure, including use of a 4-point scale. One item was altered from, "wait in the street corner to get work" to, "seeking employment at a particular place." Two items were added "I would avoid attending social gatherings for fear of deportation or detainment" and "I would avoid reporting work place discrimination for fear of deportation or detainment." Another sample item is "I would avoid walking in the streets for fear of deportation or detainment." Another ten items were derived from the original measure to assess individuals' fear that a loved one of the participant may be deported or detained. A sample item for this subscale is, "I would be concerned if a loved one were walking in the streets for fear he/she would be deportation or detainment." Items from these scales ranged from 0, *Not at all concerned* to 3, *Very often concerned* where lower scores indicate lower deportation fear based on avoidance to engage in public activities. Reponses for the 10 items were averaged for each sub-scale to obtain sub-scales scores for a deportation fear for self and a deportation fear for others. Higher scores indicate greater worry and reluctance to engage in activities due to of fear of being deported or detained.

Findings from the exploratory factor analysis indicated a two-factor structure with high positive inter-factor correlation (r = .69), which points out that these factors may not be distinct constructs. The two factors extracted represent deportation fear for self and

deportation fear for a loved one (other). The deportation fear-other subscale (see Appendix C) was retained for model testing based on greater distribution of responses compared to the deportation fear-self subscale. Internal consistency scores were excellent for the deportation fear-other subscale ($\alpha = .96$). Results of these analyses demonstrated similar consistency scores found in the original scale. Also in line with the original measure (Arbona et al., 2010), this deportation fear scale was negatively correlated ($r = -.18$, $p < .01$) with English language proficiency. However, with limited theoretical backing and previous use, results may be interpreted with caution.

U.S. acculturation. Acculturation level, measured using the U.S.-American dimension, is comprised of two subscales (ethnic identity and language competence) from the Abbreviated Multidimensional Acculturation Scale (AMAS-ZABB; Zea, Asner-Self, Birman, & Buki, 2003). Scores from the U.S.-American dimension subscales represent self-reported competence in English and personal identity alignment with the United States. Responses were rated using a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*) on the cultural identity subscale, and from 1 (*not at all*) to 4 (*extremely well*) on the language competence subscale. Items were averaged to form a total subscale score, with higher scores indicating greater English language competence and alignment with the U.S. culture (Zea et al., 2003).

The 6-item U.S. cultural identity (USID) subscale was developed based upon the American Identity Questionnaire (Phinney & Devich- Navarro, 1997). An example item from this subscale is "I feel that I am part of U.S. American culture." The English language competence (USLANG) subscale includes 9 items, which were generated by focus groups. A few of the items were drawn from existing language scales (e.g., Birman, 1991; Marin et al.,

1987; Szapocznik et al., 1978, 1980), but were adapted to reflect language competence as opposed to language preference. Items are related to a participant's English ability within a variety of contexts. An example of items from this subscale is "How well do you speak English at school or work" and "How well do you understand English on television or in movies". The U.S.-American dimension on the AMAS–ZABB is calculated by averaging two U.S.-American subscales of USID and USLANG. Higher scores indicate greater personal alignment with U.S. American cultural norms and lower scores indicate a low degree of personal alignment with U.S. American culture (Zea et al., 2003).

Initially validated with Hispanic college students and immigrants living in the community from South America, Central America, Mexico, and the Caribbean, the larger scale consists of 42 items total. Convergent and divergent validity of the AMAS-ZABB was evidenced with the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992). U.S. identity and acculturation subscales for the MEIM and AMAS-ZABB showed significant positive correlations with community (.57) and college (.88) samples. The ethnic identity subscales from these measures also displayed significant positive correlations (.76 and .63 for community and college samples, respectively). These correlations provide evidence for convergent validity for the AMAS-ZABB. For divergent validity, the U.S. acculturation subscale showed significant negative correlations with the MEIM ethnic identity subscale in the community (-.21) and college (-.46) samples (Zea, et al., 2003). A factor analysis was conducted on the U.S-American dimension of the AMAS-ZABB, which resulted in retaining the original scale 2-factor structure (see Appendix D). Internal consistency scores for each of the factors were .97 and .95 for English language comprehension and U.S. cultural identity,

respectfully. The U.S. identity subscale was retained for model testing based on greater distribution of responses compared to the U.S. Language subscale (see Appendix D).

Social justice advocacy. The Social Issues Advocacy Scale (SIAS; Nilsson, Marszalek, Linnemeyer, Bahner, & Misialek, 2011) is a self-report, 21-item instrument, measuring attitudes and behaviors toward social justice advocacy. The scale is made up of four subscales: Political and Social Advocacy (PSA, 8 items), Political Awareness (PA, 6 items), Social Issues Awareness (SIA, 4 items), and Confronting Discrimination (CD, 3 items). Items are rated on a Likert-type scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Item scores are averaged to form total scale scores, ranging from 1 to 5, with higher scores indicating attitudes and behaviors toward greater social justice advocacy. The PSA subscale measures active participation in political legislature such as voicing an opinion, volunteering, or voting. A sample item from the PSA subscale is, "I participate in demonstrations or rallies about social issues that are important to my profession." The PA subscale assesses knowledge of political issues, candidates, and voting. A sample item from the PA subscale is, "I keep track of important bills/legislative issues that are being debated in Congress that affect my profession." The SIA subscale measures awareness of social issues such as education, health, and resource availability. A sample item from the SIA subscale is, "Societal forces (e.g., public policies, resources allocation, human rights) affect individuals' health and well-being." The CD subscale measures individuals' sense of responsibility to confront discrimination. A sample item from the CD subscale is, "I am personality responsible to confront others who display signs of discrimination toward disabled individuals."

The SIAS was originally developed to guide training for professionals within the helping field. Total scale scores have shown significant convergent validity through positive correlations with sociopolitical behavioral activism (r = .61) and desired sociopolitical activism (r =.58). Test criterion validity was evidenced with political interest (r = .62) and multicultural empathy (r = .48). The overall SIAS has demonstrated strong internal consistency (Cronbach's alpha = .94) with a sample of 509 students from various degree programs (including bachelors in education, master's in counseling or psychology, medical students, and doctoral programs in counseling psychology. Nilsson et al. (2011) reported internal consistency subscales at .94 for PSA, .89 for PA, .91 for SIA, and .91 for CD.

For this study, SIAS was used to assess engagement in social justice advocacy in regards to ethnic group. Thus, changes were made to accommodate the scale utility for the purpose of this research. In nine items containing the phrases "My profession" and "my professional organization," the sentence stems were changed to "my ethnic group." This alteration was made to reflect the use of the scale for this particular study with a Mexican American community sample. On the CD subscale, "professionally" was changed to "personally," and "colleagues" was changed to "others." Finally, one item was added to the PSA subscale, "I use social networking websites (Facebook, Twitter, Linkedin) to influence others through the media regarding issues that affect my ethnic group." This change was made to reflect the growing use of social networking websites to disperse information and voice options. Original reliability scores for this instrument are based on college educated, mainly White samples (Nilsson et al., 2011).

Factor analysis demonstrated a four-factor solution (see Appendix E), as originally intended. Iterative data reduction to increase the stability of the subscales resulted in

removing two items from the Political and Social Advocacy Subscale, “I use emails, and letters to influences others about issues that affect my ethnic group” and “I use social media sites (Facebook, Twitter, Linkedin) to influences others though media about issues that affect my ethnic group.” These items showed low initial extractions indicating they do not correlate highly with the other items on the subscale. Cross loadings were also seen with these items and the Political Awareness (PA) Subscale. An additional two items were removed from PA that showed cross loadings with PSA; “I work to elect policy makers who support the views of my ethnic group on important social issues” and “I vote in most local elections.” The PSA subscale was retained for use in the hypothesized models. The PSA scale reflects social justice in the form of political engagement and examination showed a need to explore relationships between the PSA and outcome variables (see Appendix E). Additionally, this subscale showed greater distribution of scores in comparison to other subscales in the measure. Cronbach’s alpha for the seven item subscale was .93.

Active coping. A brief active coping scale was used to assess a moderated relationship between deportation fear and mental health outcomes in the model. The active coping subscale is part of the larger COPE scale (Carver, Scheier, & Weintraub, 1989). The scale is comprised of four self-report items, such as “I do what has to be done, one step at a time.” Response choices are on a 4-point scale, where 0 = "*I usually don't do this at all*," to 1 = "*I usually do this a little bit*,” 2 = "*I usually do this a medium amount*", and 3 = "*I usually do this a lot*". Item scores are averaged to form a total scale score, ranging from 0 to 3; higher scores indicate greater endorsement of active coping strategies used by participants. The normative sample for the active coping subscale had an internal consistency of .62, and test-retest scores of r = .69 at 6 weeks and r = .56 at 8 weeks (Carver, Scheier, & Weintraub,

1989). The active coping subscale demonstrated significant positive correlations with other subscales from the COPE scale, such as planning (r = .47) and seeking instrumental social support (r = .33). Negative correlations were found between subscales of behavioral disengagement (r = -.23) and denial (r = -.21). The COPE scale has been revised to shorten the measure several times (Carver, 1997; Perczek, Carver, & Price, 2000), but the original four-item active coping subscale was used for this study (Appendix F). Cronbach's alpha for in the current study this subscale was .93. The active coping subscale will be tested as an alternative moderator in the relationship between deportation fear and mental health symptoms.

Mental health symptoms. Mental health symptoms were assessed using the 21-item, self-report, Depression Anxiety Stress Scale (DASS-21; Lovibond & Lovibond, 1995). The Depression subscale assesses dysphoria, devaluation of life, self-deprecation, and inertia. The Anxiety subscale assesses autonomic arousal, skeletal muscle effects, situational anxiety, and subjective experience of anxious affect. The Stress subscale is sensitive to levels of chronic, non-specific arousal. It assesses difficulty relaxing, nervous arousal, and being easily upset, over-reactive and impatient. Participants were asked to use a 4-point scale (0 = "*Did not apply to me at all*", 1 = "*Applied to me to some degree*", 2 = "*Applied to me to a considerable degree/a good part of time*", 3 = "*Applied to me very much/most of the time*") to rate the extent to which they have experienced each state over the past week. Scores for the DASS are calculated by summing item scores to achieve a range of 0 to 21 for each subscale, where higher scores indicate greater mental health concerns. The sum of each subscale (depression, anxiety, and stress) will be used as an outcome variable with each of the analyses.

The DASS has been translated into Spanish and validated with a Hispanic sample (Daza, Novy, Stanley, & Averill, 2002). Convergent validity has been shown with the original DASS-42, scale as well as the Mood and Anxiety Symptom Questionnaire-90 (MASQ-90; Watson et al., 1995). Subscales of this measure have revealed adequate concurrent validity scores (r = .80, .69, and .73) with the Beck Depression Inventory (BDI; Beck & Steer, 1990), Beck Anxiety Inventory (BAI; Beck, Steer, and Brown 1996), and the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), respectively. Factor analyses have also demonstrated evidence for construct validity (Osman, Wong, Bagge, Freedenthal, Gutierrez, & Lozano, 2012).

In the current study, factor analysis for the three subscales evidenced comparatively better scale reliability and stability than the overall DASS-21 (see Appendix G). Each of the subscales were retained to explore cultural models predicting three categories of mental health symptoms. The depression and anxiety subscales were altered from the original scales to increase factor stability. The item "I found it difficult to work up the initiative to do things" was removed from the depression subscale due to low extraction and cross loading with the anxiety items. The items "I was worried about situations in which I might panic and make a fool of myself" and "I felt close to panic" were removed from the anxiety subscale due to cross loadings with the depression scale. The items removed seemed to represent more extreme (i.e. panic, low behavioral activation) mental health experiences, which may not have been well represented in the community sample in this study. Cronbach's alphas for internal consistency values were .91 for depression subscale, .88 for anxiety subscale, and .91 for the stress subscale.

Procedure

Participants were recruited via Hispanic-serving institutions and web-based social media sites nation-wide. The offices of diversity (or similar offices) at community and state colleges were contacted to request that the survey be sent out to their listserv and posted on their social media outlets. Community agencies serving Hispanics and local Hispanic businesses were also asked to share the survey through their mailing lists, newsletters, and social media outlets. A brief description of the study and inclusion criteria along with the Surveymonkey link to the survey was provided to participants. After reading an electronic informed consent at the start of the survey, participants were presented with the measures and a demographic questionnaire. Ten, twenty-five dollar Visa gift cards were given as a participation incentive.

Results

Power Analysis

With research on sociocultural factors, small to medium effects may be expected based on previous literature (Arbona et al., 2010; Bronfenbrenner, 1999; Sam & Berry, 2006). Testing models with small expected effects, including mediation and moderation, generally requires minimum sample sizes of 400-500 cases. Sample size estimation for structural equation models requires a minimum 1:5 parameter to participant ratio for estimating sample size, and more conservative estimates suggest a 1:10 or a 1:20 ratio (Kline, 2011). The originally proposed structural equation model (Figure 3), using a 1:5 parameter to participant ratio at minimum would require at least 320 participants for the 64 parameters of variable paths and factor item estimates. To estimate the scale variance in the originally proposed model as structural regression would include 81 parameters, and therefore a suggested sample size for the SEM model would include 810 participants. Thus, the model was simplified to a path analysis. Using G-power software to estimate the *F* statistic for a small to medium effect size with four observed variables, and .80 power an adequate sample size would be 232 participants for a regression analysis. With a total sample of 214, the analyses will be underpowered based on sample size estimation for moderated mediation tests (Kline, 2011; Preacher, Rucker, & Hayes, 2007). Underpowered analyses threaten to skew results based on the makeup of the sample and increase the likelihood of Type II error. The overall sample is described with available data (see Appendix A).

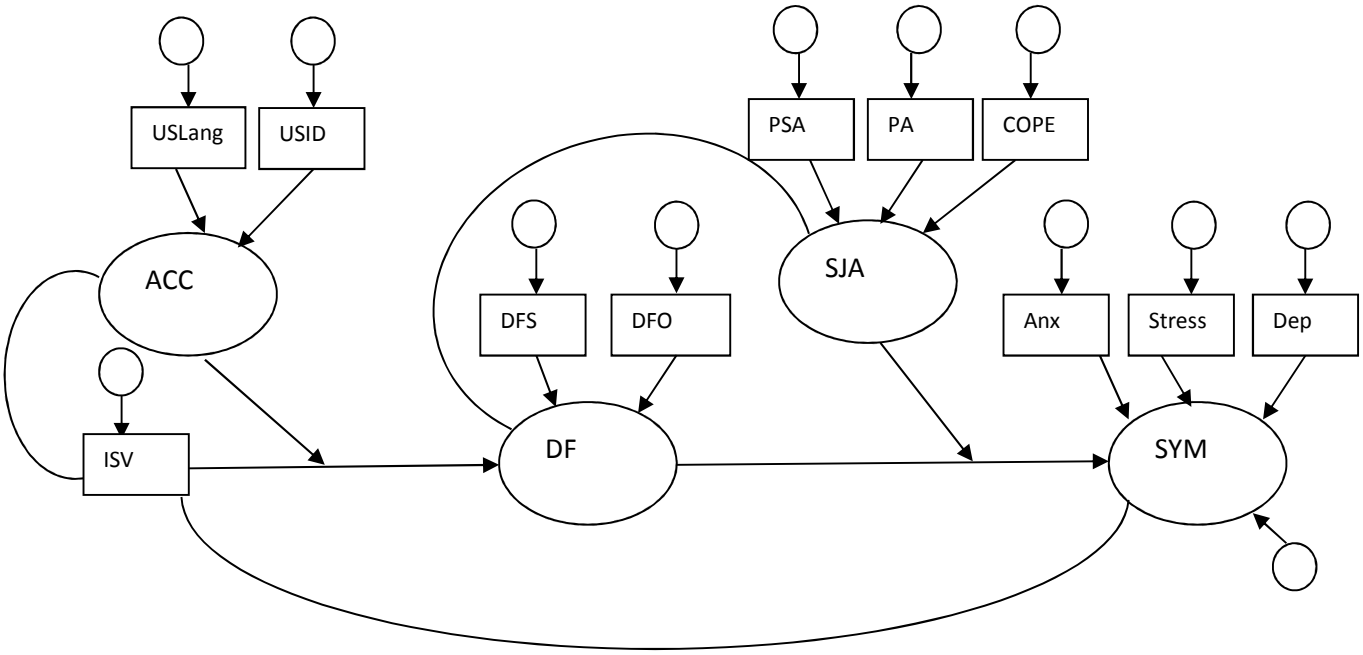


Figure 3. Proposed Structural Regression Model.

Notes: ISV = immigration status vulnerability, ACC = U.S. acculturation, DF = deportation fear, SYM = symptomatology, and SJA = social justice advocacy, USID = United States identity, USLang = English language use, DFS = deportation fear for self, DFO deportation fear for a loved one, PSA = political and social advocacy subscale, PA = political awareness subscale COPE = active coping subscale

Assumptions

Univariate outliers in the data were identified by z-scores greater than the absolute value of 3.29 for each of the variables (Warner, 2008). Based on this criteria, univariate outliers were found on three scales (i.e., DASS, DFS, and USLANG) and throughout 42 cases. Since data and scales were not severely non-normal, outliers were not removed from the dataset. Normality was assessed using bell curves, skewness, and kurtosis for each scale. Skewness and kurtosis statistics should not exceed nor fall below the absolute value of three and seven respectively (Warner, 2008). Skewness and kurtosis for model factors were all

within range of acceptable values for normality (Appendix A). In this study, the bootstrapping strategy for resampling was used in calculating statistics of interest (i.e. exploratory factor analysis, moderated mediation), which does not assume that data are normally distributed (Preacher, Rucker, & Hayes, 2007), thus no transformations were made.

Multivariate outliers were assessed by a regression analysis with five predictor variables to inspect the Mahalanobis distance values. The critical chi-square value of 20.52 was used for five degrees of freedom at a critical alpha of .001. Mahalanobis distance values ranged from .17 to 17.28, where values did not violate the critical value established (Kline, 2011). Also, Cook's distance value was less than 1, signifying that potential outliers in the dataset do not likely have a considerable influence on the statistical analyses (Tabachnick & Fidell, 2007). Based on these results, the data showed no combination of responses outside the range of what might be expected.

Linearity was assessed by regressing the outcome variables (DVs) on each of the predictor variables (IVs) in the model. Results for each regression analysis indicated sufficient linearity to be tested in a structural equation model. Multicollinearity was assessed using the variance inflation factor (VIF) measuring the inflations in the variances of the parameter estimates. The collinearity statistic VIF was inspected for each of the four regression analyses, and no value exceeded 1.30 (Kline, 2011). Homoscedasticity tests were not conducted since the model includes moderation, which assumes heteroscedastic relationships.

Preliminary Analyses

Pearson correlations were produced for all independent, dependent, and demographic variables to examine the strength and directionality of relationships, see Table 6. The

correlations indicate that the variables met criteria to explore a mediation relationship between immigration status vulnerability (ISV) and mental health symptoms of depression, anxiety and stress through deportation fear. Contrary to my hypotheses ISV, deportation fear, U.S. identity, and social justice advocacy were not significantly related to stress. Preliminarily support for strong positive relationship between the social justice advocacy and active coping was demonstrated in bivariate correlations between the overall scale scores (*r* = .49). Active coping and social justice advocacy variables were not, however, significantly correlated with deportation fear as originally suspected. Therefore contrary to the hypothesized models, a moderated pathway between deportation fear and mental health outcomes may not exist. The variable relationships were explored further moderated mediation models.

Table 6

Correlation matrix for model variables

Variable	1	2	3	4	5	6	7	8	9	10	11
1. IVS	-										
2. U.S. Identity	-.41**	-									
3. Deport. Fear	.28**	-.18**	-								
4. SJA	-.10	.21**	.09	-							
5. Active Coping	-.07	.17*	-.14*	.49**	-						
6. Anxiety	.22**	-.24**	.33**	-.16*	-.14*	-					
7. Depression	.21**	-.18**	.31**	-.08	-.14*	.69**	-				
8. Stress	.08	-.06	.06	-.18**	-.18**	.22**	.27**	-			
9. Age	.30**	.35**	-.10	.39**	.21*	-.06	.04	.03	-		
10. Income	-.14	.18*	-.25**	.10	.24**	-.13	.19*	-.05	.22*	-	
11. Education	-.24**	.02	-.36**	.16	.19*	-.24**	-.34**	-.06	.39**	.19*	-
Mean	1.27	3.56	1.74	2.94	3.08	1.53	1.48	1.81	32.20	4.43	4.70
SD	.44	.53	.81	1.00	.81	.57	.60	.74	11.45	2.77	1.26

Notes: N= 214, ISV = Immigration Status Vulnerability, Deport. Fear = Deportation Fear, SJA = Social Justice Advocacy
*p < .05. **p < .01

Main Analyses

The first purpose of this study was to examine whether deportation fear mediated the relationship between immigration status and mental health symptoms of depression and anxiety. To determine the significance of the mediated effect, bootstrap estimate with 5,000 samples utilizing the PROCESS macro (Hayes, 2013) was used for two (depression and anxiety) mediation models. Unlike Barron and Kenny's method of inferring indirect effect, bootstrapping is used here to quantify effects in the models (Preacher & Hayes, 2004). Through resampling, confidence intervals are calculated with a lower limit (LL) and an upper limit (UL) of the. If a zero occurs between the LL and UL, this means that no effect is included in the range of possible effects and the null hypothesis will be retained. If zero does not occur between the LL and the UL, then we can conclude that the indirect effect is significant. A second purpose was to explore whether social justice advocacy and U.S. identity moderates the proposed mediated relationship. Bootstrapped confidence intervals were also used to assess significant conditional indirect effects of the moderators.

Hypotheses 1. Hypotheses 1a and 1b examined whether deportation fear mediated the relationship between immigration status vulnerability and the outcome variables (i.e., depression [hypothesis a], anxiety [hypothesis b], and stress [hypothesis c]). Given that immigration status vulnerability is a dichotomous variable, any indirect effect observed in the analyses signifies mean differences between low and high groups on mental health symptoms through deportation fear (Hayes & Preacher, 2014). In these analyses, U.S. identity and active coping are entered as covariates.

Hypothesis 1a. First depression was tested as the dependent variable (Figure 4). The overall variance explained by this model was significant $F(4, 209) = 6.01$, $p < .001$, $R^2 = .10$. This models showed a small effect by explaining 10.3% of the variance in depression symptoms. The paths a and b in Figure 4, which connect immigration status vulnerability to depression through deportation fear were significant. The effect of immigration status on deportation fear (path a) was significant, $t(210) = 3.44$, $p < .001$, 95% CI [.22, .79]. Additionally, the effect of deportation fear on depression was significant, $t(209) = 3.64$, $p < .001$, CI [.08, .27]. To test the indirect effect from immigration status vulnerability to depression through deportation fear, I used the bootstrapping resampling technique and the path was significant, $b = .08$, SE = .04, 95% CI [.03, .19]. Since zero was not in the confidence interval, the hypothesis was supported. The effect of immigration status vulnerability on depression was significant without the mediator $b = .27$, SE = .10, 95% CI [.07, .46]. When deportation fear was tested as a mediator in the model, the effect of immigration status vulnerability on depression was no longer significant $b = .18$, SE = .10, 95% CI [-.02, .38]. Thus, deportation fear fully mediated the relationship between immigration status vulnerability and depression. The results support hypothesis 1a regarding a mediated relationship between immigration status vulnerability and depression symptoms through deportation fear, while controlling for social justice advocacy and U.S. identity.

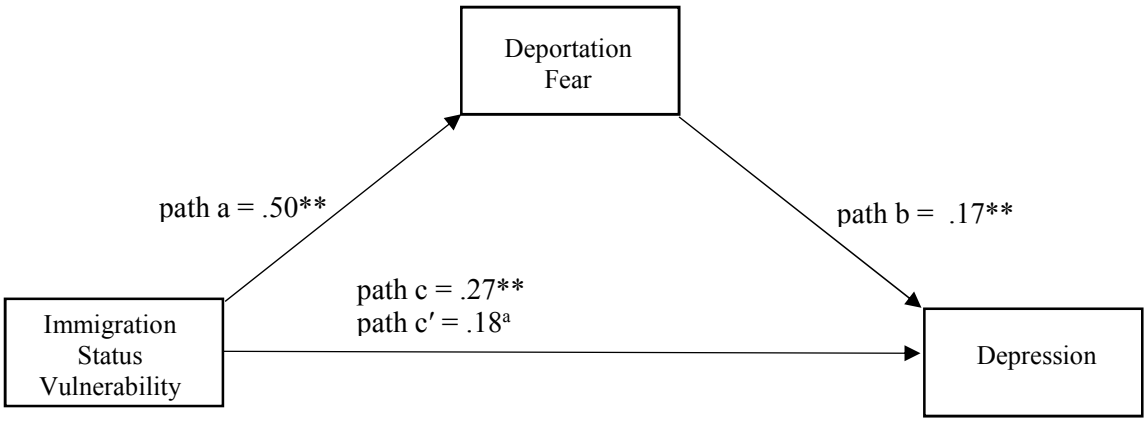


Figure 4. Regression coefficients (*b*) for the relationship between immigration status vulnerability and depression as mediated by deportation fear.

*Hypothesis 1b***.** Next anxiety was tested as the dependent variable in the mediation model. Overall 14% of the variance in anxiety symptoms was accounted for by this model, $F(4, 209) = 8.21$, $p < .001$.The indirect pathway from immigration status vulnerability to anxiety through deportation fear was significant, $b = .08$, SE = .04, 95% CI [.03, .18]. As in the previous analysis, the effect of immigration status on deportation fear (path a) was significant, $b = .50$, $t(210) = 3.44$, $p < .001$, CI [.22, .79]. The effect of deportation fear on anxiety was significant, $b = .17$, $t(209) = 3.67$, $p < .001$, CI [.08, .25]. The effect of immigration status vulnerability on anxiety was significant without the mediator $b = .23$, SE = .10, 95% CI [.04, .43]. When deportation fear was tested as a mediator in the model, the effect of immigration status vulnerability on anxiety was no longer significant $b = .15$, SE = .10, 95% CI [-.04, .35], suggesting full mediation. Since immigration status vulnerability is a dichotomous variable, these analyses point out significant mean differences between low and high groups in both anxiety and depression outcomes.

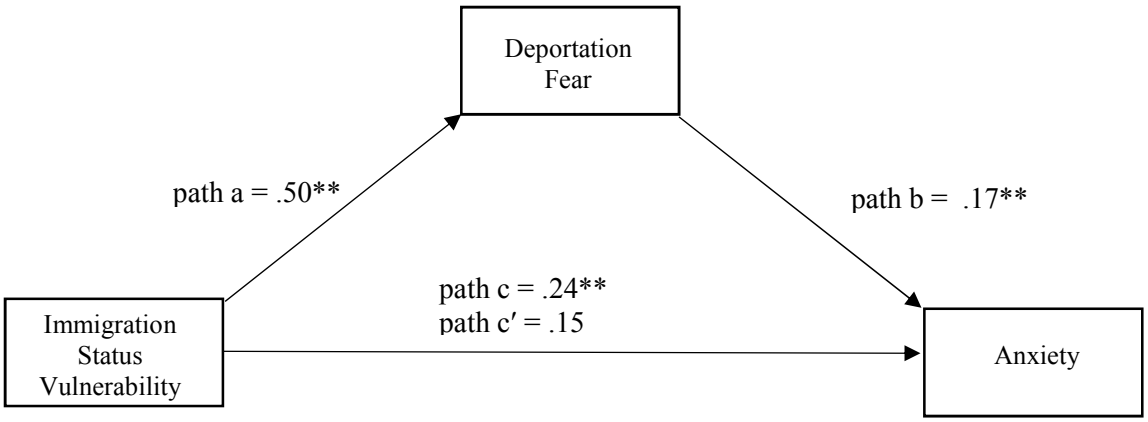


Figure 5. Regression coefficients (*b*) for the relationship between immigration status vulnerability and anxiety is mediated by deportation fear.

Hypothesis 1c. Last, stress was tested as the dependent variable in the mediation model. Overall 4% of the variance in anxiety symptoms was accounted for by this model, $F(4, 209) = 1.90$, $p = .11$.The indirect pathway from immigration status vulnerability to stress through deportation fear was not significant, $b = .03$, SE = .04, 95% CI [-.03, .11]. As in the previous analysis, the effect of immigration status on deportation fear (path a) was significant, $b = .50$, $t(210) = 3.29$, $p < .01$, CI [.20, .81]. The effect of deportation fear on stress (path b) was not significant, $b = .06$, $t(209) = .80$, $p = .42$, CI [-.08, .19]. The effect of immigration status vulnerability on stress was not significant without the mediator $b = .11$, SE = .12, 95% CI [-.12, .35].

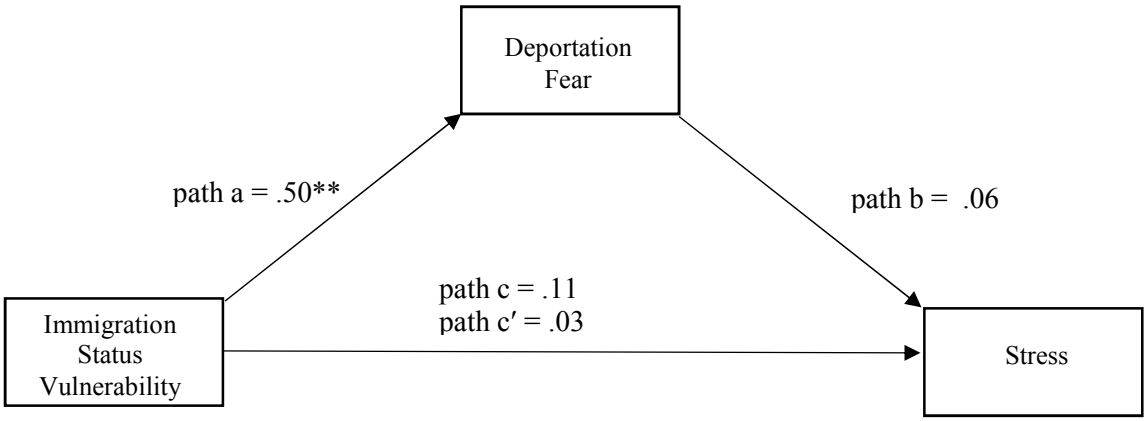


Figure 6. Regression coefficients (*b*) for the relationship between immigration status vulnerability and stress is mediated by deportation fear.

Hypothesis 2. Moderated mediation tests were conducted following the recommendations of Preacher et al. (2007) to assess conditional indirect effects. Conditional indirect effects are defined as indirect effects that are contingent on moderators (Hayes, 2009). Using this approach, I examined the indirect effect of immigration status vulnerability on mental health outcomes (i.e., depression and anxiety) through deportation fear depending on different levels of U.S. identity (low, medium, and high) and social justice advocacy to influence mediational pathways of deportation fear in the model. In the analyses U.S. identity and social justice advocacy are the moderating variables. Bootstrapping resampling technique was used as an effective way to control for Type I error rates. Bootstrapping does not impose the normality assumption in sample distributions, which is appropriate for the skewed variables tested in this model. The bias-corrected confidence intervals constructed in the bootstrapping procedure that do not include zero indicate that the indirect effect is significantly different from zero at $p < .05$ (Preacher et al., 2007).

Hypothesis 2a. The first model assessed U.S. identity and social justice advocacy as moderators of the mediated effect of immigration status vulnerability and depression symptoms though deportation fear. Model 21 (Hayes, 2015) was used to explore whether higher U.S. identity would moderate the relationship between immigration status vulnerability (ISV) and deportation fear, thus affecting mental health outcomes. In addition, social justice advocacy was tested as a moderator of the deportation fear—mental health symptoms (i.e., depression and anxiety) link.

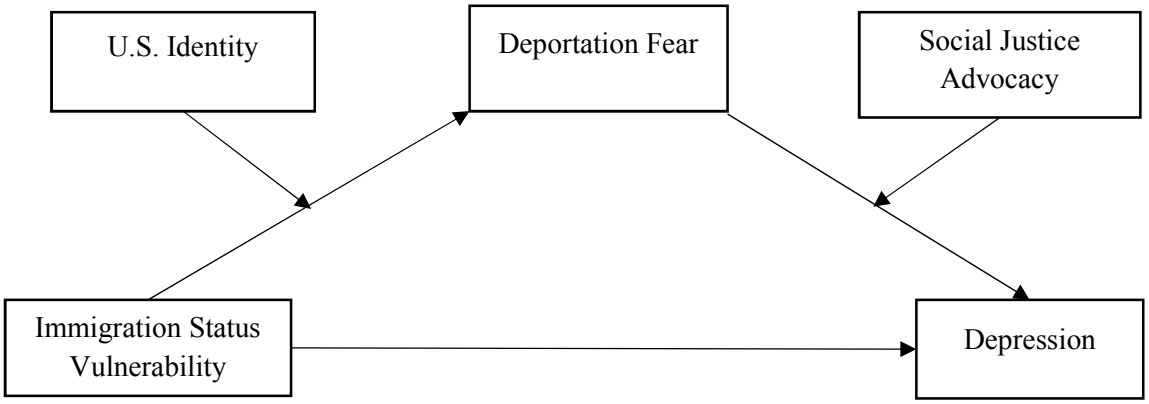


Figure 7. Moderated mediation conceptual model predicting depression symptoms

The proposed model explained 10.7% of variance of depressive symptoms, where R^2 =.11, $F(4, 209) = 4.04$, $p < .01$. A bias-corrected bootstrap analysis with 5,000 resamples revealed neither interaction term was significant (see Tables 7 and 8). U.S. identity did not moderate the relationship between immigration status vulnerability and deportation fear, b = .00, $t(210) = -.01$, $p = .99$, CI [-.27, .10]. Additionally, the relationship between deportation fear and depression was not moderated by social justice advocacy $b = -.03$, $t(210) = -..68$, p = .50, CI [-.13, .060].

Table 7

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Justice Advocacy and Depression.

Model Paths	B	*SE B*	*t*
Predictor: ISV → Deportation Fear	.50	.15	3.22**
Moderator: U.S. ID → Deportation Fear	-.09	.09	-.94
Interaction: ISV. x U.S. ID → Deportation Fear	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.17	.06	2.77*
Predictor: ISV	.18	.11	1.66[a]
Moderator: Social Justice Advocacy	-.04	.04	-1.22
Interaction: Deportation Fear x Social Justice Advocacy	-.03	.05	-.68
Outcome: Depression			

Note: N = 214, ISV =Immigration Status Vulnerability, USID = U.S. identity
*p < .05. **p < .01

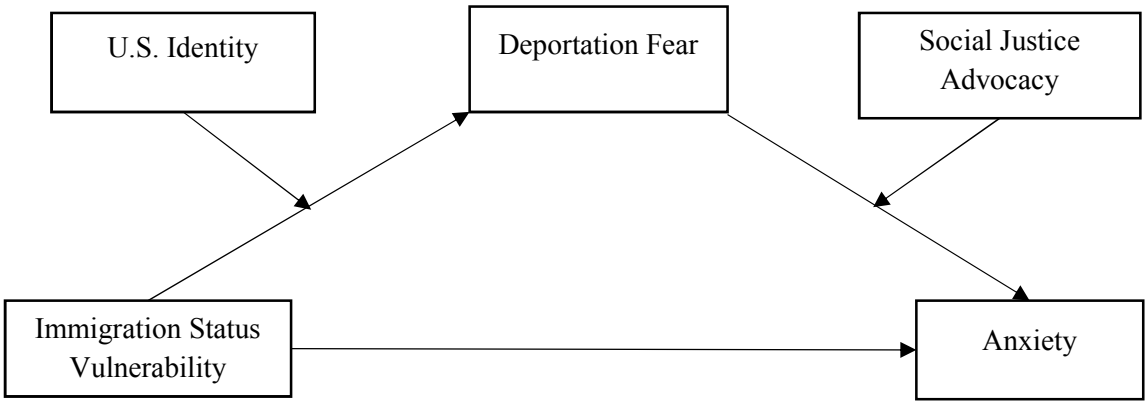


Figure 8. Moderated mediation conceptual model predicting anxiety symptoms

Table 8

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Justice Advocacy and Anxiety.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.45	.14	3.34**
Moderator: U.S. Identity	-.22	.12	-1.80
Interaction: ISV x U.S. Identity	-.06	.25	-.22
Outcome: Deportation Fear			
Mediator: Deportation Fear	.17	.05	3.44**
Predictor: ISV	.19	.10	1.90
Model Paths	B	*SE B*	*t*
Moderator: Social Justice Advocacy	-.09	.03	-2.68
Interaction: Deportation Fear x Social Justice Advocacy	-.03	.04	-.82
Outcome: Anxiety			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

When exploring anxiety as the outcome variable, U.S. identity did not serve as a significant moderator between immigration status and deportation fear. Furthermore, social justice advocacy did not moderate the deportation fear—anxiety link, $b = -.03$, $t(209) = -.82$, $p = .68$, CI [-.27, .10]. In this moderated mediation model, no signification conditional indirect effects were found (see Table 8). Thus, the moderated mediation hypotheses proposed in this study were not supported by the data. The relationship between immigration status vulnerability and deportation fear does not look different at higher levels of U.S. identity. The relationship between deportation fear and depression is not changed by the level of social justice advocacy. Based on the data, the null moderation hypotheses were retained.

Table 9

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Justice Advocacy and Stress.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.50	.16	3.22**
Moderator: U.S. Identity	-.22	.12	-1.80
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.05	.07	.78
Predictor: ISV	.08	.12	.61
Moderator: Social Justice Advocacy	-.11	.05	-2.34*
Interaction: Deportation Fear x Social Justice Advocacy	-.11	.05	-2.31*
Outcome: Stress			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

Stress was explored as an outcome variable in the moderated mediation analysis. Results showed that U.S. identity did not serve as a significant moderator between immigration status and deportation fear (Table 9). However, social justice advocacy moderated the deportation fear—stress link in the model, $b = -.11$, $t(209) = -2.31$, $p < .05$, CI [-.21, -.02]. Conditional indirect effects results indicated that the pathway at one standard deviation above the mean for US identity and one standard deviation below the mean for social justice advocacy significantly predicts stress symptoms. In other words, those high in US identity and low in social justice advocacy are likely to experience stress based on these results.

Hypothesis 3. Finally, active coping and social justice advocacy were tested in the moderated mediation models. Power and directionality of active coping as a moderator in the relationship between deportation fear and mental health symptoms were assessed (see Figure 9). Results of the moderated mediation model did not indicate a significant moderating effect on depression, $b = -.11$, $t(209) = -1.55$, $p = .12$, CI [-.25, .03] or on anxiety $b = .00$, $t(209) = .03$, $p = .98$, CI [-.10, .10].

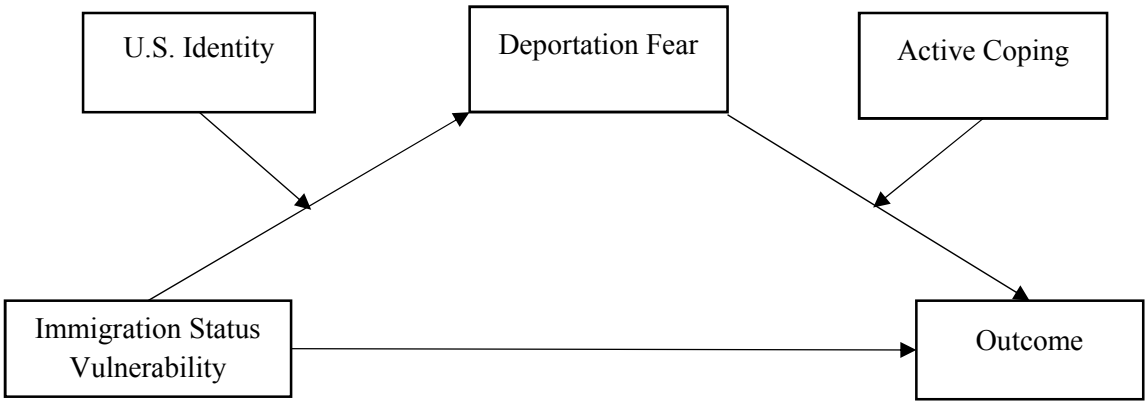


Figure 9. Moderated mediation conceptual model for testing active coping as a moderator of stress, anxiety, and depression symptoms

Table 10

Moderated Mediation Analysis, Predictors: Immigration Status, U.S. Acculturation, Deportation Fear, and Active Coping, Outcomes: Depression, Anxiety, and Stress.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Mediator: Deportation Fear			
Mediator: Deportation Fear	.14	.06	2.55*
Predictor: ISV	.20	.10	1.95[a]
Moderator: Active Coping	-.08	.05	-1.55
Interaction: Deportation Fear x Active Coping	-.11	.07	-1.55
Outcome: Depression			
Mediator: Deportation Fear	.15	.05	3.00**
Predictor: ISV	.22	.10	2.11*
Moderator: Active Coping	-.07	.05	-1.40
Interaction: Deportation Fear x Active Coping	.00	.05	.03
Outcome: Anxiety			
Mediator: Deportation Fear	.01	.06	.12
Predictor: ISV	.12	.12	.96
Moderator: Active Coping	-.13	.06	-2.09*
Interaction: Deportation Fear x Active Coping	-.13	.07	-1.91
Outcome: Stress			

Note: N = 214, ISV = Immigration Status Vulnerability

*p < .05. **p < .01

In summary, the results of this study suggest that deportation fear fully mediated the links from immigration status vulnerability to depressive and anxiety symptoms. Hypotheses 1a and 1b were supported in this study. Hypothesis 1c testing stress in the mediation analysis was not supported. Adequate power was achieved, .99 with two predictors and a total sample of 214 participants. Moderated mediation of the indirect pathways for depression and anxiety in hypotheses 2 were not supported. Results supported a moderated mediation effect of stress through high U.S. identity and low social justice advocacy. Hypothesis 3 was not supported. Adequate power was also achieve for moderation analyses, .98, for mediation tests with four predictors and a total sample of 214.

Post Hoc Analyses

Acculturation measure. In the post hoc analyses, I explored an alternative measure for acculturation given that the acculturation measure used in the analyses included orientation toward the host culture norms of U.S. identity only. Other models of acculturation incorporate home and host culture orientations into one variable in order to describe individual acculturation (e.g. Cuellar et al., 1995; Sam & Berry, 2006). Unidimensional constructs are helpful in statistical tests, but in reality likely capture only a piece of the acculturation construct. Some theorists contend that bicultural constructs more accurately represent individual experiences of acculturation (Padilla, 2006; Sam & Berry, 2006). Thus a bicultural measure was created by the author using two identity subscales to more adequately explore acculturation. The Abbreviated Multidimensional Acculturation Scale (Zea et al., 2003) also includes a Mexican cultural identity subscale. Scores on both the reported Mexican identity U.S. identity subscales were calculated to create a bicultural measure. Respective subscale scores were averaged, and the mean Mexican identity subscale score

was subtracted from the U.S. identity subscale score. The calculated score represents a cultural identity along a continuum from very Mexican oriented to very U.S. American oriented. Low scores indicate a Mexican identity and high scores indicate a U.S. American identity. A correlation matrix with the new bicultural identity variable illustrate the relationships between the variables assessed in these follow up analyses (see Table 11).

The proposed moderation models predicting stress, anxiety and depression were tested with the bicultural identity measure. Using bicultural identity as a moderator of the relationship between immigration status vulnerability and deportation fear did not alter the non-significant moderation effect on deportation fear $b = -.02$, $t(209) = -.18$, $p = .86$, CI [-.27, .23], nor did it improve the variance explained in the models for depression, $R^2 = .10$, $F(209) = 4.04$, $p < .01$. Similar results were found when exploring anxiety as the outcome variable, since the pathway in the model predicting anxiety was the same. Also the variance explained by the model predicting anxiety symptoms did not improve $R^2 = .14$, $F(209) = 6.10$, $p < .001$.

Table 11

Correlation Matrix with Subscales

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. ISV	-														
2. DF	.28**	-													
3. USID	-.41**	-.18*	-												
4. USLANG	-.27**	-.18*	.42**	-											
5. US Acc.	-.40**	.21**	.86**	.83**	-										
6. Cultural ID	-.29**	.18*	.71**	.35**	.64**	-									
7. SJA	-.10	.09	.21*	.13	.20**	.18*	-								
8. COPE	-.07	-.08	.17**	.11	.17**	.10	.49**	-							
9. DEP	.21**	..28**	-.11	-.18**	-.17**	-.06	-.08	-.16*	-						
10. ANX	.23**	.28**	-.20**	-.24**	-.26*	-.18*	.16*	-.12	.60**	-					
11. STR	.08	.06	-.05	-.06	-.16	-.08	-.18*	-.18*	.26**	.16*	-				
12. Gender	-.03	-.07	.00	-.00	-.02	.00	-.02	.10	.00	.03	.03	-			
13. Income	-.14	-.25**	.18*	.22**	.24**	.12	.11	.24**	-.19*	-.13	-.05	-.10	-		
14. Education	-.24*	-.36**	.02	.37**	.22**	.11	.16	.19*	-.34**	-.24**	-.06	.03	.39**	-	
15. Age	-.06	.05	-.08	-.23**	.18*	-.04	.21**	.07	.11	-.04	-.03	-.07	.22**	.09	-
N	214	214	214	214	214	214	214	214	214	214	214	116	125	186	214

Note: ISV = Immigration Status Vulnerability, DF = Deportation Fear, USID = U.S. Identity, USLANG = English Language Comprehension, US Acc = United States Acculturation, Cultural ID = Cultural Identity, SJA = Social Justice Advocacy, COPE = Active Coping, DEP = Depression, ANX = Anxiety, STR = Stress

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

Mediation test with control variables. When testing moderated mediation with the PROCESS macro (Hayes, 2013), cases with missing data are excluded. Due to the large amount of missing demographic data in the current data set, control variables including age, education, and income were not originally included in the moderated mediation model in order to maintain an adequate sample size. Thus, as a post hoc measure, a second analysis was conducted that included control variables. Descriptive statistics for the subsample are described in Table 12. A sample size of 111 participants was used to assess the mediation effect of deportation fear in the relationship between immigration status vulnerability and depression, while controlling for social justice advocacy, U.S. identity, age, gender and income (see Table 15). This subset of the sample consisted of mostly women (77%), making an average of $45,000 annually. Most of those included in the subset have completed some college (n = 95) with education levels that ranged from completing at least middle school (n = 5) to completing a doctoral degree (n = 8). Nearly all (87%) of the participants in the subgroup preferred English. A MANOVA was conducted to assess mean differences on the student variables between those with and without demographic data. Comparisons to assess differences between the subsample of participants who reported demographic information included and those excluded (without demographic information) were conducted. Mean comparisons showed significant differences for language preference, social justice advocacy, and U.S. identity (See Table 14). Those with demographic data preferred English significantly more and had higher social justice advocacy scores than those without demographic information. Interestingly, those who were excluded from the subsample showed significantly higher scores on U.S. identity. When assessing the differences in these

groups on the bicultural identity variable, no significant differences between the groups were evidenced.

Table 12

Demographics for Subsample Items

Variable	*M*	*SD*	Range	*N*	% Missing
Age	33.26	11.63	18-74	111	0
Education	4.77	1.27	1-7	111	0
Years in U.S.	27.84	11.57	4-74	106	4.50
Income	4.51	2.79	1-10	111	0
Language	1.87	.33	1-2	111	0
Spanish (n= 14)					
English (n= 97)					
Gender	.77	.42	0-1	110	.09
Men (n= 25)					
Women (n= 85)					
Immigration Status	1.27	.44	1-2	111	0
Low Vulnerability (n = 81)					
High Vulnerability (n = 30)					

Notes. N = 111, Immigration Status: 1= Low, 2= High; Language:1= Spanish, 2= English; Gender: 0= Male, 1 =Female; Education: 1= Elementary, 2= Middle School, 3= High School, 4= Some College, 5= Bachelor's Degree, 6= Master's Degree, 7= Doctoral Degree; Income: 1= $0-$20,000, 2= $20,001-$30,000, 3= $30,001-$40,000, 4= $40,001-$50,000, 5= $50,001-$60,000, 6= $60,001-$70,000, 7= $70,001-$80,000, 8= $80,001-$90,000, 9= $90,001-$100,000, 10= $100,000+

Table 13

Descriptive Statistics for Subsample Post Hoc Variables

Scale	Mean	Std. Dev.	Skewness	Kurtosis
Stress	1.85	.78	.82	-.40
Anxiety	1.51	.56	1.15	.31
Depression	1.46	.63	1.70	2.19
Social Justice Advocacy	2.50	1.11	.24	-.88
Active Cope	3.09	.75	-.68	-.05
US Identity	3.12	.83	-.87	-15
Deportation Fear	2.02	.99	.57	-1.01

Note. N = 111

Table 14

Group Comparisons between Included and Excluded Participants for Post Hoc Mediation

								Levene's test	
Variable	Post Hoc Test	*N*	*M*	*SD*	*t*	*df*	*p*	*F*	*p*
Stress	Included	111	1.85	.78	.78	212	.44	1.74	.19
	Excluded	103	1.77	.71					
Anxiety	Included	111	1.51	.58	-.40	212	.69	2.13	.46
	Excluded	103	1.55	.60					
Depression	Included	111	1.45	.63	.56	212	.32	.35	.55
	Excluded	103	1.41	.59					
Social Justice Advocacy	Included	111	2.50	1.17	2.62	212	.01**	1.64	.20
	Excluded	103	2.11	1.00					
Active Coping	Included	111	3.09	.76	.22	212	.83	3.27	.07
	Excluded	103	3.06	.86					
US Identity	Included	111	3.12	.82	-2.20	212	.01**	.58	.45
	Excluded	103	3.42	.78					
Deportation Fear	Included	111	2.02	.99	1.76	208.24	.08	8.50	.01**
	Excluded	103	1.80	.80					
Immigration Status	Included	111	1.27	.47	.13	212	.89	.07	.79
	Excluded	103	1.26	.46					
Age	Included	111	33.06	11.65	1.25	184	.21	.25	.62
	Excluded	75	30.92	11.10					
Income	Included	111	4.46	2.75	.54	115	.66	.07	.79
	Excluded	6	3.83	3.31					
Education	Included	111	4.47	1.28	1.66	124	.10	2.69	.10
	Excluded	15	4.42	1.08					
Language	Included	111	1.87	.33	4.61	178.09	.01**	91.11	.01**
	Excluded	103	1.61	.58					

The model, including the control variables, was not significant and explained 16.6% of variance of depressive symptoms, where R^2 =.17, $F(7,103) = 1.62$, $p = .14$. The indirect effect of immigration status vulnerability on depression through deportation fear was not significant, $b = .05$, CI [-.01, .16]. By including the control variables in the mode the coefficient for the path between immigration status vulnerability and deportation fear dropped from .50 to .43. Although the control variables did not account for a significant

amount of variance, the mediation effect was no longer significant in the model (see Table 15). The same analysis was conducted with anxiety symptoms as the outcome variable. Similar results indicated that the mediation effect of deportation fear on anxiety symptoms was not significant, *b* = .03, CI [-.02, .12]. Based on these follow up analyses with a smaller sample (*N* = 111), the relationship between immigration status vulnerability and outcomes of depression and anxiety are not mediated by deportation fear. Adequate power for this analysis was not achieved, where 1- β = .69.

Table 15

Effects for Mediation Model with Control Variables

Model Paths	B	*SE B*	*t*	95% CI
Predictor: Immigration Status Vulnerability	.14	.15	.96	-.15, .43
Mediator: Deportation Fear	.10	.07	1.49	-.03, .23
Controls: Income	-.01	.02	-.24	-.05, .04
Education	-.07	.06	-1.06	-.19, .06
Age	-.00	.01	-.82	-.01, .01
U.S. Identity	.04	.08	.55	-.11, .19
Social Justice Advocacy	-.06	.06	-1.05	-.17, .05

Note. *N* = 111

Discussion

This investigation set out to use a quantitative causal comparative, correlational research design to explore direct and indirect relationships among immigration status vulnerability, deportation fear, and mental health symptoms for Mexican and Mexican American adults in the United States. In addition, acculturation, social justice advocacy, and active coping were explored as moderators of the indirect relation between immigration status vulnerability and mental health symptoms through deportation fear. The mental health symptoms assessed in the study included anxiety, depression, and stress.

The first hypothesis explored deportation fear as a mediator in the relationship between immigration status vulnerability and depression symptoms. This hypothesis was initially supported, that is when assessing effects on depression, deportation fear fully mediated the relationship between immigration status vulnerability and depression. In the context of an ecological framework as proposed in this research, a personal resource characteristic (immigration status vulnerability) showed a positive relationship with emotional resources—depressive symptoms—*through* deportation fear. Likewise, deportation fear fully mediated the relationship between immigration status vulnerability and anxiety. These findings build on previous research that has linked immigration status to harmful mental health symptoms, including depression and anxiety (Finch & Vega, 2003; Sullivan & Rehm, 2005). Small effects were found in the mediation models for depression (R^2 = .10) and anxiety (R^2 =.14), which was expected based on previous literature on ecological factors, including deportation fear, in relation to mental health symptoms (Arbona et al., 2010; Bronfenbrenner, 1999; Cavazos-Rehg, Zayas, & Spitznagel, 2007; Sam & Berry, 2006).

The effect sizes of the indirect pathway of immigration status vulnerability on depression (β= .06) and anxiety (β= .08) through deportation fear were also small. Statistically this indicates that depression symptoms increase .06 (or anxiety symptoms increase .08) standard deviations for every increase in immigration status vulnerability through/considering deportation fear. Due to the dichotomous nature of the immigration status vulnerability variable, practical implications of standard effects do not apply to the current study, but may be beneficial to meta-analytic researchers (Hayes & Preacher, 2014). Given the low power of the study increasing the chance of false negative, significant findings indicate that with increased power the effect of the model will be more reliable. By examining deportation fear as a mediator, I measured distal system influences on personal experience. This research elucidates a more complex (mediated) relationship between these factors. It suggests that deportation fear plays a significant role and could be a point of clinical intervention and/or advocacy. The effects found among the participants, although small, add to the literature focused on the impact of social and cultural experiences on the mental health of Hispanic communities in the United States (Bronfenbrenner & Morris, 2006; Crockett et al., 2007).

The second hypothesis stated that U.S. acculturation would moderate the relationship between immigration status and deportation fear, such that the interaction of immigration status vulnerability and those low on U.S. acculturation report more deportation fear than those high on acculturation. This hypothesis was not supported by the data. Acculturation in this study was simplified to self-reported ethnic identification with the United States. While the overall moderation model demonstrated a small effect (R^2 = .11), acculturation as a moderator in the model showed virtually no effect (β= .00). Non-significant results in this study do not support that acculturation to the U.S. culture changes the positive relationship between immigration

status vulnerability and deportation fear. Moreover, as a predictor acculturation showed a small effect. U.S. acculturation tested in similar models that included socio-cultural variables has shown similar effects (Alamilla et al., 2009).

In the context of ecological systems theory (Bronfenbrenner, 2005), identity with U.S. culture may be considered a personal resource characteristic, and increases in a resource characteristic theoretically would show positive outcomes. In this study, positive outcomes would be less fear of deportation or detainment and ultimately less mental health symptoms. The rational underlying this hypothesis also was based on acculturation theory, which posits that dominant cultural constraints (i.e., immigration status vulnerability) may interact with acculturation strategies (Berry, 1997). My hypothesis that lower levels of acculturation would exacerbate the relationship between immigration status vulnerability and deportation fears ignores the notion that a strong sense of identity with the U.S. culture may actually *increase* fear because they would not want to part with a culture with which they identify. While moderation effect was not found for depression and stress, social justice advocacy did moderate the relationship between deportation fear and stress symptoms. Specifically, the model indicated that the pathway for those with high U.S. identity, through deportation fear, and with low social justice advocacy are significantly likely to experience stress. Future research may argue that higher levels of U.S. identity would show increases in deportation fear. Research on sense of belonging among Mexican immigrants in the United States (Baumeister & Leary, 1995; Chavez, 1998; Castañeda, 2004) would support assessing this alternative hypothesis.

As previously noted, the ecological framework incorporates highly complex relationships when predicting mental health symptoms. This type of theoretical model makes assessment of variables susceptible to confounding, such that the effect of the variables selected for study may

not encompass the impact of other influences beyond those reported on by participants. For example, discrimination (Capps et al, 2007), migration trauma (Talavera, Nunez-Mchiri, & Heyman, 2010), and political climate in one's geographic location (Cervantes, Fisher, Padilla, & Napper, 2015; Street, Zepeda-Millán, & Jones-Correa, 2015) may be associated with deportation fear, but these variables were not assessed in this model. In other words, something other than U.S. acculturation may interact with immigration status to influence deportation fear.

The second moderation (hypothesis 2b) proposed that social justice advocacy would moderate the relationship between deportation fear and mental health symptoms, including depression and anxiety. Social justice advocacy did not moderate the relationship between deportation fear and depression or anxiety. Thus, the data does not support that the relationship between deportation fear and mental health symptoms depends on an individual's level of social justice advocacy. The rationale for these hypotheses presumed that increasing behavioral and cognitive activity related to a potential threat would relate to higher levels of stress and anxiety (Eysenck et al., 2007), and higher levels of social justice advocacy would decrease depressive symptoms due to increases in behavioral and cognitive engagement (O'leary & Romero, 2011; Yakushko et al., 2008). However these moderation relationships were not supported by the data.

The data, however, showed no relationship between key predictors and the outcome, stress symptoms. The lack of a significant relationship between stress and predictors in the model does not align with previous research that has found that stress is associated with immigration status, fear of deportation and acculturation (Arbona et al., 2010; Cavazos-Rehg et al., 2007; Sullivan & Rehm; 2005). In this study, stress was assessed based on participants' reports of symptoms, such as hypervigilance and abnormal arousal (Lovibond & Lovibond, 1995), which may have differed from general reports of stress (Sullivan & Rehm, 2005) and

stress assessed in relation to a circumstance (Arbona et al., 2010; Cavazos-Rehg et al., 2007). Unlike these general or composite measures of stress, this study assessed specific trauma responses such as hypervigilance an arousal over the last week. Internal validity concerns with measurement of stress in this study may also be the reason study results conflict with previous literature linking study variables to experiences of stress. Since no relationship was found between key cultural variables and stress symptoms, the hypotheses in the study were assessed in relation to depressive and anxiety symptoms.

Post Hoc Analyses

Given that discussion of proper acculturation measurement continues among researcher (Berry & Sam, 2006, Padilla, 2006), and that U.S. acculturation was simplified to U.S. identity, an alternative measure of acculturation was explored in the post hoc analyses. Specifically, a Mexican American bicultural individual may exhibit behaviors predominantly considered Mexican (e.g., identifying with Mexican culture, showing pride for Mexico), and yet display great pride and attitudinal attachment with U.S. American culture. Moreover, acculturation is a "fluid process that implies movement at different speeds across different dimensions [and] that does not typically follow a deficit mode, but rather implies growth across a variety of continua" (Martín, 1992, p. 242). To explore the acculturation construct and to address to the use of a unidimensional measure of U.S. identity, a bicultural measure was created. The bicultural measure was constructed based on previous research (Padilla, 2006; Zea, Asner-Self, Birman, & Buki, 2003). The bicultural identity variable evidenced some increase in distribution of scores in comparison to the U.S. identity measure. This may suggest that the bi-cultural identity measure better captured the construct of acculturation (Sam & Berry, 2005).

When assessing models that predict mental health symptoms, including demographic, control variables aids in teasing out the effect of the sociocultural variables in this study. Controls were initially excluded from the main analyses due to the need for a complete dataset after list-wise deletion, which resulted in an inadequate sample size for testing moderated mediation models. However, in the smaller subsample (n = 111) with complete responses, it was some evidence that age, education, and income accounted for the variance found in the mediation effect of deportation fear on the relationship between immigration status vulnerability. The subsample analysis demonstrated shared variance among the control and model variables along with the need for increased power in these types of analyses. Other researchers have identified unique variance contributed by sociocultural factors beyond that accounted for by demographic variables (Alamilla, Kim, & Lam, 2009; Arbona et al., 2010), but this was not the case in the current study.

In summary, the results extend understanding of cultural factors influential in mental health symptoms and highlight the need for controlling demographic variables in order to identify sociocultural influences. In particular, difficulties arose in testing this complex theoretical model. While fear of deportation significantly and fully mediated the links from immigration status vulnerability to depression and anxiety for Mexican and Mexican Americans living in the United States, this mediation effect did not hold significance when accounting for the influences of education, income, and age. Exploration of moderation effects were not significant; that is, acculturation, social justice advocacy, and active coping did not alter the indirect relationship between immigration status vulnerability and mental health outcomes through deportation fear. This complex ecological systems model lacked adequate sample size, relied on proxy measures, and likely presented over simplification of the process.

Limitations

Limitations in this causal comparative quasi-experimental design include lack of control and, therefore, less internal validity. Sampling method errors also led to confounds and lack of research validity in this study. Confounds in selection have particular relevance to this study, along with limitations in statistical conclusion validity and, in turn, external validity. Specifically for statistical conclusion validity, restriction of range of measures increased the likelihood of type II error for this study. External validity threats are reflective of selection and sampling method, limiting the generalizability of the current research study. Consumers of this research need to keep these limitations in mind when digesting the information presented.

In this study, the snowball method, a type of convenience sampling was used to collect responses using an internet survey. Convenience sampling introduces the problem of representativeness because surveys rely on opportunity samples of volunteers, and usually results in limited generalizability (Heppner, Wampold, & Kivlighan, 2008). In particular, selection bias, as noted in the current study procedures, includes individuals with access to the internet. Selection bias in education level may have occurred due to recruitment from professional conferences, online community outreach and university list serves, resulting in a negatively skewed curve and a relatively well-educated sample. In addition, many more women participated in the study than men, which may reflect trends that Hispanic women are more likely to enter and complete college (American Council on Education, 2008; Gonzalez-Barrera, 2015).

Internet surveys have little control over the contexts where data are collected, which may have resulted in survey attrition; for example, 33% of cases were removed due to incomplete responses. In addition, spam ware created 51 identical cases and possibly compromised data integrity. Similarly, non-responses to demographic questions occurred in part because

participants were able to opt out of responding. Order effects may also have biased the responses, since measures were not randomized or counter balanced in survey administration among participants (Heppner, Wampold, & Kivlighan, 2008). In particular, participants completed a deportation fear measure and were later asked to report their legal status as well as legal status of loved ones. Order effects in responses early on in a survey can prime the participants to respond based on an unconscious bias later in the survey (Strack, 1992). Since the deportation fear measure was presented first, it is possible that this may have prompted less honest responses to immigration status vulnerability.

In the literature, measures of immigrant legal status have been debated with some researchers and policy-makers contending that information on legal status cannot, or should not, be reliably obtained (Carter-Pokras and Zambrana 2006; U.S. Government Accountability Office 2006). Research proponents of collecting immigration status information argue social science theory and contemporary research designed to explore patterns of acclimation risk suffering from omitted variable bias (Massey & Bartley, 2005). "The myriad structural and/or cultural mechanisms purported to slow the incorporation of some groups, especially Mexicans, are spuriously associated with integration outcomes due to the omission of legal status in assimilation models" (Bachmeier, Van Hook, & Bean, 2014, p. 552). Patterns in missing data for this study showed most participants responded to items asking about immigration status, in line with recent research (Bachmeier et al., 2014). However, the majority of participants in this study reported citizenship, which may support claims that reluctance to report immigration status other than citizenship leads to reliability concerns (Carter-Pokras and Zambrana 2006; U.S. Government Accountability Office 2006).

Lack of variability in immigration status vulnerability resulted in a restricted range. In previous use, immigration status vulnerability measured variability on a continuous scale based on the premise that people without legal authorization, who have a family members detained/deported, and who have personally been previously detained/deported will experience greater vulnerability to detention/deportation policies than individuals with authorization and who have not experienced detention/deportation personally or in their family (Brabeck & Xu, 2010). While the premise of this measure remained for the current study, there was little variability in reported immigration statuses. This led to the creation of a dichotomous variable. By altering the measure and collapsing several responses, bias in instrumentation occurs. In this case, the collapsed high legal status vulnerability group contained a variety of individuals from those who have been previously deported to those with legal permanent residence. Collapsing the seven non-citizen groups into one resulted in immigration status vulnerability equal for each of these groups. In reality, and as shown in previous research (Brabeck & Xu, 2010), immigration status vulnerability is not the same for the collapsed groups.

Lastly, the ecological systems model resulted in a broad conceptualization of the cultural variables. Using the framework established by Bronfenbrenner (1999) to hypothesize interdependent relationships in a broad manner did not allowed for direct measures of sociocultural impacts on mental health outcomes. The focus on inter-related processes within the ecological model coupled with limited research on deportation fear resulted in conceptually weak parameter estimation. For instance, according to Bronfenbrenner's theory acculturation processes may be conceptualized to moderate several relationships within the proposed models due to the on-going nature of the process components within the theory. The cultural models proposed in this research study also lacked several aspects of the ecological model of development. While

Bronfenbrenner acknowledged partial use of the framework, aspects of context and time were not addressed here. Simplifying the theoretical grounding resulted in a limited understanding the complex process of immigration and adaptation. More precise conceptualization of relevant variables may extend the literature on the role of immigration status vulnerability on mental health outcomes. For instance, collective identity, cultural trauma, and engagement in social movements (Alexander, 2004; Melucci, 1995; Keeter, Zukin, Andolina, & Jenkins, 2002; Prilleltensky, 2003) may provide greater precision of the proposed model variables.

Implications for Practice

The current research study utilized ecological systems theory in assessing relationships between cultural factors and mental health. Findings suggested that the relationships among cultural variables and mental health symptoms are complex and likely overlap with demographic factors. In particular, this study evidenced a mediated relationship between immigration status vulnerability and depression and anxiety through deportation fear. These findings suggest it is important to assess distal variables that may have proximal impacts on immigrants' symptoms of depression and anxiety (Bronfenbrenner, 2005). For researchers assessing this information, ensuring confidentiality and randomization of items presented may help to remove response biases that arose in this study. It may be beneficial for helping professionals to understand fears and worries that individuals experience related to deportation and detainment when addressing mental health concerns. Specifically, individuals may be worried for themselves or for a loved one. In line with previous research, establishing rapport with individuals aids in disclosure when requesting sensitive information (Arbona et al, 2010; Cavazos-Rehg, Zayas, & Spitznagel, 2007).

Given the implications of system influences on mental health symptoms, researchers and practitioners are urged to explore sociocultural stressors. Multicultural counseling therapy

outlines the use of a systems approach in working with minority or marginalized individuals. This approach is flexible and considers the needs of the individual in relationship to the community (Ivey, D'Andrea, Ivey, & Morgan, 2002). Much like feminist approaches, multicultural approaches seek to bring about awareness of oppression within a system and to empower individuals to make changes. An empowerment orientation aims to address client problems by encouraging professionals to work toward enhancing, "the possibilities for people to control their own lives" (Rappaport, 1981, p. 15). The growing recognition of oppression in the lives of minority groups has been crucial in moving counselors and mental health professionals to identify useful interventions that focus on addressing such issues. Multicultural, feminist, and other systems approaches direct mental health professionals to work more broadly in order to affect social change (Hage, 2003; Vera & Speight, 2003)

To support helping professionals working with immigrant communities, several additional recommendations are presented. First, it is important to take care when asking about immigration status and reiterate whether a conversation with an individual is protected by confidentiality. While some have noted that non-response rates are higher for this type of sensitive information (Arbona et al, 2010), others contend that disclosure of immigration status does not hold the stigma it did once historically (Bachmeier et al., 2012). In a national study conducted with over 1,300 DACA recipients, nearly 80% reported a desire to share their immigration status publically (Wong & Valdivia, 2014). Similarly, in this study, 85% of participants responded to items regarding immigration status. However, recent changes local and national legislation have seemingly brought about a new wave of stigmatization for the immigrant community in the United States (Hatzenbuehler, 2017; Pew Research Center, 2017). The high non-response rate to immigration status items (15 % in the current study) may indicate

concerns regarding confidentiality, which need to be considered in the sampling procedures and methods used with this particular population.

The next recommendation is to consume and share information regarding immigration status and possible changes in legislation. Understanding immigration and deportation processes on an intricate level may be more appropriate for immigration lawyers. However, general understanding of terms such as sanctuary city, DACA, DAPA, and DREAMer, can facilitate conversations regarding deportation fear and discussions on limitation of resources affecting mental health symptoms. If there are immigration status terms or legal cases unfamiliar to a helping professional, they are recommended to ask the individuals about their understanding, research the meaning, or consult with someone knowledgeable of immigrant advocacy, and follow up with individuals they are serving. Given findings that deportation fear has a positive relationship with mental health symptoms, providing information may decrease fears and resistance to engaging with community supports. Immigration process, legislation, and status are complex and vary by state and region hence verifying information discussed with individuals can assist in dispelling myths and reality checking (National Immigration Law Center, 2014).

There are several avenues for helping professionals to pursue when obtaining information about working with undocumented individuals and their loved ones. Helping professionals may join a professional local or national organization where information is sent electronically regarding legislative updates and resources for this group. The U.S. Department of Education has an initiative on educational excellence for Hispanics. Information and resources such as a DACA tool kit and guide to supporting undocumented youth are available on the website or via listserve (U.S. Department of Education, 2015). Finally, DREAM Zone trainings have become popular in academic settings, with the intention of creating safe places to talk about immigration status.

This model reflects the well-known SAFE zone training targeted at increasing safe places for the LGBT community (Gildersleeve, Rumann, & Mondragón, 2010).

Empowering individuals to take action addressing the systems that impose resource constraints such as legislation has been a tenet of behavioral activation techniques, multicultural counseling, feminist theory, and positive psychology (Hage, 2003; Ivey, D'Andrea, Ivey, & Morgan, 2002; Rappaport, 1981; Vera & Speight, 2003). Although not supported by this study, use of active coping strategieshas shown a negative relationship with mental health symptoms in the research (Carver, Scheier, & Weintraub, 1989; Driscoll & Torres, 2013; Holahan & Moss, 1987). To this end, it is recommended that helping professionals go beyond providing information on navigating the immigration system. Helping professionals can also encourage individuals to act in changing the system through advocacy work and civic engagement. Literature continues to emerge on political participation as it relates to factors known to support positive mental health such as a sense of belonging (Bergstresser, Brown, & Colesante, 2013; Ware, Hooper, Tugenberg, 2007), agency (Schwarzer & Taubert, 2002; Sousa, 2013), and self-reliance (Hernandez, 2002). National organizations such as United We Dream and America's Voice as well as numerous local organizations (e.g. Missouri Immigrant Rights Advocates and Texas Dream Alliance) have campaigns where individuals have opportunities to advocate for immigrant rights. Professionals may also serve as advocacy models and mentors for individuals who feel disempowered.

Future Research

In future research, several improvements could be made with regard to sampling method, instrumentation, and research design. The sampling method could be improved by narrowing the population parameters and better defining the population of interest. For example, future studies

may only include those without citizenship to explore the variation in deportation fear experienced. Given the regional differences in immigration policy and enforcement, clearer implications of societal and political forces in relation to mental health outcomes for the Hispanic community may be provided by identifying and comparing specific regions (i.e., sanctuary cities vs. cities that withhold resources from immigrants). For example, Hatzenbuehler et al. (2017) have begun examining mental health in relation to immigration policies across 31 states and found evidence that states with exclusionary policy climates showed higher reports of poor mental health. Another route may be to systematically sample individuals involved in or affiliated with immigration advocacy groups and compare them to a group without a history of immigration advocacy on key factors such as deportation fear, acculturation, and mental health symptoms. Specifying a target sample would also improve the external validity of the research study such that the ability of the findings to be generalized to the particular population would be more clearly defined (Heppner, Wampold, & Kivlighan, 2008).

Future research may improve upon internal validity by selecting instruments developed with the population of interest in mind. Cross-cultural validation of instruments not previously used with Spanish-speaking participants could be first tested in a pilot study. Specifically validating deportation fear, given the social justice advocacy measure used here encompassed political actions and awareness in a general sense, future studies may utilize instruments that assess specific actions taken to increase socio-political equity with regard to immigration legislation could be included; for example, using the Political and Social Advocacy subscale (Nilsson et al., 2011), which reflects behavioral activation addressing distal influences such as immigration policy that effect access to resources and limits self-actualization.

To reflect the developmental nature of Bronfenbrenner's ecological model (1999), researchers may also take a longitudinal approach in methodology. For instance, tracking control and experimental groups over time as they engage in social justice advocacy activities like those described in the Political and Social Advocacy subscale (Nilsson et al., 2011) and assessing mental health and well-being. When attempting to predict causal relationships between variables, experimental designs like this could be used to demonstrate causality through manipulation and random assignment. In consideration of the community focus and the sensitive nature of information shared by participants, the highly collaborative community-based participatory research (Israel, Schulz, Parker, & Becker, 1998) approach may be more appropriate for this study. Even more suitable for the current study would be to employ participatory action research (Whyte, 1991), which intends to not only include the participants in the study development and implementation, but to use the research to create or facilitate social action for the betterment of the community. This specific approach to community-based research fits well with social justice advocacy construct explored in the current study.

Conclusion

In conclusion, this study sought to assess models of Mexican migration processes by exploring complex sociocultural variables as they interact and relate to mental health symptoms. Results of this study were modest in elucidating the intricate nature of influential cultural experiences of Mexican and Mexican Americans. Evidence supported deportation fear as a mediator between immigration status and outcomes of anxiety and depression. It is the hope that with increases in immigrant families living in the United States, research will continue to be directed at understanding and supporting this transitional and developmental process.

Table 11.

Correlation Matrix with Subscales

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
16. ISV	-														
17. DF	.28**	-													
18. USID	-.41**	-.18*	-												
19. USLANG	-.27**	-.18*	.42**	-											
20. US Acc.	-.40**	.21**	.86**	.83**	-										
21. Cultural ID	-.29**	.18*	.71**	.35**	.64**	-									
22. SJA	-.10	.09	.21*	.13	.20**	.18*	-								
23. COPE	-.07	-.08	.17**	.11	.17**	.10	.49**	-							
24. DEP	.21**	..28**	-.11	-.18**	-.17**	-.06	-.08	-.16*	-						
25. ANX	.23**	.28**	-.20**	-.24**	-.26*	-.18*	.16*	-.12	.60**	-					
26. STR	.08	.06	-.05	-.06	-.16	-.08	-.18*	-.18*	.26**	.16*	-				
27. Gender	-.03	-.07	.00	-.00	-.02	.00	-.02	.10	.00	.03	.03	-			
28. Income	-.14	-.25**	.18*	.22**	.24**	.12	.11	.24**	-.19*	-.13	-.05	-.10	-		
29. Education	-.24*	-.36**	.02	.37**	.22**	.11	.16	.19*	-.34**	-.24**	-.06	.03	.39**	-	
30. Age	-.06	.05	-.08	-.23**	.18*	-.04	.21**	.07	.11	-.04	-.03	-.07	.22**	.09	-
N	214	214	214	214	214	214	214	214	214	214	214	116	125	186	214

Note: ISV = Immigration Status Vulnerability, DF = Deportation Fear, USID = U.S. Identity, USLANG = English Language Comprehension, US Acc = United States Acculturation, Cultural ID = Cultural Identity, SJA = Social Justice Advocacy, COPE = Active Coping, DEP = Depression, ANX = Anxiety, STR = Stress

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

Appendix A.

Preliminary Analyses

Table A1

Descriptive Statistics for Original Study Variables

Scale	Mean	Std. Dev.	Skewness	Kurtosis
DASS Composite	1.61	.48	1.35	1.68
Stress	1.81	.73	.88	-.17
Anxiety	1.54	.59	1.26	1.02
Depression	1.48	.61	1.67	2.23
SIAS	2.88	1.04	-.003	-1.00
PSA	2.37	1.07	.50	-.66
PA	2.84	1.24	.07	-1.25
SIA	3.33	1.41	-.36	-1.23
CD	3.89	1.18	-1.05	.33
Active Cope	3.04	.85	-.52	-.74
US Acculturation	3.58	.51	-1.60	2.53
USID	3.29	.80	-1.09	.36
USLANG	3.77	.47	-2.41	6.12
DF	1.71	.79	1.18	.57
DFO	1.89	.89	.75	-.57
DFS	1.54	.83	1.58	1.34
ISV (*N*=214)	1.27	.44	1.07	-.88

Notes: N = 251, unless otherwise specified, DASS = Depression, Anxiety, Stress Scale, SIAS = Social Issues Advocacy Scale, PSA = Political and Social Advocacy, PA = Political Awareness, SIA = Social Issue Awareness, CD = Confronting Discrimination, USID = U.S. Identity, USLANG = English Language Comprehension, DFO = Deportation Fear Others, DFS = Deportation Fear Self, ISV = Immigration Status Vulnerability

Table A2

Missing Values Analyses- Little's MCAR Test

Scale	Chi-Square	Degrees of Freedom	Significance
DASS	180.10	160	0.33
Deportation Fear	268.73	189	0.00
SIAS	257.00	229	.30
Active Coping	3.61	6	.73
Acculturation	12.82	56	1.00

Notes: N = 251, DASS = Depression, Anxiety, Stress Scale, SIAS = Social Issues Advocacy Scale

Table A3

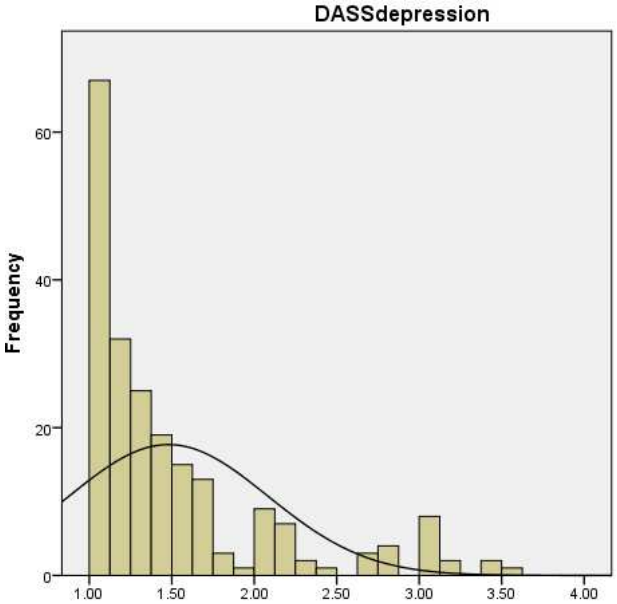
Group Comparisons between Responders and Non-responders for Ethnicity

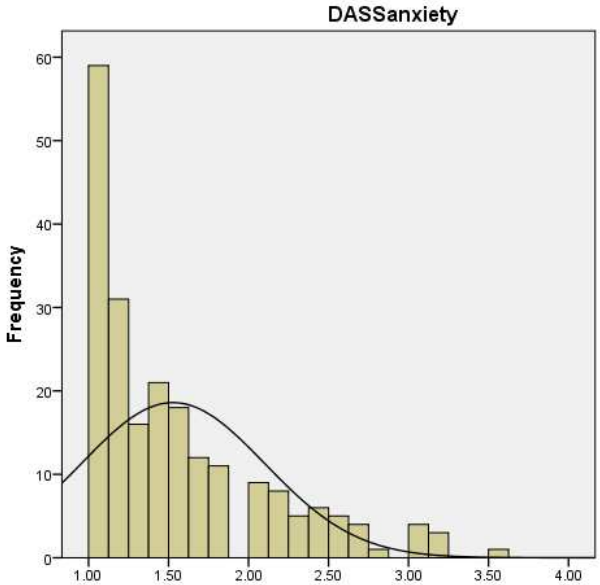
								Levene's test	
Variable	Ethnicity	*N*	*M*	*SD*	*t*	*df*	*p*	*F*	*p*
Stress	NonResponder	52	1.84	.70	.38	249	.71	.17	.68
	Responder	199	1.80	.74					
Anxiety	NonResponder	52	1.47	.58	-.99	249	.32	.55	.46
	Responder	199	1.56	.60					
Depression	NonResponder	52	1.56	.71	.99	249	.32	1.74	.19
	Responder	199	1.46	.59					
SIAS	NonResponder	52	2.74	1.17	-1.13	249	.26	2.53	.11
	Responder	199	2.92	1.00					
Active Coping	NonResponder	52	2.93	.95	-1.06	249	.29	3.52	.06
	Responder	199	3.07	.82					
US Acculturation	NonResponder	52	3.68	.45	1.70	249	.09	.70	.41
	Responder	199	3.55	.52					
Deportation Fear	NonResponder	50	1.67	.78	-1.91	239	.06	3.14	.08
	Responder	191	1.94	.92					
Immigration Status	NonResponder	26	1.27	.45	.04	212	.97	.01	.94
	Responder	188	1.26	.44					
Gender	NonResponder	32	.81	.40	.70	218	.48	2.29	.13
	Responder	188	.75	.43					
Income	NonResponder	4	3.00	1.41	-1.03	115	.13	2.86	.09
	Responder	113	4.45	2.80					
Education	NonResponder	8	3.88	.64	-3.47[a]	11.10	.01	4.95	.03
	Responder	120	4.75	1.27					
Language	NonResponder	52	1.92	.27	3.70[a]	129.90	.00	50.39	.00
	Responder	199	1.74	.44					
Age	NonResponder	10	30.40	1.77	-.46	9.97	.66	.04	.85
	Responder	180	32.16	1.43					
Years in the U.S.	NonResponder	1	18.00	N/A	-.79	110	.43	-	-
	Responder	111	27.35	1.74					

Table A4

Group Comparisons between Responders and Non-responders for Years in the United States

Variable	Years in the United States	*N*	*M*	*SD*	*t*	*df*	*p*	Levene's test *F*	Levene's test *p*
Stress	NonResponder	139	1.78	.70	-.86	249	.39	2.03	.15
	Responder	112	1.86	.77					
Anxiety	NonResponder	139	1.57	.63	.78	249	.46	1.95	.16
	Responder	112	1.51	.54					
Depression	NonResponder	139	1.49	.65	.07	249	.95	1.14	.29
	Responder	112	1.48	.57					
SIAS[a]	NonResponder	139	2.70	1.04	-3.23	249	.001	1.25	.26
	Responder	112	3.11	.99					
Active Coping	NonResponder	139	3.01	.92	-.70[b]	248.78	.48	6.76	.01
	Responder	112	3.08	.76					
US Acculturation	NonResponder	139	3.62	.52	1.42	249	.16	1.02	.32
	Responder	112	3.53	.50					
Deportation Fear	NonResponder	133	1.76	.81	-2.42[b]	205.78	.02	10.27	.002
	Responder	108	2.05	1.00					
Immigration Status	NonResponder	103	1.26	.44	-.13	212	.89	.07	.79
	Responder	111	1.27	.45					
Ethnicity	NonResponder	88	1.08	.38	-1.91[b]	177.85	.06	12.33	.001
	Responder	111	1.23	.69					
Gender	NonResponder	109	.78	.42	.60	218	.58	1.25	.27
	Responder	111	.75	.44					
Income	NonResponder	8	3.75	2.49	-.69	115	.49	.44	.51
	Responder	109	4.45	2.80					
Education	NonResponder	19	3.95	.97	-3.51[b]	29.68	.001	4.59	.03
	Responder	109	4.84	1.26					
Language	NonResponder	139	1.71	.45	-3.06[b]	247.92	.002	40.42	.001
	Responder	112	1.87	.34					
Age	NonResponder	79	31.01	11.20	-1.07	188	.29	.67	.41
	Responder	111	27.35	1.74					


DASSdepression
Frequency
60
40
20
0
1.00
1.50
2.00
2.50
3.00
3.50
4.00


DASSanxiety
Frequency
60
50
40
30
20
10
0
1.00
1.50
2.00
2.50
3.00
3.50
4.00

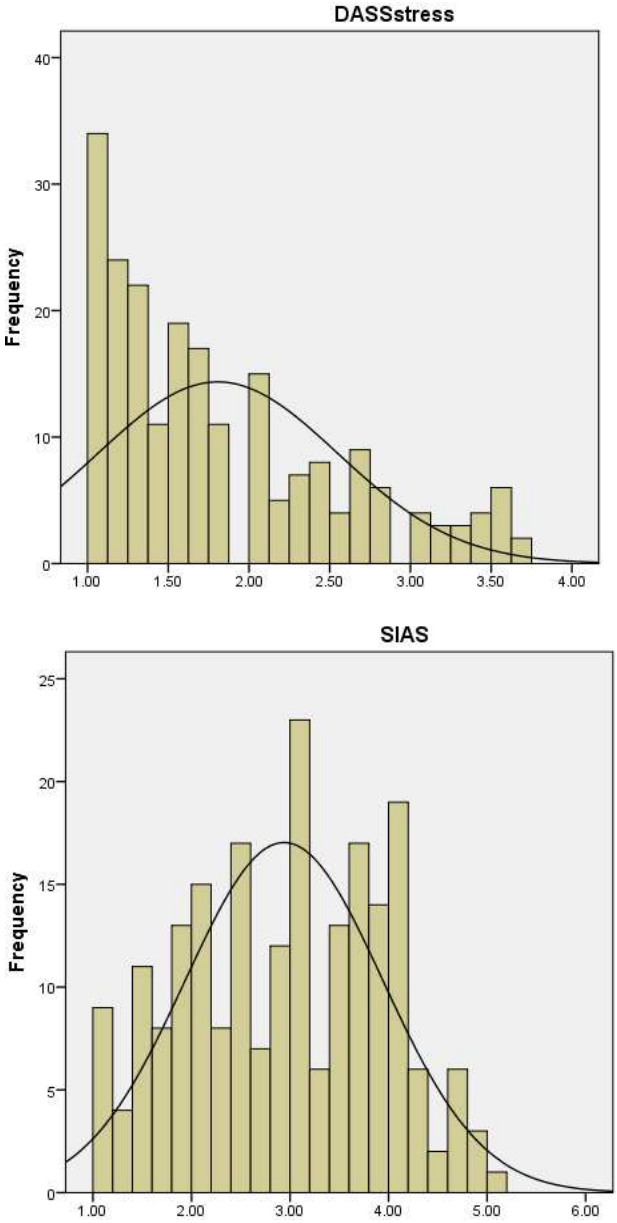
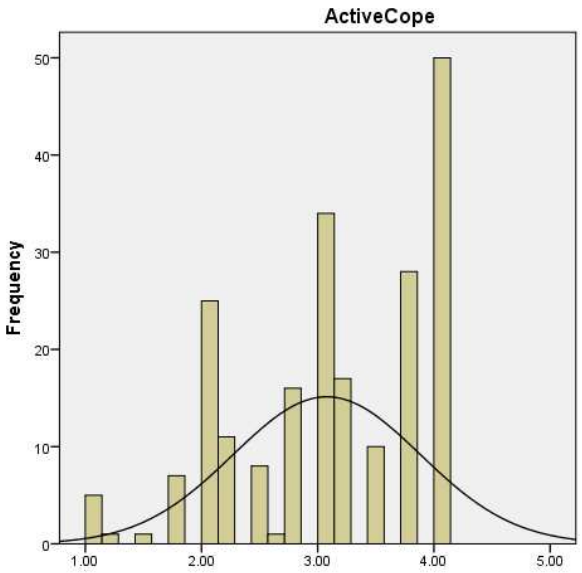
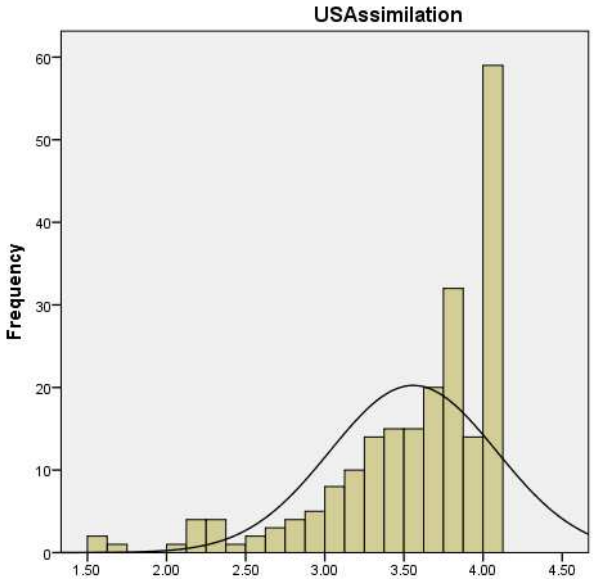


Figure A1. Histograms with Normal Curves (N = 251)


ActiveCope
Frequency
0
10
20
30
40
50
1.00
2.00
3.00
4.00
5.00


USAssimilation
Frequency
0
10
20
30
40
50
60
1.50
2.00
2.50
3.00
3.50
4.00
4.50

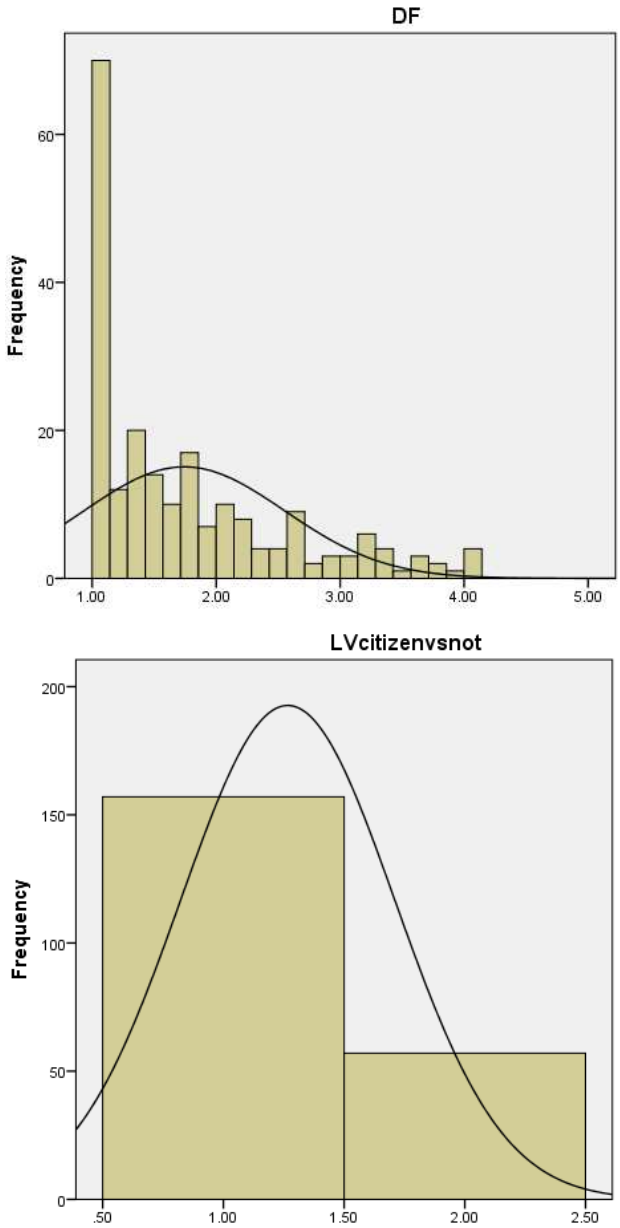


Figure A1. Histograms with Normal Curves (N = 251)

Appendix B

Immigration Status Vulnerability Measure

Table B1

Immigration Status Vulnerability Distribution (before collapse)

Response	Frequency
U.S Citizen	157
Resident	17
DACA recipient	15
Undocumented	1
Deported/Detained	2
U.S. Citizen + family deported/detained	16
Noncitizen + family deported/detained	5
U.S. Citizen + family deported/detained + family with DACA	1

Table B2

T-test for All Variables of Interest Using Low and High Immigration Status Vulnerability

	Immigration Status Vulnerability			
	High	Low	*t*	*df*
Education	4.89 (1.08)	4.21 (1.57)	1.57*	60.22
DFO	1.76 (.85)	2.32 (.94)	-3.97*	91.06
USID	3.47 (.64)	2.72 (.99)	5.33*	73.60
USLANG	3.83 (.38)	3.53 (.69)	3.10*	68.45
DEP	1.36 (.56)	1.64 (.69)	-2.80*	84.42
ANX	1.45 (.52)	1.76 (.75)	-2.90*	76.50
STR	1.77 (.75)	1.91 (.72)	-1.20	102.80

Note. * = $p < .05$. Standard Deviations appear in parentheses after means.

Appendix C.

Deportation Fear Measure

A principle components analysis without rotation was initially conducted on the 20-item deportation fear measure. Examination of the scree plot indicated a two-factor structure for this scale (Figure 11), which also reflects an intended structure. Since the factors are not known to be orthogonal, Maximum Likelihood extraction of a two factor structure was tested with a Promax rotation. This rotation allows for the correlation of the factors making initial extractions based on the reduced correlation matrix. The subscale correlation matrix also supported non-orthogonal results with a correlation coefficient of $r = .67$. This level of correlation between the subscales may indicate multicollinearity. The pattern matrix displayed little evidence of cross-loadings (Table C1). The two factor rotated structure indicated variance was distributed between factor one and factor two based on the rotated loadings. Communalities extracted for items on this measure were high, ranging from .51 to .87. Reported factor loadings for factor 1 ranged from .70 to .98 for items asking about fear of deportation for self. Items asking about deportation fear for a loved one loaded on factor 2, with loadings ranging from .58 to .96. Factor loadings represented deportation fear for self and deportation fear for a loved one.

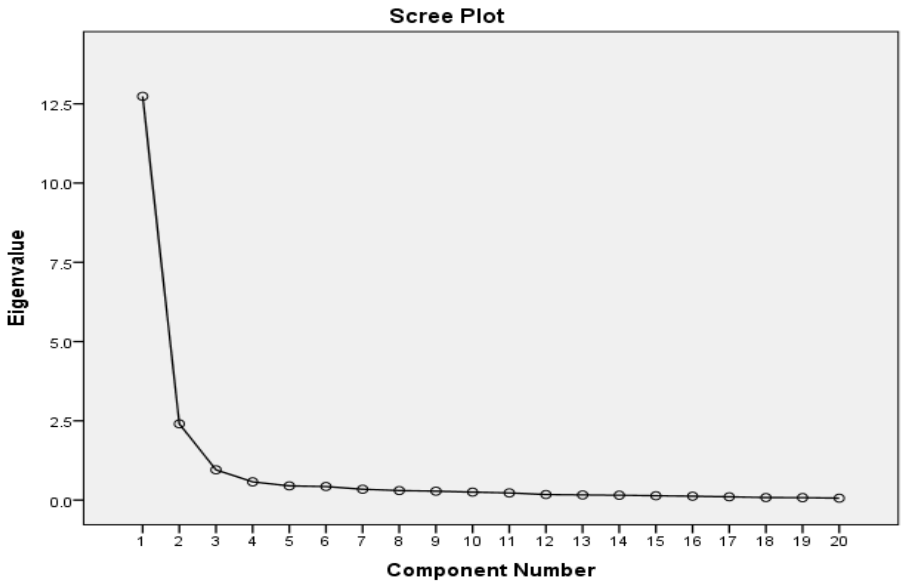


Figure C1. Scree Plot for Deportation Fear

Table C1.

Deportation Fear Scale- Initial Extraction Communalities and factor solution after Promax rotation. Salient loading values are printed in bold

	Communalities		Factor Loadings	
Scale Item	Initial	Extraction	1	2
I would be concerned if a loved one was walking in the streets	.70	.55	.22	**.58**
I would be concerned if a loved one was asking for help from government agencies	.76	.72	.08	**.81**
I would be concerned if a loved one was reporting an infraction to the police	.83	.77	-.01	**.89**
I would be concerned if a loved one was reporting an infraction to the police against his or herself	.83	.78	-.13	**.96**
I would be concerned if a loved one was driving in the car	.79	.74	.02	**.84**
I would be concerned if a loved one was applying for a driver's license	.83	.80	.05	**.85**
I would be concerned if a loved one was attending social gatherings	.71	.51	.04	**.65**
I would be concerned if a loved one was attending court if ordered to do so	.79	.76	-.06	**.92**
I would be concerned if a loved one was reporting workplace discrimination	.77	.70	.14	**.73**
I would be concerned if a loved one was seeking employment at a particular place	.78	.73	.11	**.80**
I would avoid walking in the streets	.70	.56	**.70**	.10

I would avoid asking for help from government agencies	.82	.75	**.84**	.04
I would avoid reporting an infraction to the police	.90	.84	**.87**	.09
I would avoid reporting an infraction to the police against one's person (myself)	.89	.81	**.86**	.08
I would avoid applying for a driver's license	.90	.87	**.98**	-.09
I would avoid driving in the car	.84	.76	**.85**	.01
I would avoid attending social gatherings	.81	.62	**.73**	.06
I would avoid attending court if ordered to do so	.83	.78	**.87**	.05
I would avoid reporting Workplace discrimination	.84	.82	**.95**	-.08
I would avoid seeking employment at a particular place	.80	.78	**.86**	.02

Table C1.

Deportation Fear-Variance by Factor with Promax Rotation

Factor	Eignvalues Initial	Variance Percentage	Rotated Sum of Squared Loadings
1	12.74	63.68	10.96
2	2.40	12.02	10.51
Cumulative Percent		73.05	

Appendix D.

U.S. Acculturation Scale Validation

Factor analysis was conducted on the U.S. American dimension of the AMAS-ZABB. Examination of the scree plot indicated a two-factor structure for this scale (Figure 12), which reflects its intended structure. The inter-item correlation matrix displayed positive manifold in the data, and Bartlett's Test of Sphericity (Chi Squared = 4618.95, $p < .001$) supported factor analytic procedures. Maximum likelihood extraction with an oblique rotation (Promax) was used in order to allow subscales to share variance. Factor analysis resulted a two factor solution, with 78% of cumulative variance in the scale structure. The factor matrix showed factor one loadings between .94 and .83, and factor two loadings ranged from .94 to .81 (Table D1). The distribution of the variance increased with the rotated factor solution (Table D2). Factor loadings reflected the established subscales; where factor one included the English language competence (USLANG) items, and factor two included cultural identity (USID) items. Internal consistency analysis for the 15-item U.S-American dimension scale showed was .94, and indicated no increase in alpha by deleting any of the scale items.

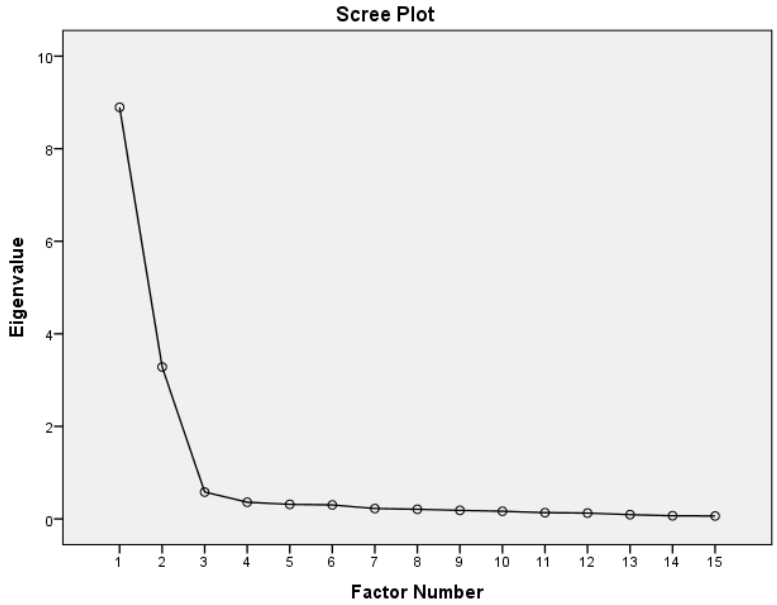


Figure D1. Scree Plot for U.S. Acculturation

Table D1.

U.S. Dimension Scale- Initial Extraction Communalities and factor solution after Promax rotation. Salient loading values are printed in bold

U.S. Dimension Scale Item	Communalities		Factor Loadings	
	Initial	Extraction	1	2
I think of myself as being U.S. American.	.70	.72	.04	**.83**
I feel good about being U.S. American.	.78	.78	-.02	**.89**
Being US American plays an important part in my life.	.67	.68	.03	**.81**
I feel that I am part of U.S. American culture.	.75	.75	.07	**.83**
I have a strong sense of being U.S. American.	.81	.84	-.06	**.94**
I am proud of being U.S. American.	.75	.75	-.05	**.88**
How well do you speak English at school or at work	.90	.88	**.94**	.01
How well do you speak English with American friends	.78	.72	**.85**	-.02
How well do you speak English on the phone	.85	.84	**.93**	-.03
How well do you speak English with strangers	.88	.87	**.89**	.09
How well do you speak English in general	.86	.84	**.92**	.01
How well do you understand English on television or in movies	.90	.83	**.90**	.01
How well do you understand English in newspapers and magazines	.86	.73	**.88**	-.05
How well do you understand English words in songs	.79	.73	**.83**	.06
How well do you understand English in general	.80	.76	**.89**	-.05

Table D2.

U.S. Dimension Scale- Variance by Factor with Promax Rotation

Factor	Eignvalues Initial	Variance Percentage	Rotated Sum of Squared Loadings
1- USID	8.91	59.42	8.05
2- USLANG	3.24	21.61	5.91
Cumulative Percent		81.03	

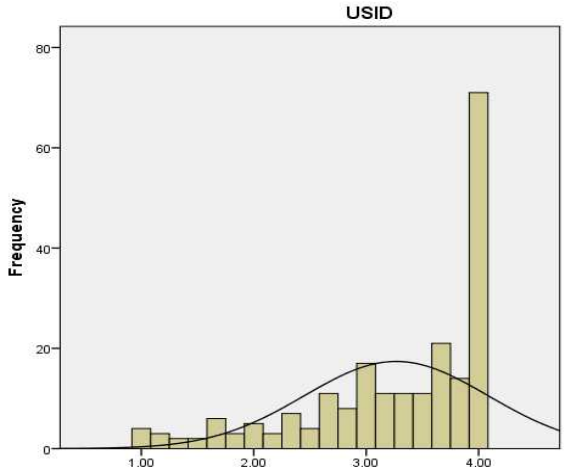


Figure D2. Distribution with normal curve for U.S. Identity subscale

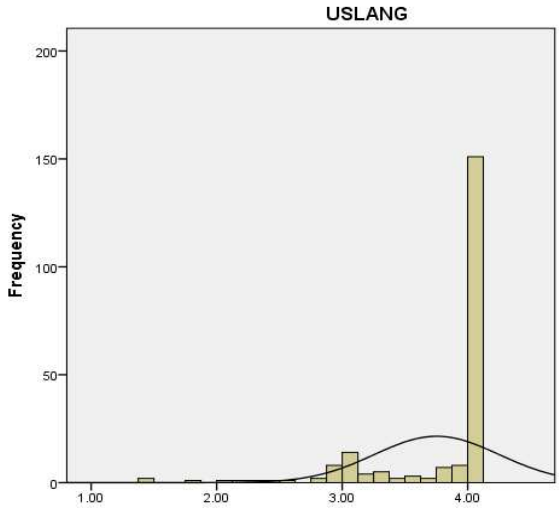


Figure D3. Distribution with normal curve for U.S. Language subscale

Appendix E.

Social Justice Advocacy Scale Validation

Principle component factor analysis was conducted first without rotation on the 22-item scale. Examination of the scree plot and eigenvalues indicated a 4-factor structure, as intended. Upon inspection of the extracted communalities, two items showed values less than .60 indicating a low proportion of item explained by the remaining items in the scale. Items; "I use social media sites (Facebook, Twitter, Linkedin) to influence others through media about issues that affect my ethnic group," and "I vote in most local elections," showed extraction values of .34 and .50, respectfully.

For the purpose of this study, an exploratory factor analysis was conducted using maximum likelihood extraction with an oblique rotation (Promax), allowing the 22 items to share variance explained within the factor. A four-factor solution accounted for 75.08 percentage cumulative of variance, and showed increased distribution of variance with the rotated factor solution (Table E1). Rotated factors loadings showed comparatively low loadings and potential cross-loading with other subscales for items "I use emails and letters to influences others about issues that affect my ethnic group," "I vote in most local elections," and "I work to elect policy makers who support the views of my ethnic group on important social issues." Also note cross loadings between factors one and two in the model (Table E1). Iterations of the analysis explored removing one item at time and assessing factor structure changes.

Results of these analyses showed slight, but not significant, improvements in factor loadings or variance explained. The 22-item scale structure generally reflected the intended structure with factors 1, 2, 3, and 4; respectively representing Political and Social Advocacy

(PSA, 8 items), Political Awareness (PA, 5 items), Social Issues Awareness (SIA, 4 items), and Confronting Discrimination (CD, 3 items). An exception to the intended structure was item 15, "I vote in most local elections," which loaded onto factor one (PSA) not the intended subscale, factor two (PA). Internal consistency subscale score were .94 for PSA, .94 for PA, .98 for SIA, and .97 for CD.

Table E1.

SAIS (22-item) - Factor Solution after Maximum likelihood extraction and Promax rotation. Salient loading values are printed in bold

Scale Item	Factor Loadings				Communalities	
	1	2	3	4	Initial	Extrac.
1. I participate in demonstrations or rallies about social issues that are important to my ethnic group.	**.88**	-.10	.167	-.10	.81	.78
2. I make telephone calls to policy makers to voice my opinion on issues that affect my ethnic group.	**.90**	.03	-.101	-.10	.70	.70
3. I volunteer for political causes and candidates that I believe in	**.74**	.03	-.06	.10	.72	.63
4. I participate in demonstrations or rallies about social issues that are important to me.	**.91**	-.12	.17	-.08	.84	.82
5. I meet with policy makers (e.g. city council, state and federal legislators, local elected officials) to advocate for social issues that I personally believe in	**.82**	.02	-.03	-.03	.68	.63
6. I volunteer for political causes and candidates that support the values of my ethnic group.	**.78**	-.00	-.08	.10	.72	.65
7. I make financial contributions to political causes or candidates who support the values of my ethnic group.	**.68**	.07	-.03	.02	.64	.53
8. I use emails, and letters to influences others about issues that affect my ethnic group.	**.46**	**.39**	-.07	.10	.69	.65
9. I use social media sites (Facebook, Twitter, Linkedin) to influences others though media about issues that affect my ethnic group.	**.35**	.18	.06	-.00	.48	.35
10. I discuss bills/legislative issues that are important to my ethnic group with friends and family.	.07	**.83**	-.04	.02	.78	.76
11. I keep track of important bills/legislative issues that are being debated in Congress that affect my ethnic group.	.01	**.99**	.03	-.15	.88	.93
12. I keep track of important bills/legislative issues that are being debated in Congress that I am personally interested in.	-.03	**.89**	.07	.03	.86	.87
13. I discuss bills/legislative issues that are important to my coworkers and acquaintances.	-.01	**.70**	.09	.01	.67	.61
14. I work to elect policy makers who support the views of my ethnic group on important social issues	**.36**	**.46**	-.02	.11	.73	.69
15. I vote in most local elections.	**.47**	.05	.08	.16	.58	.47
16. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' health and well-being.	.01	.10	**.83**	.05	.88	.88

17. State and federal policies affect individuals' access to quality education and resources.	.02	.00	**.96**	-.00	.93	.95
18. State and federal policies affect individuals' access to social services.	-.00	-.01	**.96**	.03	.92	.93
19. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' educational performance.	-.01	.04	**.94**	.01	.92	.93
20. I am responsible to confront people who display signs of discrimination toward the elderly.	.04	-.06	.01	**.96**	.90	.93
21. I am responsible to confront people who display signs of discrimination toward culturally/ethnically different people or groups.	-.01	.02	.06	**.91**	.90	.91
22. I am responsible to confront people who display signs of discrimination toward disabled individuals.	-.04	-.03	.00	**1.00**	.92	.95

Table E2.

SIAS (22 items)- Variance by Factor with Promax Rotation

Factor	Initial Eignvalues	Extracted Sum of Squared Loadings	Variance Percentage	Rotated Sum of Squared Loadings
1	12.73	11.70	53.19	10.54
2	2.13	1.88	8.53	9.78
3	1.38	1.75	7.96	9.09
4	1.08	1.1	5.88	7.11
Cumulative Percent	78.68		75.08	

Table E3.

SAIS (21-item) - Factor Solution after Maximum likelihood extraction and Promax rotation. Salient loading values are printed in bold

	Factor Loadings				Communalities	
Scale Item	1	2	3	4	Initial	Extrac.
1. I participate in demonstrations or rallies about social issues that are important to my ethnic group.	**.889**	-.109	.167	-.081	.812	.768
2. I make telephone calls to policy makers to voice my opinion on issues that affect my ethnic group.	**.912**	.036	-.101	-.091	.695	.699
3. I volunteer for political causes and candidates that I believe in	**.706**	.090	-.059	.103	.715	.637
4. I participate in demonstrations or rallies about social issues that are important to me.	**.930**	-.150	.181	-.072	.835	.816
5. I meet with policy makers (e.g. city council, state and federal legislators, local elected officials) to advocate for social issues that I personally believe in	**.825**	.013	-.017	-.053	.683	.634
6. I volunteer for political causes and candidates that support the values of my ethnic group.	**.748**	.055	-.096	.122	.709	.645
7. I make financial contributions to political causes or candidates who support the values of my ethnic group.	**.672**	.093	-.019	.005	.631	.537
8. I use emails, and letters to influences others about issues that affect my ethnic group.	**.450**	**.381**	-.062	.113	.669	.641
10. I discuss bills/legislative issues that are important to my ethnic group with friends and family.	.086	**.811**	-.033	.029	.769	.757

11. I keep track of important bills/legislative issues that are being debated in Congress that affect my ethnic group.	.006	**1.000**	.055	-.160	.880	.929
12. I keep track of important bills/legislative issues that are being debated in Congress that I am personally interested in.	-.039	**.909**	.079	.002	.857	.873
13. I discuss bills/legislative issues that are important to my coworkers and acquaintances.	.000	**.729**	.059	.023	.666	.611
14. I work to elect policy makers who support the views of my ethnic group on important social issues	**.338**	**.497**	-.012	.095	.727	.685
15. I vote in most local elections.	**.439**	.097	.099	.155	.578	.473
16. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' health and well-being.	.017	.106	**.822**	.048	.884	.879
17. State and federal policies affect individuals' access to quality education and resources.	.015	.010	**.957**	.002	.927	.948
18. State and federal policies affect individuals' access to social services.	-.006	.000	**.944**	.039	.918	.933
19. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' educational performance.	-.006	.038	**.937**	.010	.918	.930
20. I am responsible to confront people who display signs of discrimination toward the elderly.	.034	-.063	.009	**.970**	.900	.925
21. I am responsible to confront people who display signs of discrimination toward culturally/ethnically different people or groups.	-.018	.017	.062	**.913**	.895	.908
22. I am responsible to confront people who display signs of discrimination toward disabled individuals.	-.047	-.026	.015	**1.003**	.916	.949

Table E4.

SIAS (21 items)- Variance by Factor with Promax Rotation

Factor	Initial Eignvalues	Extracted Sum of Squared Loadings	Variance Percentage	Rotated Sum of Squared Loadings
1	12.378	11.414	54.353	10.196
2	2.116	1.847	8.796	9.486
3	1.369	1.711	8.148	8.905
4	1.074	1.203	5.729	7.433
Cumulative Percent	80.66		77.03	

The factor structure was assess again after removing two items from the PSA subscale and two items from the PA showing cross loadings. The results are shown in Table E5. The PSA subscale was utilized in model testing as a moderator of the relationship between deportation fear and mental health symptoms.

Table E5.

SAIS (18-item) - Factor Solution after Maximum likelihood extraction and Promax rotation. Salient loading values are printed in bold

Scale Item	Factor Loadings				Communalities	
	1	2	3	4	Initial	Extrac.
1. I participate in demonstrations or rallies about social issues that are important to my ethnic group.	**.86**	-.08	.16	-.08	.79	.76
2. I make telephone calls to policy makers to voice my opinion on issues that affect my ethnic group.	**.85**	.06	-10	-.07	.66	.66
3. I volunteer for political causes and candidates that I believe in	**.72**	.06	-.07	.12	.69	.61
4. I participate in demonstrations or rallies about social issues that are important to me.	**.91**	-.10	.15	-.06	.83	.84
5. I meet with policy makers (e.g. city council, state and federal legislators, local elected officials) to advocate for social issues that I personally believe in	**.76**	.06	-.03	.00	.68	.62
6. I volunteer for political causes and candidates that support the values of my ethnic group.	**.75**	.03	-.08	.12	.68	.62
7. I make financial contributions to political causes or candidates who support the values of my ethnic group.	**.61**	.11	-.02	.05	.57	.49
8. I discuss bills/legislative issues that are important to my ethnic group with friends and family.	.10	**.80**	-.04	.04	.73	.74
9. I keep track of important bills/legislative issues that are being debated in Congress that affect my ethnic group.	.05	**.97**	.02	-.13	.86	.92
10. I keep track of important bills/legislative issues that are being debated in Congress that I am personally interested in.	00	**.87**	.05	.05	.83	.85
11. I discuss bills/legislative issues that are important to my coworkers and acquaintances.	.01	**.68**	.08	.03	.60	.57
12. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' health and well-being.	.00	.09	**.84**	.05	.87	.87
13. State and federal policies affect individuals' access to quality education and resources.	.01	.00	**.97**	.00	.91	.94
14. State and federal policies affect individuals' access to social services.	-.01	-.01	**.96**	.02	.91	.93
15. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' educational performance.	-.01	.03	**.95**	.00	.90	.92
16. I am responsible to confront people who display signs of discrimination toward the elderly.	.04	-.04	.01	**.94**	.89	.91
17. I am responsible to confront people who display signs of discrimination toward culturally/ethnically different people or groups.	.00	.03	.06	**.89**	.88	.90
18. I am responsible to confront people who display signs of discrimination toward disabled individuals.	-.03	-.01	.00	**.99**	.91	.95

Table E6.

SIAS (18 items)- Variance by Factor with Promax Rotation

Factor	Initial Eignvalues	Extracted Sum of Squared Loadings	Variance Percentage	Rotated Sum of Squared Loadings
1	10.09	9.35	51.96	7.90
2	2.17	1.84	10.23	7.53
3	1.53	1.67	9.30	7.18
4	1.07	1.21	6.74	5.72
Cumulative Percent	82.54		78.24	

Appendix F.

Active Coping Scale Validation

Principle component factor analysis was conducted without rotation on the 4-item subscale in the present study. Examination of the scree plot indicated a single factor structure as intended, accounting for 82.76 percent of scale variance. The internal consistency score, Chronbach's alpha, for the 4-item active coping subscale was. These analyses support the use of the subscale.

Table F1.

Active Coping Scale- Initial and Extraction Communalities and factor solution. Salient loading values are printed in bold

	Communalities		Factor Loadings
Scale Item	Initial	Extraction	1
I take additional action to try to get rid of the problem.	.69	.73	.85
I concentrate my efforts on doing something about it.	.81	.94	.97
I do what has to be done, one step at a time.	.69	.71	.84
I take direct action to get around the problem.	.54	.54	.74

Table F2.

Active Coping Scale- Variance by Factor with Promax Rotation

Factor	Eignvalues Initial	Variance Percentage	Rotated Sum of Squared Loadings
1	3.18	72.98	2.92

Appendix G.

Depression, Anxiety, and Stress Scale- 21 Validation

Principle component analysis was conducted on the DASS-21 without rotation in the present study. Examination of the scree plot indicated a three-factor structure for this scale, which was in line with the scale's intended structure, and Bartlett's Test of Sphericity (Chi Squared = 3299.37, $p < .001$) supported factor analytic procedures. However, inspection of the extracted communalities showed seven items with low proportions of variance (less than .50) explained by the remaining items in the scale. In addition, component loadings did not reflect the intended three-factor solution with several items loading onto more than one component. Evidence points toward a two or one factor solution for this data. All but three items loaded onto more than one component. Variance explained in the scale structure increased from 62. To 72.49, however multiple cross-loadings showed disturbances in scale structure (Table G1). Several follow-up component analyses were conducted to explore validity of two-factor and one-factor solutions for this scale, but no significant improvements were found without major changes to the intended scale structure. These analyses are evidence that for this sample items assessing depression, anxiety, and stress were not part of a larger symptomatology factor. Thus, the three components were analyzed as independent factors in the main path analyses (Tables G2-G4).

Principle component analyses conducted separately for each of the three subscales evidenced comparatively better scale reliability and stability than the overall DASS-21. Chronbach's alphas for internal consistency values were .91 for depression subscale, .88 for anxiety subscale, and .91 for the stress subscale. The seven item depression subscale factor analysis resulted in 66.91% of variance explained, extraction communalities that ranged from

.47 to .77, and factor loadings between .75 and .79. The seven item anxiety subscale factor analysis resulted in 57.55% of variance explained, extraction communalities that ranged from .48 to .62, and factor loadings between .69 and .79. The seven item stress subscale factor analysis resulted in 64.78% of variance explained, extraction communalities that ranged from .50 to .74, and factor loadings between .71 and .86. Each of the subscales were retained as proposed in the original scale. However, subscale analyses did not show that these scales were part of the larger theoretical factor, mental health symptomatology. Thus, three separate path analyses will be conducted for the main analyses as proposed in the hypotheses for this study.

Table G1.
DASS (21-item) – Principle Component Analysis Extracted Communalities and Item Loadings. Salient loading values are printed in bold

		Factor Loadings		
Scale Item	Extraction	1	2	3
1. I found it hard to wind down	.545	.10	**.73**	.13
2. I tended to over-react to situations	.683	.28	**.83**	.17
3. I felt that I was using a lot of nervous energy	.703	.24	**.83**	.14
4. I found myself getting agitated	.744	.23	**.86**	.11
5. I found it difficult to relax	.726	.24	**.86**	.15
6. I was intolerant of anything that kept me from getting on with what I was doing	.665	.28	**.82**	.22
7. I felt that I was rather touchy	.501	.22	**.71**	.07
8. I was aware of dryness of my mouth	.618	**.56**	.18	**.79**
9. I experienced breathing difficulty (eg, excessively rapid breathing breathlessness in the absence of physical exertion)	.658	**.47**	.07	**.80**
10. I experienced trembling (eg, in the hands)	.681	**.616**	-.296	**.462**
11. I was worried about situations in which I might panic and make a fool of myself	.468	**.678**	-.082	.037
12. I felt I was close to panic	.597	**.743**	-.211	.015
13. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	.617	**.628**	-.235	**.410**
14. I felt scared without any good reason	.556	**.673**	-.195	.256
15. I couldn't seem to experience any positive feeling at all	.540	**.696**	-.161	-.173
16. I found it difficult to work up the initiative to do things	.439	**.655**	-.095	-.035
17. I felt that I had nothing to look forward to	.762	**.789**	-.220	**-.303**

18. I felt down-hearted and blue	.727	**.780**	-.153	**-.309**
19. I was unable to become enthusiastic about anything	.751	**.830**	-.126	-.215
20. I felt I wasn't worth much as a person	.803	**.787**	-.160	**-.398**
21. I felt that life was meaningless	.663	**.718**	-.108	**-.368**

Table G2.
DASS- Depression – Principle Component Analysis Extracted Communalities and Item Loadings

Scale Item	Extraction	Component 1
1. I couldn't seem to experience any positive feeling at all	.567	.753
2. I found it difficult to work up the initiative to do things	.466	.683
3. I felt that I had nothing to look forward to	.756	.869
4. I felt down-hearted and blue	.734	.857
5. I was unable to become enthusiastic about anything	.766	.875
6. I felt I wasn't worth much as a person	.772	.879
7. I felt that life was meaningless	.623	.789
Variance Percentage		66.91

Table G3.
DASS- Anxiety – Principle Component Analysis Extracted Communalities and Item Loadings

Scale Item	Extraction	Component 1
1. I was aware of dryness of my mouth	.564	.751
2. I experienced breathing difficulty (eg, excessively rapid breathing breathlessness in the absence of physical exertion)	.601	.775
3. I experienced trembling (eg, in the hands)	.624	.790
4. I was worried about situations in which I might panic and make a fool of myself	.476	.690
5. I felt I was close to panic	.594	.770
6. I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	.585	.765
7. I was aware of dryness of my mouth	.585	.765
Variance Percentage		57.547

Table G4.
DASS- Stress – Principle Component Analysis Extracted Communalities and Item Loadings

Scale Item	Extraction	Component 1
1. I found it hard to wind down	.517	.719
2. I tended to over-react to situations	.682	.826
3. I felt that I was using a lot of nervous energy	.705	.840
4. I found myself getting agitated	.743	.862
5. I found it difficult to relax	.724	.851

6. I was intolerant of anything that kept me from getting on with what I was doing	.665	.816
7. I felt that I was rather touchy	.498	.705
	Variance Percentage	64.784

Appendix H.

Moderated Mediation Models with Alternative Moderator U.S. Language

Table H1.

Moderated Mediation Analysis for Immigration Status, U.S. Language, Deportation Fear, Social Justice Advocacy and Anxiety.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.45	.14	3.34**
Moderator: U.S. Language	-.22	.12	-1.80
Interaction: ISV x U.S. Language	-.06	.25	-.22
Outcome: Deportation Fear			
Mediator: Deportation Fear	.17	.05	3.44**
Predictor: ISV	.19	.10	1.90
Moderator: Social Justice Advocacy	-.09	.03	-2.68
Interaction: Deportation Fear x Social Justice Advocacy	-.03	.04	-.82
Outcome: Anxiety			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

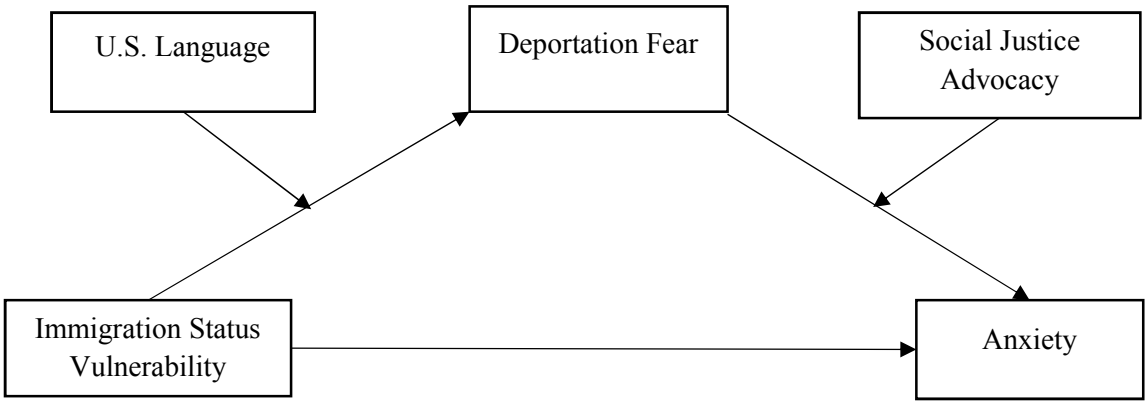


Figure H1. Moderated mediation conceptual model predicting anxiety symptoms

Table H2.

Moderated Mediation Analysis for Immigration Status, U.S. Language, Deportation Fear, Social Justice Advocacy and Anxiety.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.26	.07	3.61**
Moderator: U.S. Language	-.24	.14	-1.65
Interaction: ISV x U.S. Language	-.06	.25	-.22
Outcome: Deportation Fear			
Mediator: Deportation Fear	.15	.06	2.74**
Predictor: ISV	.07	.05	1.35
Moderator: Social Justice Advocacy	-.04	.04	-1.08
Interaction: Deportation Fear x Social Justice Advocacy	-.00	.04	-.82
Outcome: Depression			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

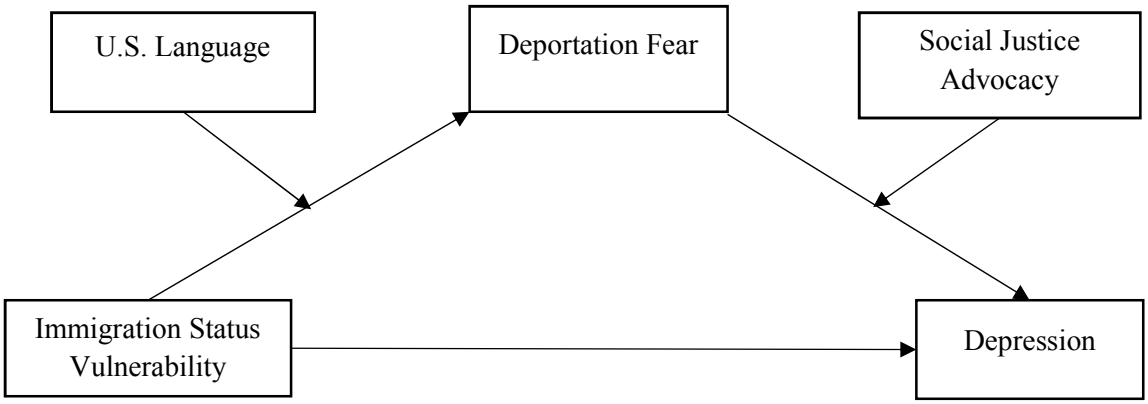


Figure H2. Moderated mediation conceptual model predicting depression symptoms

Appendix I.

Moderated Mediation Models with Alternative Moderator Social Issues and Advocacy Scale

Table I1.

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Issues and Advocacy Scale and Depression.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.17	.05	3.48**
Predictor: ISV	.20	.09	1.88
Moderator: Social Issues and Advocacy Scale	-.06	.04	-1.60
Interaction: Deportation Fear x Social Issues and Advocacy Scale	-.07	.05	-1.43
Outcome: Depression			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

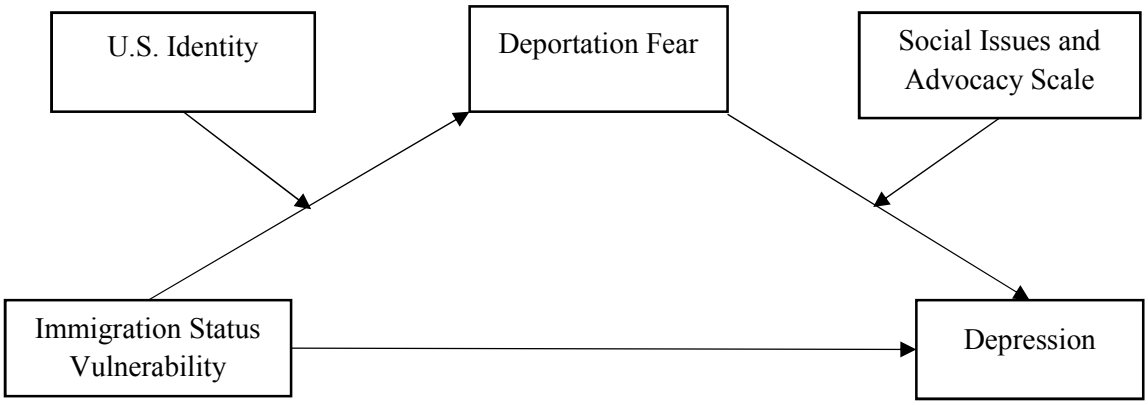


Figure I1. Moderated mediation conceptual model predicting depression symptoms

Table I2.

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Issues and Advocacy Scale and Anxiety.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.17	.05	3.47**
Predictor: ISV	.20	.10	1.90
Moderator: Social Issues and Advocacy Scale	-.06	.04	-1.60
Interaction: Deportation Fear x Social Issues and Advocacy	-.07	.05	-1.43
Outcome: Anxiety			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

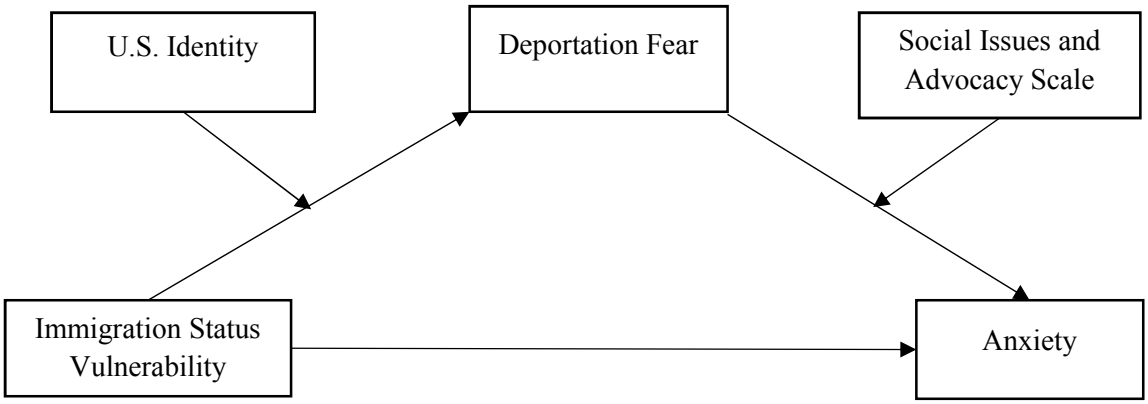


Figure I2. Moderated mediation conceptual model predicting anxiety symptoms

Table I3

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Issues and Advocacy Scale and Stress.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability (ISV)	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.06	,07	.78
Predictor: ISV	.08	.13	.63
Moderator: Social Issues and Advocacy Scale	-.09	.05	-1.70
Interaction: Deportation Fear x Social Issues and Advocacy Scale	-.10	.06	-1.74
Outcome: Stress			

Note: N = 214, ISV = Immigration Status Vulnerability
*p < .05. **p < .01

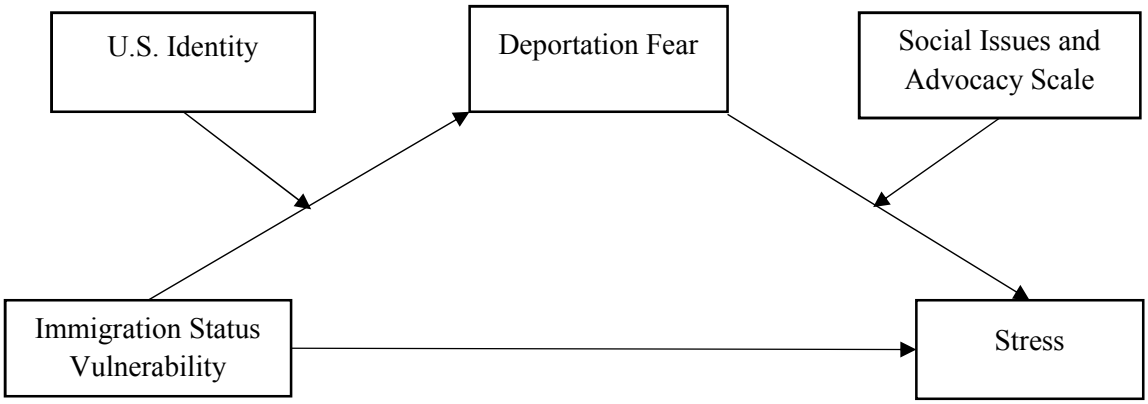


Figure I3. Moderated mediation conceptual model predicting stress symptoms

Appendix J.

Moderated Mediation Models with DASS Outcome

Table J1.

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Justice Advocacy and DASS.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: Immigration Status Vulnerability x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.13	.05	2.91**
Predictor: Immigration Status Vulnerability	.14	.09	1.60
Moderator: Social Justice Advocacy	-.08	.03	-2.84**
Interaction: Deportation Fear x Social Justice Advocacy	-.07	.03	-1.94*
Outcome: DASS			

Note: N = 214, DASS = Depression Anxiety Stress Scale
*p < .05. **p < .01

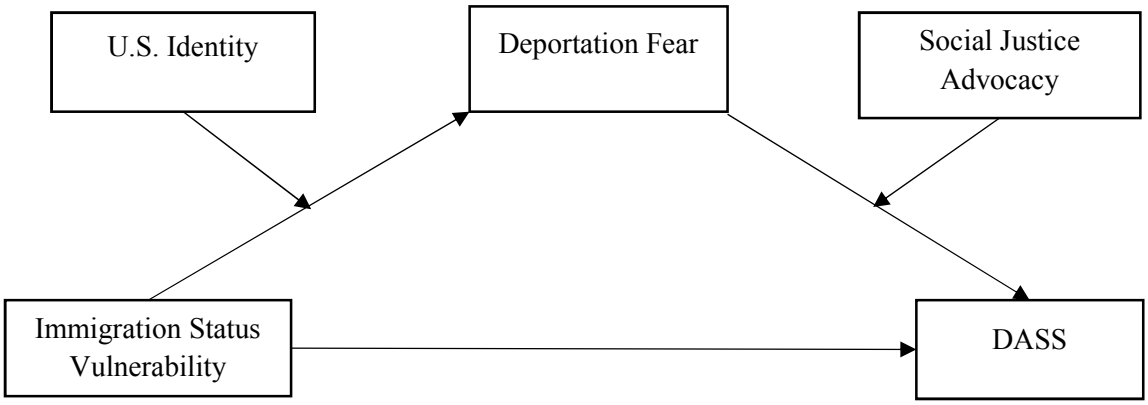


Figure J1. Moderated mediation conceptual model predicting mental health symptoms

Table J2.

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Coping and DASS.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.10	.04	2.41*
Predictor: Immigration Status Vulnerability	.17	.09	1.94
Moderator: Coping	-.09	.04	-2.39*
Interaction: Deportation Fear x Coping	-.08	.05	-1.87
Outcome: DASS			

Note: N = 214, DASS = Depression Anxiety Stress Scale
*p < .05. **p < .01

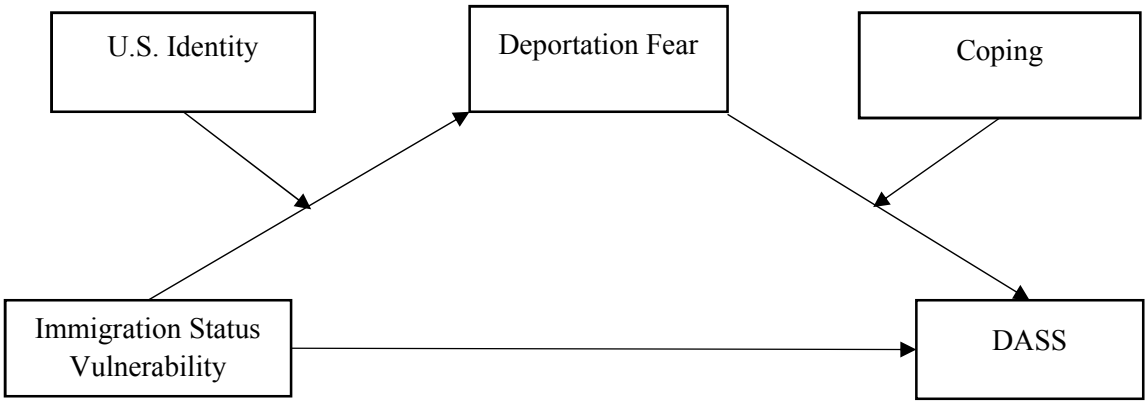


Figure J2. Moderated mediation conceptual model predicting mental health symptoms

Table J3.

Moderated Mediation Analysis for Immigration Status, U.S. Identity, Deportation Fear, Social Issues and Advocacy Scale and DASS.

Model Paths	B	*SE B*	*t*
Predictor: Immigration Status Vulnerability	.50	.16	3.22**
Moderator: U.S. Identity	-.09	.09	-.94
Interaction: ISV x U.S. Identity	-.00	.18	-.01
Outcome: Deportation Fear			
Mediator: Deportation Fear	.14	.05	2.75**
Predictor: Immigration Status Vulnerability	.14	.09	1.58
Moderator: Social Issues and Advocacy Scale	-.06	.03	-1.82
Interaction: Deportation Fear x Social Issues and Advocacy Scale	-.07	.04	-1.63
Outcome: DASS			

Note: N = 214, DASS = Depression Anxiety Stress Scale
*p < .05. **p < .01

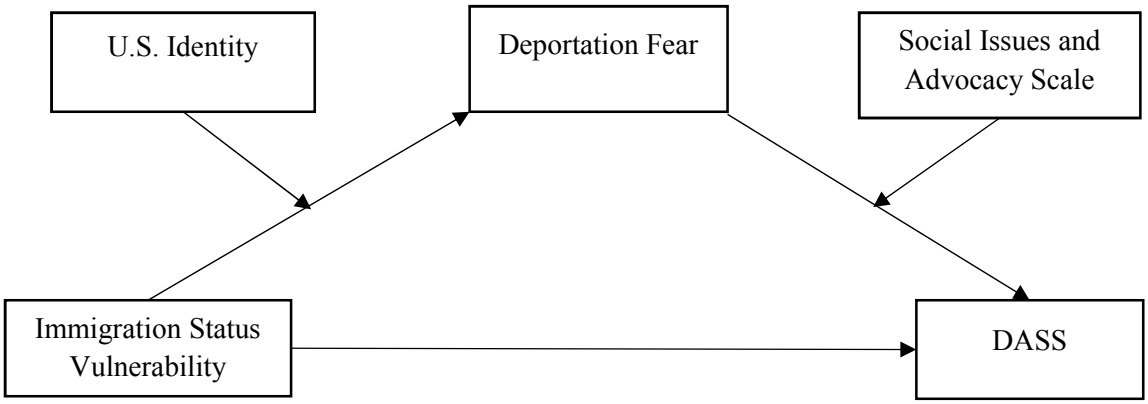


Figure J3. Moderated mediation conceptual model predicting mental health symptoms

Appendix K

Measures Used

DASS-21

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you *over the past week*. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1	I found it hard to wind down	0	1	2	3
2	I was aware of dryness of my mouth	0	1	2	3
3	I couldn't seem to experience any positive feeling at all	0	1	2	3
4	I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)	0	1	2	3
5	I found it difficult to work up the initiative to do things	0	1	2	3
6	I tended to over-react to situations	0	1	2	3
7	I experienced trembling (eg, in the hands)	0	1	2	3
8	I felt that I was using a lot of nervous energy	0	1	2	3
9	I was worried about situations in which I might panic and make a fool of myself	0	1	2	3
10	I felt that I had nothing to look forward to	0	1	2	3
11	I found myself getting agitated	0	1	2	3
12	I found it difficult to relax	0	1	2	3
13	I felt down-hearted and blue	0	1	2	3
14	I was intolerant of anything that kept me from getting on with what I was doing	0	1	2	3
15	I felt I was close to panic	0	1	2	3
16	I was unable to become enthusiastic about anything	0	1	2	3
17	I felt I wasn't worth much as a person	0	1	2	3
18	I felt that I was rather touchy	0	1	2	3
19	I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)	0	1	2	3
20	I felt scared without any good reason	0	1	2	3
21	I felt that life was meaningless	0	1	2	3

DASS-21

Por favor lea las siguientes afirmaciones y coloque un círculo alrededor de un número (0, 1, 2, 3) que indica cuánto esta afirmación le aplicó a usted *durante la semana pasada.* No hay respuestas correctas o incorrectas. No tome demasiado tiempo para contestar.

La escala de calificación es la siguiente:

0 No me aplicó
1 Me aplicó un poco, o durante parte del tiempo
2 Me aplicó bastante, o durante una buena parte del tiempo
3 Me aplicó mucho, o la mayor parte del tiempo

1.	Me costó mucho relajarme	0	1	2	3
2.	Me di cuenta que tenia la boca seca	0	1	2	3
3.	No podía sentir ningún sentimiento positivo	0	1	2	3
4.	Se me hizo difícil respirar	0	1	2	3
5.	Se me hizo difícil tomar la iniciativa para hacer cosas	0	1	2	3
6.	Reaccioné exageradamente en ciertas situaciones	0	1	2	3
7.	Sentí que mis manos temblaban	0	1	2	3
8.	Sentí que tenia muchos nervios	0	1	2	3
9.	Estaba preocupado por situaciones en las cuales podía tener pánico o en las que podría hacer el ridículo	0	1	2	3
10.	Sentí que no tenia nada por que vivir	0	1	2	3
11.	Noté que me agitaba	0	1	2	3
12.	Se me hizo difícil relajarme	0	1	2	3
13.	Me sentí triste y deprimido	0	1	2	3
14.	No toleré nada que no me permitiera continuar con lo que estaba haciendo	0	1	2	3
15.	Sentí que estaba al punto de pánico	0	1	2	3
16.	No me pude entusiasmar por nada	0	1	2	3
17.	Sentí que valía muy poco como persona	0	1	2	3
18.	Sentí que estaba muy irritable	0	1	2	3
19.	Sentí los latidos de mi corazón a pesar de no haber hecho ningún esfuerzo físico	0	1	2	3
20.	Tuve miedo sin razón	0	1	2	3
21.	Sentí que la vida no tenia ningún sentido	0	1	2	3

Abbreviated Multidimensional Acculturation Scale

The following section contains questions about culture and your *language* (e.g. Spanish). By culture of origin, we refer to the culture of your nation where you or your ancestors came from (e.g., Mexico, Cuba, El Salvador) By *native language* we refer to the language of that country, spoken by you or your parents in that country (e.g., Mexico, Cuba, El Salvador, etc.).

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

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

1. I think of myself as being U.S. American.
2. I feel good about being U.S. American.
3. Being U.S. American plays an important part in my life.
4. I feel that I am part of U.S. American culture.
5. I have a strong sense of being U.S. American.
6. I am proud of being U.S. American.
7. I think of myself as being Mexican.
8. I feel good about being Mexican.
9. Being Mexican plays an important part in my life.
10. I feel that I am part of Mexican culture.
11. I have a strong sense of being Mexican.
12. I am proud of being Mexican.

Please answer the questions below using the following responses:

	1	2	3	4
	Not at all	A Little	Pretty Well	Extremely well
How well do you speak English:				
13. at school or at work				
14. with American friends				
15. on the phone				
16. with strangers				
17. in general				
How well do you understand English:				
18. on television or in movies				
19. in newspapers and magazines				
20. words in songs				
21. in general				
How well do you speak Spanish:				
22. with family				
23. with friends from the same country as you				
24. on the phone				
25. with strangers				
26. in general				

How well do you understand your native language:
27. on television or in movies
28. in newspapers and magazine
29. words in songs
30. in general

Abbreviated Multidimensional Acculturation Scale

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

Instrucciones: Escoja una de las opciones que aparecen a continuación de cada una de las frases. Por favor señale con un círculo la opción que corresponda a su respuesta.

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

1. Me considero estadounidense.
2. Me siento bien de ser estadounidense.
3. Ser estadounidense juega un papel importante en mi vida.
4. Yo siento que formo parte de la cultura estadounidense.
5. Me siento completamente estadounidense.
6. Me siento orgulloso de ser estadounidense.
7. Pienso que soy _____ (miembro de mi cultura de origen).
8. Me siento bien de ser _____ (miembro de mi cultura de origen).
9. Ser _____ (miembro de mi cultura de origen) juega un papel importante en mi vida.
10. Siento que formo parte de la cultura _____(mi cultura de origen).
11. Me siento completamente _____ (mi cultura de origen).
12. Me siento orgulloso de ser _____ (mi cultura de origen).

1 Nada	2 Un poco	3 Bastante bien	4 Perfectamente bien

CUÁN BIEN HABLA INGLÉS?
13. en el colegio o trabajo
14. con amigos norteamericanos
15. en el teléfono
16. con desconocidos
17. en general

CUÁN BIEN ENTIENDE INGLÉS?
18. en la televisión o en el cine
19. en periódicos y revistas
20. en la letra de las canciones
21. en general

CUÁN BIEN HABLA ESPAÑOL?
22. con la familia
23. con amistades de su mismo país
24. por teléfono
25. con desconocidos
26. en general

CUÁN BIEN ENTIENDE ESPAÑOL?

27. en la televisión o en el cine
28. en periódicos y revistas
29. en la letra de las canciones
30. en general

Fear of Deportation Scale

What is the likelihood you would avoid or not engage in the following activities because you believe you will be deported or detained?

Circle a number between 1 and 5 next to each item that best applies.

For example "I would avoid walking in the streets for fear of deportation or detainment."

0	**1**	**2**	**3**
Not at all	**Very little of not very often**	**Moderately**	**Much or very often**

1. I would avoid walking in the streets	**0**	**1**	**2**	**3**
2. I would avoid asking for help from government agencies.	**0**	**1**	**2**	**3**
3. I would avoid reporting an infraction to the police	**0**	**1**	**2**	**3**
4. I would avoid reporting an infraction to the police against one's person (myself)	**0**	**1**	**2**	**3**
5. I would avoid applying for a driver's license	**0**	**1**	**2**	**3**
6. I would avoid driving in the car	**0**	**1**	**2**	**3**
7. I would avoid attending social gatherings	**0**	**1**	**2**	**3**
8. I would avoid attending court if ordered to do so	**0**	**1**	**2**	**3**
9. I would avoid reporting Workplace discrimination	**0**	**1**	**2**	**3**
10. I would avoid seeking employment at a particular place	**0**	**1**	**2**	**3**

To what degree are you concerned about a loved one engaging in the following activities because you believe your loved one will be deported or detained?

Circle a number between 1 and 5 next to each item that best applies.
For example "I would be concerned if a loved one was walking in the streets for fear of deportation or detainment."

0	**1**	**2**	**3**
Not at all	**Very little of not very often**	**Moderately**	**Much or very often**

I would be concerned if a loved one was walking in the streets	**0**	**1**	**2**	**3**
I would be concerned if a loved one was asking for help from government agencies	**0**	**1**	**2**	**3**
I would be concerned if a loved one was reporting an infraction to the police	**0**	**1**	**2**	**3**
I would be concerned if a loved one was reporting an infraction to the police against his or herself	**0**	**1**	**2**	**3**
I would be concerned if a loved one was driving in the car	**0**	**1**	**2**	**3**
I would be concerned if a loved one was applying for a driver's license	**0**	**1**	**2**	**3**
I would be concerned if a loved one was attending social gatherings	**0**	**1**	**2**	**3**
I would be concerned if a loved one was attending court if ordered to do so	**0**	**1**	**2**	**3**
I would be concerned if a loved one was reporting workplace discrimination	**0**	**1**	**2**	**3**
I would be concerned if a loved one was seeking employment at a particular place	**0**	**1**	**2**	**3**

Active Coping

Be sure to treat each item separately from every other item. There are no right or wrong answers.

Answer base on what **you do** rather than what "most people" do.

0 I usually don't do this at all	1 I usually do this a little bit	2 I usually do this a medium	3 I usually do this a lot		
I take additional action to try to get rid of the problem.		0	1	2	3
I concentrate my efforts on doing something about it.		0	1	2	3
I do what has to be done, one step at a time.		0	1	2	3
I take direct action to get around the problem.		0	1	2	3

Social Issues and Advocacy Scale

Instructions: Please mark the number that best corresponds to your answer.
1- Strongly disagree, 2-Disagree, 3- Neither agree nor disagree, 4-Agree, 5-Strongly Agree

1. I participate in demonstrations or rallies about social issues that are important to my ethnic group.	1	2	3	4	5
2. I make telephone calls to policy makers to voice my opinion on issues that affect my ethnic group.	1	2	3	4	5
3. I volunteer for political causes and candidates that I believe in	1	2	3	4	5
4. I participate in demonstrations or rallies about social issues that are important to me.	1	2	3	4	5
5. I meet with policy makers (e.g. city council, state and federal legislators, local elected officials) to advocate for social issues that I personally believe in	1	2	3	4	5
6. I volunteer for political causes and candidates that support the values of my ethnic group.	1	2	3	4	5
7. I make financial contributions to political causes or candidates who support the values of my ethnic group.	1	2	3	4	5
8. I use emails, and letters to influences others though media about issues that affect my ethnic group	1	2	3	4	5
9. I use social media sites (Facebook, Twitter, Linkedin) to influences others though media about issues that affect my ethnic group	1	2	3	4	5
10. I discuss bills/legislative issues that are important to my ethnic group with friends and family	1	2	3	4	5
11. I keep track of important bills/legislative issues that are being debated in Congress that affect my ethnic group	1	2	3	4	5
12. keep track of important bills/legislative issues that are being debated in Congress that I am personally interested in.	1	2	3	4	5
13. I discuss bills/legislative issues that are important to my coworkers and acquaintances	1	2	3	4	5
14. I work to elect policy makers who support the views of my ethnic group on important social issues	1	2	3	4	5
15. I vote in most local elections	1	2	3	4	5
16. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' health and well-being	1	2	3	4	5
17. State and federal policies affect individuals' access to quality education and resources.	1	2	3	4	5
18. State and federal policies affect individuals' access to social services.	1	2	3	4	5
19. Societal forces (e.g. public policies, resources allocation, human rights) affect individuals' educational performance	1	2	3	4	5
20. I am responsible to confront people who display signs of discrimination toward the elderly	1	2	3	4	5

21. I am responsible to confront people who display signs of discrimination toward culturally/ethnically different people or groups.	1	2	3	4	5
22. I am responsible to confront people who display signs of discrimination toward disabled individuals.	1	2	3	4	5

Legal Vulnerability

Please indicate which of the following best describes your current status. Mark all that apply.

1. I am a legal U.S. citizen.
2. I am a legal U.S. resident.
3. I have been granted Deferred Action for Childhood Arrivals (DACA)
4. I have a family member who has been granted DACA and was previously deported
5. I have a family member deported
6. I have a family member currently in detention
7. I was previously deported
8. I have been detained by immigration authorities in the past
9. I have a current deportation order
10. I am undocumented or unauthorized

Demographic Questionaire

General Instructions: This survey includes several demographic items and seven individual scales. Each scale has its own instructions. Because no part in the survey will ask for your name or any identifying information, your responses will be completely anonymous. There are no right or wrong answers. Please answer all items.

1. Your Age _____

2. Your Sex (Check only one) ____Male ____Female

3. What is your cultural/ethnic identity? (Check all that apply)

____Native American/American Indian ____White/Caucasian American
____ Arabic/Arab American ____African/African American
____Latino/Hispanic American ____Asian/Asian American
____Other, please specify _____

4. If you selected Latino/Hispanic American please indicate your country of origin
_____

5. How long have you lived in the United States? (Please specify years and months)
_____years and _____months

6. Please indicate your household income. (Check only one)
_____less than $20,000 _____between $60,000-$70,000
_____between $20,000-$30,000 _____between $70,000-$80,000
_____between $30,000-$40,000 _____between $80,000-$90,000
_____between $40,000-$50,000 _____between $90,000-100,000
_____between $50,000-$60,000 _____over $100,000

7. Which statement best describes your mother? (Check only one)
_____My mother was both born and grew up in the United States.
_____My mother was born outside of the United States.

8. Which statement best describes your father? (Check only one)
_____My father was born and grew up in the United States.
_____My father was born outside of the United States

9. Indicate your highest level of education completed. (Check only one)
_____Elementary School _____Middle School _____High School
_____Some college _____Bachelors degree _____Masters degree
_____Doctorate

10. What is the zip code of your current residence?
_____

11. Please indicate your legal status
_____U.S. Citizen _____Legal Permanent Resident _____Temporary Worker
_____Paperwork in process _____DACA recipient _____Unauthorized immigrant

Appendix L.

Solicitation and Informed Consent Email

Hello!

My name is Marti Trummer. I am a counseling psychology doctoral student at the University of Missouri-Kansas City and I am asking you to participate in a research study under the supervision of Dr. Johanna Nilsson. This study has been approved by the UMKC campus SSIRB (XXXXX). I am researching the relationships among legal status, social justice, and Mexican and Mexican Americans well-being. Your participation and dissemination of this study will help build the larger literature base of adjustment and coping psychology through better knowledge about immigrant mental health; and assist counseling psychologists with various approaches to aid in adjustment and enhance life satisfaction.

You and others you know are eligible to participate if you are (a) 18 years or older and (b) identify as Mexican or Mexican American. The study is **anonymous and confidential**; it will take approximately 20-25 minutes to complete. Your participation is completely voluntary and you may choose to withdraw at any time while completing the study.

As an incentive to participate, you will have the opportunity to enter your name in a raffle drawing to win one of 10 Amazon.com e-gift cards worth $25 each. If you choose to enter this, you will be asked to enter your contact information on a secure page that will NOT be linked to your survey responses.

If you would like to participate in this survey, please click the link below which will take you to the survey.

LINK

Thank you!

Appendix M.

Permission to Use Instruments

From: Arbona, Consuelo
[ConsueloA@Central.UH.EDU]
Sent: Tuesday, October 15, 2013 1:29 PM

To: Trummer, Margaret (UMKC-Student)
Subject: RE: Fear of Deportation scale

Margaret,
I would not say that what we used in that paper is a formally developed Fear of Deportation scale. The team that gathered the data that I worked with had developed a series of items as described in the paper to gather information about types of situations in which people felt fear of deportation and then translated them to Spanish. They had set the answer options as yes or no for each item. When I worked with the data, I used these items to develop a "crude" measure of fear of deportation by summing the number of yes. Since the response options for each item were dichotomous, I used the Kuder-Richardson coefficient to assess internal reliability.

With that said, based on the information provided in the article you could re-create the scale asking similar questions as we did or change some of the items if you wish. You could also consider using a Likert format for the response options and that way you may have more variability in the responses. Hope this helps.

Best wishes,
Consuelo Arbona, Ph.D.
Professor Counseling Psychology
University of Houston
Houston, Texas 77204

From: Trummer, Margaret (UMKC-Student)
Sent: Wednesday, October 09, 2013 9:54 PM

To: Arbona, Consuelo
Subject: Fear of Deportation scale

Hi Dr. Arbona,
I would like to know if I could please use the Fear of Deportation scale from your 2010 article Acculturation Stress Among Documented and Undocumented Latino Immigrants in the United States to use in my current dissertation research, where I will be testing the buffering effects of active coping like social justice advocacy on fear of deportation? Additionally, I was wondering if the scale has been translated and back-translated from your research? Also I was thinking of altering one of the questions to fit with the Latino community in this area and would appreciate your thoughts:
Change "wait in the street corner to get work" to "ask a company or individual for work"

I would greatly appreciate your help.
Thank you,
Marti Trummer
University of Missouri- Kansas City
Instructor- University College
Counseling Psychology Ph. D. Student
mtrummer@mail.umkc.edu

From: Trummer, Margaret (UMKC-Student)

Sent: Wednesday, November 27, 2013 1:12 AM

To: kbrabeck@ric.edu

Subject: legal vulnerability scale

Hi Dr. Brabeck,

I was wondering if I could please use the Parent legal vulnerability scale from The impact of detention and deportation on Latino immigrant children and families: A quantitative exploration, for my dissertation research? I am looking at how deportation fear may mediate the effect of legal vulnerability on mental health, and how acculturation may serve as a moderator.

I also wanted to get your thoughts and feedback about adding two items to the existing scale to capture another level of legal status.

Whether the participant

(9) has been granted DACA (10) has a family who has been granted DACA

Happy Holidays,
Marti Trummer
University of Missouri- Kansas City
Instructor- University College
Counseling Psychology Ph. D. Student
mtrummer@mail.umkc.edu

REFERENCES

Abrego, L. J. (2011), Legal consciousness of undocumented Latinos: Fear and stigma as barriers to claims-making for first- and 1.5-generation immigrants. *Law and Society Review, 45,* 337–370. doi:10.1111/j.1540-5893.2011.00435.x

Acevedo-Garcia, D., Sanchez-Vaznaugh, E., Viruell-Fuentes, E. & Almeida, J. (2012). Integrating social epidemiology into immigrant health research: A cross-national framework. *Social Science & Medicine*, *75* (12), 2060-2068.

Alamilla, S. G., Kim, B.S., & Lam, N. A. (2009). Acculturation, enculturation, perceived racism, minority status stressors and psychological symptomatology among Latino/as. *Hispanic Journal of Behavioral Sciences*, *32* (1), 55-76. doi: 10.1177/0739986309352770

Altarriba, J. & Santiago-Rivera, A. L. (1994). Current perspectives on using linguistic and cultural factors in counseling the Hispanic client. *Professional Psychology: Research and Practice, 25* (4), 388-397. doi: 10.1037/0735-7028.25.4.388

American Immigration Council. (July 2012). *Who and where the Dreamers are: A demographic profile of immigrants who might benefit from the Obama administration's deferred action initiative*. Immigrationpolicycenter.org, Retrieved on September 22, 2013

Andrews, A. R., Bridges, A. J., & Gomez, D. (2013). A multi-study analysis of conceptual and measurement issues related to health research on acculturation in Latinos. *Journal of Transcultural Nursing, 24* (2), 134-143. doi: 10.1177/1043659612472199

Androff, D. K., Ayón, C., Becerra, D., Gurrola, M., Salas, L., Kryski, J., Segal, E. (2011). U.S. immigration policy and immigrant children's well-being: The impact of policy shifts. *Journal of Sociology and Social Welfare, 38,* 77–98.

Arbona, C., Olvera, N., Rodrigues, N., Hagan, J., Linares, A., & Wiesner, M. (2010). Acculturative stress among documented and undocumented Latino immigrants in the United States. *Hispanic Journal of Behavioral Sciences, 32* (3), 362-384. doi: 10.1177/0739986310373210

Ashiabi, G. S. & O'Neal, K. K. (2015). Child social development in context: An examination of some propositions in Bronfenbrenner's bioecological theory. *SAGE Open, 5* (2) 1-14. doi: 10.1177/2158244015590840

Aspinwall, L. G., & Taylor, S. E. (1997). A stitch in time: Self-regulation and proactive coping. *Psychological Bulletin, 121* (3), 417.

Ayers, T. S., Sandler, I. N., West, S. G., & Roosa, M. W. (1996). A dispositional and situational assessment of children's coping: Testing alternative models of coping. *Journal of Personality, 64* (4), 923-58.

Ayón, C., & Becerra, D. (2013). Mexican immigrant families under siege: The impact of anti-immigrant policies, discrimination, and the economic crisis. *Advances in Social Work, 14,* 206-228.

Bach-y-Rita, E. W. (1985). *An ethnographic and psycho-social study of Latin American undocumented women immigrants in the San Francisco bay area,* (Unpublished doctoral dissertation). Wright Institute, Berkely, CA.

Bachmeier, J. D., Van Hook, J. & Bean, F. D. (2014), Can we measure immigrants' legal status? Lessons from two U.S. surveys. *International Migration Review, 48,* 538–566. doi:10.1111/imre.12059

Berry, J. W. (1976). *Human ecology and cognitive style: Comparative studies in cultural and psychological adaptation.* NewYork: Sage/Halsted.

Berry, J. W. (1997). Immigration, acculturation and adaptation. *Applied Psychology, 46*, 5–68.

Berry, J. W. (2004). Fundamental psychological processes in intercultural relations. In D. Landis, J. Bennett, & M. Bennett (Eds.), *Handbook of intercultural training*, (3rd ed.) (pp. 166 -184). Thousand Oaks, CA: Sage.

Berry, J. W., Kim, U., Minde, T., & Mok, D. (1987). Comparative studies of acculturative stress. *International Migration Review, 21*, 491–511.

Billings, A. G., & Moos, R. H. (1981). The role of coping responses and social resources in attenuating the stress of life events. *Journal of Behavioral Medicine, 4* (2), 139-57.

Blustein, D., Elman, N., & Gerstein, L. (2001, July). *Executive report: Social action groups (SAGs)*. Report from the National Counseling Psychology conference presented to the executive boards of Division 17 and the Council of Counseling Psychology Training Programs.

Brabeck, K., & Xu, Q. (2010). The impact of detention and deportation on Latino immigrant children and families: A quantitative exploration. *Hispanic Journal of Behavioral Sciences, 32,* 341–361. doi:10.1177/0739986310374053

Brittian, A. S., Toomey, R. B., Gonzales, N. A., & Dumka, L. E. (2013). Perceived discrimination, coping strategies, and Mexican origin adolescents' internalizing and

externalizing behaviors: Examining the moderating role of gender and cultural orientation. *Applied Developmental Science, 17,* 4-19.

Broesch, J., & Hadley, C. (2012). Putting culture back into acculturation: Identifying and overcoming gaps in the definition and measurement of acculturation. *The Social Science Journal, 49,* 375-385. doi: 10.1016/j.soscij.2012.02.004

Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist, 32* (7), 513-531. doi: 10.1037/0003-066X.32.7.513

Bronfenbrenner, U. (1979). Contexts of child rearing: Problems and prospects. *American Psychologist, 34*, 844 – 850. doi:10.1037/0003-066X.34.10.844

Bronfenbrenner, U. (1994). Ecological models of human development. In *International Encyclopedia of Education* 2nd Ed. Oxford: Elsevier.

Bronfenbrenner, U. (1999). Environments in developmental perspective: Theoretical and operational models. Friedman S. L. & Wachs, T. D. (Eds.), *Measuring environment across the life span: Emerging methods and concepts* pp. 3-28. Washington, DC: Psychological Association Press. doi: 10.1037/10317-000

Bronfenbrenner, U. (2005). *Making human beings human: Bioecological perspectives on human development*. Thousand Oaks, CA: SAGE Publications, Inc.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. InW. Damon & R. M. Lerner (Eds.), *Handbook of child psychology, Vol. 1: Theoretical models of human development* (6th Ed., pp. 793-828). New York: John Wiley.

Burman, M., Telles, C., Hough, R., Escobar, J. (1987). Measurement of acculturation in a community population of Mexican-Americans. *Hispanic Journal of Behavioral Sciences 9* (2), 105–130.

Bustamante, A. V., Fang, H., Garza, J., Carter-Pokas, O., Wallace, S. P., Rizzo, J. A., & Ortega, A. N. (2012). Variations in healthcare access and utilization among Mexican immigrants: The role of documentation status. *Journal of Immigrant Minority Health, 14,* 146-155. doi: 10.1007/s1090301094069

Cacari-Stone L., & Avila, M. (2012). Rethinking research ethics for Latinos: The policy paradox of health reform and the role of social justice. *Ethics and Behavior, 22,* 445-460. doi: 10.1080/10508422.2012.729995

Campos, B., Schetter, C. D., Walsh, J. A., & Schenker, M. (2007). Sharpening the focus on acculturative change: ARSMA-II, stress, pregnancy anxiety, and infant birthweight in recently immigrated Latinas. *Hispanic Journal of Behavioral Sciences, 29* (2), 209-224.

Caplan S. (2007). Latinos, acculturation, and acculturative stress: A dimensional concept analysis. *Policy, Politics, and Nursing Practice, 8,* 93–106.

Capps, R., Castaneda, R. M., Chaudry, A., & Santos, R. (2007). Paying the price: The impact of immigration raids on America's children. Washington, DC: Urban Institute.

Carver, C. S. (1997). You want to measure coping but your protocol' too long: Consider the brief cope. *International Journal of Behavioral Medicine, 4*, 92-96. doi: 10.1207/s15327558ijbm0401_6

Carver, C. S., & Scheier, M. F. (1994). Situational coping and coping dispositions in a stressful transaction. *Journal of Personality and Social Psychology, 66,* 184–195.

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56* (2), 267-286.

Cavazos-Rehg, P. A., Zayas, L. H., & Spitznagel, E. L. (2007). Legal status, emotional well-being and subjective health status of Latino immigrants. *Journal of National Medical Association, 99* (10), 1126-1131. doi: 10.1037/t00961-000

Center for Immigration Studies. (2016, November). *Illegal immigration*. Retrieved from: http://cis.org/Illegal

Cervantes, R. C., Fisher, D. G., Padilla, A. M., & Napper, L. E. (2016). The Hispanic Stress Inventory Version 2: Improving the assessment of acculturation stress. *Psychological Assessment, Sep 7, 2015, 28* (5), 509-522. doi: 10.1037/pas0000200

Cervantes, J. M., Mejia, O.L., & Mena, A. G. (2010). Serial migration and the assessment of extreme and unusual psychological hardship with undocumented Latina/o families. *Hispanic Journal of Behavioral Sciences, 32* (2), 275-291. doi: 10.1177/0739986310366286

Cervantes, R. C., Padilla, A. M., & Salgado de Synder, N. S. (1991). The Hispanic Stress Inventory: A culturally relevant approach toward psychological assessment. *A Journal of Consulting and Clinical Psychology, 3* (3), 438-447.

Chaudry, A., Capps, R., Pedroza, J., Castaneda, R.M., Santos, R. & Scott, M.M. (2010). *Facing our future: Children in the aftermath of immigration enforcement*. Washington, DC: Urban Institute. Retrieved from http://www.urban.org/UploadedPDF/412020_FacingOurFuture_final.pdf

Chavez, L. R. (1998). *Shadowed lives: Undocumented immigrants in American society*. 2nd Edition. San Diego, CA: Harcourt Brance

Coatsworth, J. D., Maldonado-Molina, M., Pantin, H., & Szapocznik, J. (2005). A person-centered and ecological investigation of acculturation strategies in Hispanic immigrant youth. *Journal of Community Psychology, 33* (2), 157-174. doi: 10.1002/jcop.20046

Cohen, D. (2001). Advocacy: Its many faces and a common understanding. In D. Cohen, R. de la Vega, & G. Watson (Eds.), *Advocacy for social justice: A global action and reflection guide*, (pp. 7-10). Bloomfield, CT: Kumarian Press.

Compas, B.E., Malcarne, V.L., & Fondacaro, K.M. (1988). Coping with stressful events in older children and young adolescents. *Journal of Consulting and Clinical Psychology, 56,* 405–41. doi: 10.1037//0022-006X.56.3.405

Constantine, M. G., Hage, S. M., Kindaichi, M. M., & Bryant, R. M. (2007). Social justice and multicultural issues: Implications for the practice and training of counselors and counseling psychologists. *Journal of Counseling and Development, 85* (1), 24-29. doi: 10.1002/j.1556-6678.2007.tb00440.x

Cuellar, I., Arnold, B., & Maldonado, R. (1995). Acculturation rating scale for Mexican Americans-II: A revision of the original ARSMA scale. *Hispanic Journal of Behavioral Sciences, 17* (3), 275-304 doi: 10.1177/07399863950173001

Daza, P., Novy, D. M., Stanley, M. A., & Averill, P. (2002). The depression anxiety stress scale-21: Spanish translation and validation with a Hispanic sample. *Journal of Psychopathology and Behavioral Assessment*, *24* (3), 195-205. doi: 10.1023/A:1016014818163

Dreby, J. (2012). The burden of deportation on children in Mexican immigrant families. *Journal of Marriage and Family, 74,* 829-845. doi: 10.1111/j.1741-3737.2012.00989.x

Driscoll, M. W., & Torres, L. (2013). Acculturative stress and Latino depression: The mediating role of behavioral and cognitive resources. *Cultural Diversity and Ethnic Minority Psychology, 19* (4), 373-382. doi: 10.1037/a0032821

Ebata, A. T., & Moos, R. H. (1991). Coping and adjustment in distressed and healthy adolescents. *Journal of Applied Developmental Psychology, 12* (1), 33-54. doi: 10.1016/0193-3973(91)90029-4

Edwards, L. M., & Romero, A. J. (2008). Coping with discrimination among Mexican descent adolescents. *Hispanic Journal of Behavioral Sciences, 30,* 24–39. doi: 10.1177/0739986307311431

Eysenck, M. W., Derakshan, N., Santos, R., & Calvo, M. G. (2007). Anxiety and cognitive performance: Attentional control theory. *Emotion, 7* (2), 336-353. doi: 10.1037/1528-3542.7.2.336

Farley, T., Galves, A., Dickinson, L. M., & Perez, M. J. Z. (2005). Stress, coping, and health. A comparison of Mexican immigrants: Mexican American and non-Hispanics Whites. *Journal of Immigrant Health, 7,* 213–220.

Finch B. K., & Vega, W. A. (2003). Acculturation stress, social support, and self-rated health among Latinos in California. *Journal of Immigrant Health, 5* (3), 109-117.

Fraley, R. C., Roisman, G. I., Booth-LaForce, C., Owen, M. T., & Holland, A. S. (2013). Interpersonal and genetic origins of adult attachment styles: A longitudinal study

from infancy to early adulthood. *Journal of Personality and Social Psychology, 104,* 817-838. doi: 10.1037/a0031435

Fussell, E. (2011). The deportation threat dynamic and victimization of Latino migrants: Wage theft and robbery. *The Sociological Quarterly, 52,* 593–615. doi:10.1111/j.1533-8525.2011.01221.x

Galindo, R. (2012). Undocumented and unafraid: The DREAM Act 5 and the public disclosure of undocumented status as a political act. *The Urban Review, 44* (5), 589-611. doi: 10.1007/s11256-012-0219-0

Gildersleeve, R. E., Rumann, C., & Mondragón, R. (2010). Serving undocumented students: Current law and policy. *New Directions for Student Services, 1,* 5–18. doi:10.1002/ss.364

Golash-Boza, T., & Hondagneu-Sotelo, P. (2013). Latino immigrant men and the deportation crisis: A gendered racial removal program. *Latino Studies, 11* (3), 271-292. doi: 10.1057/lst.2013.14

Gonzalez-Barrera, A. (2015, November*). More Mexicans leaving than coming to the U.S.* Pew Research Center Hispanic Trends. Retrieved from http://www.pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-the-u-s/

Gonzalez-Barrera, A. & Krogstad, J. M. (2014, October 2). *U.S. deportations of immigrants reach record high in 2013*. Pew Research Center. Retrieved from http://www.pewresearch.org/fact-tank/2014/10/02/u-s-deportations-of-immigrants-reach-record-high-in-2013/

Gordon, M. M. (1964). *Assimilation in American Life: The role of race, religion and national origins*. New York: Oxford. University Press

Graves, T. D. (1967). Acculturation, access, and alcohol in a tri-ethnic community. *American Anthropologist, 69* (3-4), 306-321. doi: 10.1525/aa.1967.69.3-4.02a00030

Guisepi, R. A. (2007, March). *Hispanic Americans*. International World History Project. Retrieved from http://history-world.org/hispanics.htm

Gulbas, L.E., Zayas, L.H., Yoon, H., Szlyk, H., Aguilar-Gaxiola, S. & Natera, G. (2015). A mixed-method study exploring depression in U.S. citizen-children in Mexican immigrant families. *Child Care Health Development, 42* (2), 220-230. doi: 10.1111/cch.12307

Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research, 50,* 1-22. doi: 10.1080/00273171.2014.962683

Hayes, A. F., & Preacher, K. J. (2014). Statistical mediation analysis with a multi-categorical independent variable. *British Journal of Mathematical and Statistical Psychology, 67,* 451-470. doi: 10.1111/bmsp.12028

Hembree-Kigin, T. L., & McNeil, C. B. (1995). *Parent–child interaction therapy.* New York: Plenum Press.

Henderson, S. W., & Baily, C. D. (2013). Parental deportation, families, and mental health. *Journal of the American Academy of Child and Adolescent Psychiatry, 52* (5), 451-453.doi: 10.1016/j.jaac.2013.007

Heppner, P. P., Wampold, B. E., & Kivlighan, D. M. (2008). Quantitative descriptive designs. *Research Designs in Counseling, 3,* 224-255.

Heyman, J. M., Nunez, G. G., & Talavera, V. (2009). Healthcare access and barriers for unauthorized immigrants in El Paso County, Texas. *The Journal of Health Promotion and Maintenance, 32* (1), 4-21.

Horevitz, E., & Organista, K. C. (2012). The Mexican health paradox: Expanding the explanatory power of the acculturation construct. *Hispanic Journal of Behavioral Sciences, 35* (1), 3-34. doi: 10.1177/0739986312460370

Ibrahim, F.A., & Heuer, J.R. (2016). Incorporating social justice and advocacy in counseling and psychotherapy. *Cultural and Social Justice Counseling, 1,* 99-122. doi: 10.1007/978-3-319-18057-1_5

Ingram, M. McClelland, D. J., Martin, J., Caballero, M. F., Mayorga, M. T., & Gillespie, K. (2010). Experiences of immigrant women who self-petition under the Violence Against Women Act. *Violence Against Women, 16* (8), 858-880. doi: 10.1177/1077801210376889

Israel, B.A., Schulz, A.J., Parker, E.A., & Becker, A.B. (1998). Review of community-based research: Assessing partnership approaches to improve public health. *Annual Review of Public Health, 19,* 173-202.

Kanstroom, D. (2012). *Aftermath: Deportation law and the new American diaspora*. New York: Oxford University Press.

Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York: Guilford Press.

Koneru, V. K., Weisman de Mamani, A. G., Flynn, P. M., & Bentacourt, H. (2007). Acculturation and mental health: Current findings and recommendations for future

research. *Applied and Preventive Psychology 12,* 76-96. doi: 10.1016/j.appsy.2007.07.016

LaFromboise, T., Coleman, H. L., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin, 114* (3), 395.

Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.

Letiecq, B. L., Grzywacz, J. G., Gray, K. M., & Eudave, Y. M. (2013). Depression among Mexican men on the migration frontier: The role of family separation and other structural and situational stressors. *Journal of Immigration Minority Health, 16* (6), 1193–1200. doi: 10.1007/s10903-013-9918-1

Linthicum, K. (2016, April). More people are filing to become citizens in the face of anti-immigration politics. *L.A. Times.* Retrieved from: http://www.latimes.com/politics/la-me-calif-trump-citizenship-20160422-story.html

Liu, F. F., Gonzales, N. A., Fernandez, A. C., Millsap, R. E., & Dumka, L. E. (2011). Family stress and coping for Mexican origin adolescents. *Journal of Clinical Child and Adolescent Psychology, 40* (3), 385-397. doi: 10.1080/15374416.2011.563463

Lopez, M. H., Morin, R., & Taylor, P. (2010). *Illegal immigration backlash worries, divides Latinos*. Retrieved from The Pew Hispanic Center website, http://pewhispanic.org/files/reports/128.pdf

Lopez-Class, M., Castro, F. G., & Ramirez, A. G. (2011). Conceptions of acculturation: A review and statement of critical issues. *Social Science and Medicine, 72,* 1555-1562

Lovibond, P. F., & Lovibond, S. H. (1995). *Manual for the Depression Anxiety and Stress Scales*. (2nd Ed.) Sydney: Psychological Foundation.

Marín, G. (1992). Issues in the measurement of acculturation among Hispanics. In KF Geisinger (Ed.), *Psychological Testing of Hispanics* (pp. 223–351). Washington, DC: American Psychological Association

Massey, D. S., & Bartley, K. (2005). The changing legal status of immigrants: A caution. *International Migration Review, 39* (2)*,* 469–484. doi: 0.1111/j.1747-7379.2005.tb00274

Meyler, D., Stimpson, J. P., & Peek, M. K. (2006). Acculturation and self-esteem among older Mexican Americans. *Aging and Mental Health, 10* (2), 182-186. doi: 10.1080/13607860500310450

Miller, M. J., Yang, M., Lim, R. H., Hui, K., Choi, N., Fan, X., Lin, L., Grome, R. E., Ferrell, J. A., & Blackmon, S. (2013). A test of the domain-specific acculturation strategy hypothesis. *Cultural Diversity and Ethnic Minority Psychology, 19* (1)*,* 1-12. doi: 10.1037/a0030499

Moscicki, E. K., Locke, B. Z., Rae, D. S., & Boyd, J. H. (1989) Depressive symptoms among Mexican Americans: The Hispanic health and nutrition examination study. *American Journal of Epidemiology, 130* (2), 348–360.

Mummendey, A., Kessler, T., Klink, A., & Mielke, R. (1999). Strategies to cope with negative social identity: Predictions by social identity theory and relative deprivation theory. *Journal of Personality and Social Psychology, 76* (2), 229-245.

National Immigration Law Center. (2014, November). *Immigration reform and Obama executive actions*. Retrieved from https://www.nilc.org/issues/immigration-reform-and-executive-actions/

National Immigration Law Center. (2016, April). *Immigration enforcement*. Retrieved from https://www.nilc.org/issues/immigration-enforcement/

Negy, C. (2012). The importance of considering undocumented immigration from multiple perspectives in the context of social justice. *Analyses of Social Issues and Public Policy, 12,* 138–143. doi:10.1111/j.1530-2415.2011.01268.x

Nilsson, J. E., Schale, C. L., & Khamphakdy-Brown, S. (2011). Facilitating trainees' multicultural development and social justice advocacy through a refugee/immigrant mental health program. *Journal of Counseling and Development, 89,* 413-422. doi: 10.1002/j.1556-6676.2011.tb02838.x

Norsworthy, K. L., Abrams, E. M., & Lindlau, S. (2012). Activism, advocacy, and social justice in feminist multicultural counseling psychology. In C. Z. Enns & E. N. Williams (Eds.), *The Oxford handbook of feminist counseling psychology*. New York: Oxford University Press.

Odo, F. (2002). *The Columbia documentary history of the Asian American experience* (1st Edition). Columbia University Press. New York.

O'leary, A. O., & Romero, A. J. (2011). Chicana/o students respond to Arizona's anti-ethnic studies bill, SB 1108: Civic engagement, ethnic identity, and well-being. *Aztlan: A Journal of Chicano Studies, 36* (1), 9-36.

Ortega, A. N., Fang, H., Perez, V. H., Rizzo, J. A., Carter-Pokras, O., & Wall S P. (2007). Health Care access, use of services, and experiences among undocumented Mexicans and other Latinos. *Archives of International Medicine, 167* (21), 2354-2360. doi:10.1001/archinte.167.21.2354.

Osman, A., Wong, J. L., Bagge, C. L., Freedenthal, S., Gutierrez, P. M., & Lozano, G. (2012). The depression anxiety stress scales-21 (DASS-21): Further examination of dimensions, scale reliability, and correlates. *Journal of Clinical Psychology, 68* (12), 1322-1338. doi:10.1002/jclp.2908

Padilla, A. M. (2006). Bicultural social development. *Hispanic Journal of Behavioral Sciences, 28* (4), 467-497. doi: 10.1177/0739986306294255

Padilla, A. M., Cervantes, R. C., Maldonado, M., & Garcia, R. E. (1998). Coping responses to psychosocial stressors among Mexican and Central American immigrants. In P. B. Organista, K. Chun & G. Marin (Eds.), *Readings in ethnic psychology* (pp. 249-259). New York, NY: Routledge.

Perczek, R., Carver, C.S., Price, A.A., & Pozo-Kaderman, C. (2000). Coping, mood, and aspects of personality in Spanish translation and evidence of convergence with English versions. *Journal of Personality Assessment, 74* (1), 63–87. doi: 10.1207/S15327752JPA740105

Perez, Z. J., Luna, A., Reyna A., & Silva, L. (2015). *A portrait of deferred action for childhood arrivals recipients: Challenges and opportunities three-years later.* Retrieved from https://unitedwedream.org/wp-content/uploads/2015/10/DACA-report-final-1.pdf

Pew Hispanic Center. (2013, January). *A nation of immigrants a portrait of the 40 million, including 11 million unauthorized.* Washington, DC: Pew Hispanic Center.

Pina, A. A., Villalta, I. K., Oritz, C. D., Gottschall, A. C., Costa, N. M., & Weems, C. F. (2008). Social support, discrimination, and coping as predictors of posttraumatic stress reactions in youth survivors of Hurricane Katrina. *Journal of Clinical Child and Adolescent Psychology, 37* (3), 564-574. doi: 10.1080/15374410802148228

Potochnick, S.R., & Perreria, K.M. (2010). Depression and anxiety among first-generation immigrant Latino youth: Key correlates and implications for future research. *The Journal of Nervous and Mental Disease, 198* (7), 470–477. doi: 10.1097/NMD.0b013e3181e4ce24

Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research, 42* (1), 185-227 doi: 10.1080/00273170701341316

Prilleltensky, I. (2003). Understanding, resisting, and overcoming oppression: Toward psychopolitical validity. *American Journal of Community Psychology, 31*, 195–202. doi: 10.1023/A:1023043108210

Rappaport, J. (1981). In praise of paradox: A social policy of empowerment over prevention. *American Journal of Community Psychology*, *9,* 1–25.

Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American Anthropologist, 38,* 149-152.

Rosenblum, M. R., Kandel, W. A. Seelke, S. R., & Wasem, R. E. (2012, June). *Mexican migration to the United States: Policy and trends*. Congressional Research Service, www.crs.gov. CRS Report for Congress.

Sam, D. L., & Berry, J. W. (2006). *The Cambridge handbook of acculturation psychology*. New York, NY: Cambridge University Press.

Santos, C. E., & Menjivar, C. (2013). Youths' perspective on Senate Bill 1070 in Arizona: The socio-emotional effects of immigration policy. *Association of Mexican-American Educators (AMAE) Special Invited Issue, 7* (2), 7-17.

Schlomer, G. L., Bauman, S., & Card, N. A. (2010). Best practices for missing data management in counseling psychology. *Journal of Counseling Psychology, 57* (1), 1-10. doi: 10.1037/a0018082

Schwalbe, K. (2010) *Mexican immigration to the United States*. Doctoral Dissertation, University of Delaware, Newark.

Serdarevic, M., & Chronister, K. M. (2005). Research with immigrant populations: The application of an ecological framework to mental health research with immigrant populations. *International Journal of Mental Health Promotion, 7* (2)*,* 24-34.

Stolberg, S. G. (2013, March 7). Latinos gain political muscle, and fund-raisers show how. *The New York Times*. Retrieved from http://www.nytimes.com/2013/03/08/us/politics/3-fund-raisers-show-latinos-rising-clout.html

Sullivan M. M., & Remh, R. (2005). Mental health of undocumented Mexican immigrants: A review of the literature. *Advances in Nursing Science, 28* (3), 240-251.

Torres, L., Driscoll, M. W., & Voell, M. (2012). Discrimination, acculturation, acculturative stress, and latino psychological distress: A moderated mediational model. *Cultural Diversity & Ethnic Minority Psychology, 18(1),* 17–25. doi: 10.1037/a0026710

Trudge, J. R., Mokrova, I., Hatfield, B. E., & Karnik, R. B. (2009). Uses and misuses of Bronfenbrenner's bioecological theory of human development. *Journal of Family Theory & Review, 1*, 198–210.

Umaña-Taylor, A. J., & Updegraff K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural

orientation, self-esteem, and depressive symptoms. *Journal of Adolescence, 30* (4), 549-567. doi: 10.1016/j.adolescence.2006.08.002

Umaña-Taylor, A. J., Vargas-Chanes, D., Garcia, C. D., & Gonzales-Backen, M. A. (2008). A longitudinal examination of Latino adolescents' ethnic identity, coping with discrimination, and self-esteem. *Journal of Early Adolescence, 28,* 16–50. doi: 10.1177/0272431607308666.

U.S. Census Bureau. (2015). *American Community Survey*. Retrieved from: https://www.census.gov/programs-surveys/acs/

Vega, W.A. Kolody, B., & Valle, J.R. (1987). Migration and mental health: An empirical test of depression risk factors among immigrant Mexican women. *International Migration Review, 21* (3), 512-30.

Vera, E. M., & Speight, S. L. (2003). Multicultural competence, social justice, and counseling psychology: Expanding our roles. Social Justice Forum. *The Counseling Psychologist, 31* (3), 253-272. doi: 10.1177/0011000002250634

Ward, C., & Kus, L. (2012). Back to and beyond Berry's basics: The conceptualization, operationalization and classification of acculturation. *International Journal of Intercultural Relations, 36,* 472-485. doi: 10.1016/j.ijintrel.2012.02.002

Warren, R., & Passel, J. S. (1987). A count of the uncountable: estimates of undocumented aliens counted in the 1980 United States Census. *Demography, 24(3),* 375-393.

Xu, Y. (2011). Ethnic variations in the relationship between socioeconomic status and psychological distress among Latino adults. *Race and Social Problems, 3*(3), 212-224. doi: 10.1007/s12552-011-9048-0

Yoon, E., Chang, C., Kim, S., Clawson, A., Cleary, S. E., Hansen, M., Bruner, J. P., Chan, T. K., & Gomes, A. M. (2013) A meta-analysis of acculturation/enculturation and mental health. *Journal of Counseling Psychology, 60*(1), 15-30. doi: 10.1037/a030652

Yakushko, O., Watson, M. & Thompson, S. (2008). Stress and coping in the lives of recent immigrants and refugees: Considerations for counseling. *International Journal for Advancement of Counseling, 30,* 167-178. doi: 10.1007/s10447-008-9054-0

VITA

Margaret (Marti) Trummer was born January 25, 1986, in Omaha, Nebraska. After receiving her high school diploma from V.J. and Angela Skutt Catholic High School, she attended Northwest Missouri State University on a soccer scholarship. There, Ms. Trummer completed a study abroad program in Monterrey, Mexico and her Bachelor of Arts degree in Psychology and Sociology with a minor in Spanish. In 2013, she completed her Master of Arts degree in Counseling at the University of Missouri-Kansas City (UMKC). Ms. Trummer has taught at UMKC, graduate courses in the Counseling Psychology and Counselor Education department as well as undergraduate courses in the University College department. She completed her pre-doctoral internship at University of Houston's Counseling Assessment and Psychology Services department. Currently, Ms. Trummer serves as an assessment specialist and career counselor at the University of Houston-Downtown in the Career Development Center.