The Relationship of Immigration Status with Mexican Immigrant Maternal and Child Well-Being in the United States

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ITESO

THE RELATIONSHIP OF IMMIGRATION STATUS WITH MEXICAN IMMIGRANT

MATERNAL AND CHILD WELL-BEING IN THE UNITED STATES

A dissertation

By

ANAYELI LOPEZ

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of the requirements for the degree of
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Dissertation Co-Chairs: Dr. Ruth Elizabeth Prado Pérez and Dr. Thomas Crea

Abstract

Undocumented Mexican immigrants and their children make up a considerable proportion of the United States population at risk of mental health problems. Yet research to inform the mental health of undocumented Mexican immigrants and their children is very limited, and the majority of existing studies are qualitative; both types of studies are needed to understand better the relationship among different factors that may influence the mental health of immigrant parents and their children. This three-paper dissertation analyzed the implications of parents' and children's immigration status for the mothers' mental health and the children's behavioral problems. It utilized subsamples from the Los Angeles Family and Neighborhood Survey (L.A. FANS), a survey representative of Los Angeles County, which includes direct measures of respondent's immigration status. Paper 1 used path analysis to examine the relationship between the mothers' immigration status and major depression, and whether self-efficacy served as a mediator. Surprisingly, undocumented mothers had fewer symptoms of major depression compared with Mexican American and documented mothers. However, when self-efficacy mediated the relationship, immigration status lowered self-efficacy increasing symptoms of major depression. Paper 2 used hierarchical regression analysis to examine the associations of mother's and children's immigration status with children's behavioral problems.

Immigration status was significantly associated with internalizing problems, but not with externalizing problems. For children in mixed-status families, the influence of immigration status on internalizing problems was more severe for children in middle childhood compared to children in early childhood. The influence of immigration status on internalizing problems was more severe for adolescents compared to children in early childhood and middle childhood. Also, the mother's self-efficacy ameliorated the negative influence of immigration status on children's behavioral problems (internalizing and externalizing) for girls in undocumented and mixed-status families. Finally, marital conflict exacerbated the negative effects of immigration status on children's behavioral problems (internalizing and externalizing) for girls in undocumented and mixed-status families. Paper 3 utilized path analysis to examine the mediating role of mother's mental health (e.g., major depression and self-efficacy) and parenting stress in the relationship between immigration status and children's behavioral problems. It was found that immigration status influences the mothers' mental health and parenting stress, which in turn influences the behavioral functioning of children in middle childhood and adolescents. Results of these three studies will help inform practice and policy by addressing critical gaps in the literature impacting a growing number of undocumented immigrant mothers and their children.

DEDICATION

To my husband, Juan Luis, for your unconditional support and love throughout my journey of doctoral studies. Thank you for encouraging me and being there for me every step of the way, and for believing in me, even when I didn't believe in myself.

To my children, Gabriel and Tony, you are my driving force. My work and my whole life are dedicated to you.

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Above all, I dedicate my work to God who gave me the wisdom, knowledge, and strength needed to successfully complete this journey. I owe him everything I am and everything I have accomplished.

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CHAPTER I: DISSERTATION INTRODUCTION

Rationale and Statement of the Problem

Immigration is a current important issue in the United States on both local and national levels. One issue of much debate includes the current number of undocumented immigrants; defined as those who entered the country without inspection or remained in the country once their visas expired (Niven, 2012). The immigrant population in the United States grew tremendously over the 1990s and 2000s. From the early 1990s to the mid 1990s, the immigrant population entering the U.S. was more 1.1 million migrants per year (Pew Research Center, 2005). In the peak years of 1999 and 2000, the annual inflow was close to 1.5 million migrants per year. Between 1990 and 2000, 13 million new immigrants arrived in the U.S. Changes to immigration laws did not keep up with the changing factors in immigrant sending countries such as Mexico (e.g., change in terms of international trade, economic crises, violence) nor did they keep pace with the increasing demand for workers in the U.S. economy (Durand, Massey, & Parrado, 1999). The mismatch between social reality and immigration policy led to a failure in the U.S. immigration system, resulting in a population of approximately 11.7 million undocumented immigrants living in the United States (Pew Hispanic Center, 2017). Mexico is the leading country of origin for undocumented immigrants, with 58% (i.e. 6.5 million) undocumented immigrants in the U.S. coming from Mexico (Pew Hispanic Center, 2017).

Some undocumented immigrants (including those who entered with a visa and later became undocumented when their visas expired) brought their children with them; others initially came to the country without their children and reunited with them in the U.S. years after; yet others bore children in the U.S. These families created a growing and increasingly visible number of children with undocumented immigrant parents. Between 2010–2014, about

4.5 million U.S. citizen children under the age of 18 lived with a parent who was undocumented, and the majority of them were from Latin America (American Immigration Council, 2017). Additionally, approximately 1 million undocumented children are themselves undocumented and have spent at least part of their childhood in the U.S. as undocumented immigrants (American Immigration Council, 2017).

Psychological distress for immigrants can result in response to immigration-related challenges that immigrants experience as they adapt to life in a new country. Some of these stressors include separating from one's family and friends, learning a new language, and adapting to a new culture (Cavazos-Regh, Zayas, & Spitznagel, 2007). Based on the limited research available, researchers have found that immigrants without authorization can experience added psychological distress as a result of the life-threatening experiences they may have encountered during their journey to the U.S. (Perez & Fortuna, 2005; Sullivan & Rehm, 2005). It is also likely that unauthorized immigration status can exert a negative psychological influence on immigrants' adaptation and experience once they arrive in the U.S.. Some of the unique factors that influence the mental health of undocumented Mexican immigrants include the experience of failing to thrive in their country of origin, the trauma associated with dangerous border crossings, lack of legal protections, limited resources, inability to visit family left behind, constant fear of being deported, stigmatization, marginalization, and isolation (Arbona et al., 2010; Sullivan & Rehm, 2005). Furthermore, undocumented immigrants are at a greater disadvantage, compared to their documented counterparts, given their limited legal rights in the United States and their risk of exposure to emotional, financial, and physical exploitation (Díaz-Lázaro, Verdinelli, & Cohen, 2012).

Research has shown that stressors related to undocumented status do not only affect undocumented individuals; they also have significant repercussions on the physical, emotional, developmental, and economic circumstances of U.S. citizen family members (Migration Policy Institute, 2015). Research has also shown that growing up with undocumented parents poses risks to children's development and well-being as a result of increased family stress, fear of deportation, reduced income, poor working conditions, dilapidated housing, and poor access to social services and community supports (Yoshikawa, 2011; Yoshikawa & Kalil, 2011). For these reasons, it is particularly important for social workers and other professionals working with immigrants and their families to understand how immigration status impacts the well-being of immigrant families and be able to provide appropriate interventions.

Unfortunately, due to data limitations, and privacy concerns, only a very limited number of quantitative studies have examined the well-being of undocumented mothers and their children at a time when immigration is a pressing issue in the United States. Until recently, little quantitative research has been conducted on the mental health of undocumented mothers and children of undocumented immigrants. Existing research has shown that Mexican-origin youth whose parents are immigrants have better mental health outcomes compared to Mexican-origin youth with U.S.-born parents (Gonzalez et al., 2008; Gonzalez, Fabrett, & Knight, 2009). However, very few studies have considered how the immigration status of parents and children can serve as a source of heterogeneity among children of undocumented immigrants. This dissertation seeks to explore the relationship between children's and mothers' immigration status and Mexican immigrant maternal and child mental health outcomes.

Immigrant rights have been a critical issue for social workers in the United States throughout the profession's history. The pioneers of the field, Jane Addams and Edith and Grace Abbott, developed their expertise while working at centers of residence and social services for migrants who recently arrived in the United States (Hansan, 2011). Presently, the National Association of Social Workers (NASW) recognized that immigrants face unique challenges due to their immigration status and that it is important to consider how their status has an impact on their well-being and social service provision (National Association of Social Workers, 2015). The topic of this dissertation is relevant for social work practitioners and researchers and other professionals working with immigrant families more than ever before. Within a year of taking office, the Trump presidential administration made several changes to the U.S. immigration system through a series of executive orders (Migration Policy Institute, 2017). Some of these changes include: increasing the number of detentions and removals of undocumented immigrants by changing the priorities for immigration enforcement, banning citizens of eight different countries from entering the United States, cancelling the Deferred Action for Childhood Arrivals (DACA) program, and ending Temporary Protected Status (TPS) for nationals of several countries. The immigration practices of the Trump administration are in direct violation of the National Association of Social Worker (NASW) Code of Ethics that are based on the profession's core values including service, social justice, dignity and worth of the person, and the importance of human relationships (Haidar, 2017). By gaining a more in-depth understanding of how immigration status affects the mental health of Mexican immigrant mothers and their children, this study will expand the literature related to a critical issue in the United States. Results from the current study can contribute to the core values of the social work profession, by

providing implications for research, policy, and practice related to undocumented mothers and their children.

Aims of the Three Papers

Given the relationships established in the literature between immigration status and emotional and psychological well-being, and given the relative lack of information on how children's well-being is implicated in these relationships, this dissertation is guided by the following three aims. Each aim is conceptualized as a distinct research study.

1. The aim of paper #1 is to examine the relationship between immigration status and Mexican immigrant mothers' mental health and the mediating effects of mothers' self-efficacy.

2. The aim of paper #2 is to assess the relationship between immigration status and externalizing and internalizing problems among Mexican-origin children. This paper also examines the moderating role of age, gender, maternal mental health, and family environment.

3. The aim of paper #3 is to test the relationship between family immigration status and behavioral outcomes among children of Mexican origin. This paper also tests the mediating role of maternal factors, including mothers' self-efficacy, maternal depression, and parenting stress.

Definitions of Concepts

Collective efficacy. Collective efficacy is a form of social capital and is a concept that measures individuals' perceptions of social cohesion among neighbors combined with the willingness to intervene on behalf of others for the common good (Sampson, Raudenbush, & Earls, 1997). Collective trust increases social control for sustaining normative values and

behaviors in neighborhoods (Sampson et al., 1997). The concept of collective efficacy is founded on Albert Bandura's work on perceived self-efficacy (Bandura, 1977) but extends the concept of efficacy to communities. Bandura claimed that a community's strength could be partially attributed to the residents' beliefs that working together can solve collective problems. The stronger this belief, the more effort is invested in collective behaviors for the good of the community (Bandura, 1995). Social cohesion (trust between neighbors), intergenerational closure (ties between adults and children in a neighborhood), and informal social control (the active involvement of adults in a neighborhood to protect children) are important dimensions of collective efficacy that may promote positive child outcomes (Sampson et al., 1997).

    Internalizing and externalizing problems. Children's emotional and behavioral functioning are key developmental outcomes, since they serve as strong predictors of future adjustment. Internalizing behavioral problems have been characterized as over-control of emotions, and they are manifested as depression, withdrawal, anxiety, feelings of worthlessness or inferiority, and dependency (Guttmannova, Szanyi, & Cali, 2008). On the other hand, externalizing behavioral problems have been defined by an under-control of emotions, such as difficulties with interpersonal relationships, displays of aggression, and delinquency (Guttmannova et al., 2008). Internalizing and externalizing behavioral problems during middle childhood can lead to negative consequences in later life (Bornstein, Hahn, & Haynes, 2010).

    Immigration status. There are a variety of immigration statuses. One of the categories into which immigrants fall is the documented immigrant category. This group of immigrants includes lawful permanent residents and naturalized citizens. Lawful permanent residents, or green card holders, are noncitizens who are given permission by the U.S. government to obtain permanent residence (Mulder, Guzmán, & Brittingham, 2001). Holding permanent residency

means that these individuals can live in the United States indefinitely and have the right to seek employment and U.S. citizenship via the naturalization process (Mulder et al., 2001). Naturalized citizens are foreign-born individuals who became citizens after fulfilling the requirements established by Congress under the Immigration and Nationality Act. They have the same rights as U.S.-born individuals, except that they cannot ever become the U.S. vice president or president. Finally, another category used in this study is undocumented immigrants, who are defined as the noncitizens who entered the country without inspections or entered with a temporary visa and overstayed their visa (Mulder et al., 2001). Mixed-status families refers to those families in which at least one of the parents is undocumented (Passel & Cohn, 2011).

Marital conflict. Marital conflict arises when individuals in a marriage indicate disagreement in a range of issues (Stocker, Richmond, Low, Alexander, & Elias, 2003). Couples can use either positive communication tactics during conflict discussions or destructive tactics such as name-calling, cursing, insulting, etc. Paper 2 of this dissertation examines how marital conflict and either exacerbate or mitigate the negative effects of undocumented and mixed-status on the behavioral functioning of children.

Maternal depression. The American Psychological Association (2012) describes the experience of mothers who have major depressive disorder as:

A depressed mood and/or loss of interest or pleasure in life activities for a least 2 weeks and at least five of the following symptoms that cause clinically significant impairment in social, work, or other important areas of functioning almost every day—depressed mood most of the day, diminished interest or pleasure in all or most activities, significant unintentional weight loss or gain, insomnia or sleeping too much, agitation or psychomotor retardation noticed by others, fatigue or loss of energy, feelings of

worthlessness or excessive guilt, diminished ability to think or concentrate, or indecisiveness, and recurrent thoughts of death (p. 160).

Parenting stress. Parenting stress refers to the feelings of distress or discomfort that result when parenting demands exceed the perceived ability to meet those demands and succeed in the parenting role (Abidin, 1990). While parenting stress is a normal experience of being a parent, it increases when the demands exceed the expectations. For example, parenting stress occurs when a parent is unable to restore functioning following the introduction of a stressor related to parenting, such as a child's difficult behavior, by engaging in their regular parenting coping strategies (Hayes & Watson, 2013).

Self-efficacy. General self-efficacy beliefs are beliefs an individual has about his or her ability to overcome particular obstacles. One example of a self-efficacy belief is, "I am capable of dealing with most problems that come up in life" (Waldrop, Lightsey, Ethington, Woemmel, & Coke, 2001). In 1989, Bandura also conceptualized self-efficacy beliefs in situations specifically related to particular behaviors, such as academics, health-related behaviors, and social abilities. Such beliefs are vital in prompting individuals to take action in the area of their lives related to their self-efficacy beliefs. Research continues to focus on a general understanding of self-efficacy, which serves a protective role in various behavioral and psychological outcomes (Maddux & Gosselin, 2003). This study utilizes the concept of general self-efficacy beliefs and how they may serve as a protective mediating factor for undocumented Mexican mothers.

Literature Review

The following section reviews studies on undocumented immigrants and their children. Specifically, the literature topics include the historical overview of U.S. immigration policy, immigrant health paradox and mental health, well-being of children in mixed-status families,

family systems and children's well-being, and collective efficacy. This section helps shape this dissertation by reviewing the factors that influence the mental health of immigrant mothers and their children and by identifying the gap in the literature related to undocumented parents and their children's well-being.

Historical Overview of U.S. Immigration Policy

Factors in society such as public policies, societal norms, and shared attitudes shape the developmental outcomes of unauthorized immigrant parents and their children. Even before a family immigrates to the United States macrosystemic factors (i.e., the global economy, the country of origin's economic conditions and emigration polices, and immigration policies in the U.S.) influence whether families migrate without documents or overstay their visas (Gutierrez, 1995). Attitudes toward unauthorized immigrants have become increasingly harsh in the past several decades, as reflected in the increase in anti-immigrant policies and anti-immigrant sentiment in the U.S. Immigrants have historically filled the demand for labor in the U.S. (Massey, Durand, & Malone, 2002); however, during times of economic crises and high unemployment, immigrants are often blamed for taking the jobs of native-born U.S. citizens (Gutierrez, 1995). Several immigration policies enacted in the United States over the past several decades have reflected these views.

Historically, the flow of workers and goods between Mexico and the U.S. dates back to the late 19th century. The migration of Mexican workers grew on a larger scale during the 20th century. Since then Mexican workers have been seen as a source of cheap, temporary labor and the migration has been encouraged (Gutierrez, 1995). In particular, during World War II there was a labor shortage in the U.S. and this increased the country's reliance on Mexican workers (Durand, Massey, & Parrado, 1999). The U.S. and Mexico created a bi-national treaty, known as

the Bracero Program, in which approximately five million Mexican workers were contracted to work in the U.S.

Prior to 1965, there were few restrictions on the number of Mexican and other Latin American immigrants permitted to enter the U.S. to enter legally. However, the passage of several immigration policies for Mexican and other Latinos since the 1960s have focused on restricting migration (Durand, Massey, & Parrado, 1999). The Hart-Cellar Act of 1965 changed the quota system and created categories based on family ties, employment skills, artistic excellence and refugee status. This new system only made 20,000 visas available for Mexican workers per year, whereas before there were no restrictions for Mexican workers seeking a work visa through the Bracero Program (Massey, Durand, & Malone, 2002). The change in policy was made without taking into consideration the previous flow and need of Mexican immigrant workers in the U.S., creating a group of undocumented immigrants (Durand, Massey, & Parrado, 1999). Over the years, the undocumented immigrant population grew, in large part due to neoliberal policies led by the Reagan Administration. The most important of these policies was the North-American Free Trade Agreement (NAFTA) with Mexico and Canada in 1993. In Mexico, NAFTA resulted in many Mexican businesses unable to compete with U.S. industries, leaving many Mexican nationals without jobs. This free trade agreement also failed to recognize the need for individuals to move freely across borders for labor and was responsible for the dramatic increase of Mexican undocumented immigrants seeking employment in the U.S. Finally, the amnesty provisions of the Immigration Reform and Control Act ended in 1988, further restricted access and pathways for unauthorized individuals to obtain a green card or gain U.S. citizenship (Motomura, 2008).

Following the increase of undocumented immigrants, the U.S. responded by increasing enforcement and restricting public services through various initiatives at the state and federal levels. It is possible that those policies could have negatively influenced the well-being of Mexican immigrant children and mothers in the current sample, since the majority of the immigration policies over the years have imposed restrictions on immigrant families and children. For example, in 1994, California passed Proposition 187, barring undocumented immigrants from receiving public social services, nonemergency health care, and public education (Valentino, Brader, and Jardina, 2013). At the federal level, in 1996, Congress passed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which made undocumented immigrants ineligible for any public services. Even though their citizen children are eligible for public services, undocumented immigrants may be reluctant to seek them for their children since they may be afraid of providing their information and being identified as undocumented (Yoshikawa & Kalil, 2011).

Section 287(g) of the Immigration and Nationality Act was also enacted in 1996 but remained inactive for several years until the September 11, 2001, attacks, which raised the interest of policymakers and political leaders (Lacayo, 2010). This program allows state and local law enforcement to enforce federal immigration laws (Lacayo, 2010). While the main goal of 287(g) was to find and apprehend dangerous criminals and potential terrorists, this program has also been misused and has led to arrests of immigrants who do not pose a threat to the U.S. (Lacayo, 2010). This policy also increased racial and ethnic profiling among Latinos at the local level. For example, a 2008 Pew Hispanic survey of Latinos in the U.S. revealed that almost one in 10 Latino adults (including U.S. citizens and immigrants) had been questioned by law enforcement about their immigration status in the past year (Layaco, 2010).

These anti-immigrant policies have made unauthorized immigrants more vulnerable and have created fear, inaccessibility to social services, and inaccessibility to health care. For example, the study mentioned above conducted by the Pew Hispanic Center (Layaco, 2010) revealed that 35% of U.S.-born Latinos (who cannot be deported) worry about the possibility that a loved one can be deported. The findings of a study conducted by Ayón and Becerra (2013) about the implications of harsh immigration policy and increased enforcement in Arizona also show that anti-immigrant policies and enforcement have deleterious health and social implications on the well-being of immigrant families and communities. As illustrated by previous literature, macrosystem factors such as anti-immigrant laws and anti-immigrant sentiment influence the well-being of immigrant families and children negatively.

Immigrant Health Paradox

Prior to reviewing the literature on how the immigration status influences the mental health of immigrants, it is important to review the literature related to immigrants in general. According to Alegria et. al (2009) the population phenomenon known as the *immigrant health paradox*, states that being foreign born is perceived as a protective factor against mental health problems despite the stressful experiences associated with immigration. The immigrant health paradox suggests that first-generation immigrants are relatively healthier than U.S. born Latinos, and this might be due to Latino immigrants arriving to the U.S. and perceiving the U.S. society as an improvement in their standard of living (Vega et al., 2009). U.S. born Latinos are at a greater risk than immigrant Latinos for any depressive disorder, anxiety disorder, social phobia, alcohol abuse and dependence and drug abuse and dependence (Moreno & Cardemil, 2018). However, fast assimilation to the American culture is associated with worse mental and physical health (Falicov, 2009). Immigrants who have lived in the U.S. for a longer time were more

likely to have poorer health than recent immigrants, suggesting that acculturation has a negative effect on immigrants (Bostean, 2013). Further, the immigrant health paradox has been consistently observed among Mexican immigrants; they reported lower prevalence of most psychiatric disorders compared to their U.S. born Mexican counterparts (Alegria et al., 2009). Finally, although the immigrant health paradox has been widely studied few other studies have examined how the population phenomenon of the immigrant health paradox may apply to immigrants with an undocumented status and whether they still have better mental health despite the additional acculturative stressors they experience.

Well-Being of Children in Mixed-Status Families

Even though the literature on the immigrant health paradox indicates that immigrants have better physical and mental health compared to their native-born counterparts, very few studies have examined how immigration status may influence the well-being of undocumented immigrants and their children. Some of the limited studies available on this topic show that multiple variables at the exosystem level may affect undocumented immigrant parents and their children (Yoshikawa & Kalil, 2011). These factors include places or people children may not interact with because of their parents' unauthorized status but which still have a large effect on them indirectly through the lack of access. For example, evidence shows that parents' undocumented status is strongly associated with parental distress, poverty, discrimination, and poor physical and mental health among their children (American Psychological Association, 2012). Families of immigrants face economic hardships that prevent them from obtaining adequate housing and also lead to frequent moves and overcrowded households (Ayón, Gurrola, Salas, Androff, & Krysik, 2012). In addition, because undocumented immigrants lack work authorization, children of undocumented parents are also more likely to suffer from food

insecurity as a result of limited resources, compromising children's health, development, and growth (Ortega et al., 2009). Undocumented immigrants have less access to health care and are less likely to visit health care providers because they may not have health insurance (Ortega et al., 2007). They are also more likely to delay using health care, including mental health services, because they fear being reported to immigration authorities. In addition, these families are less likely to use public programs, social services, and welfare benefits, even when their citizen children are eligible, for fear of having their undocumented status discovered (Xu & Brabeck, 2012).

Children of undocumented parents may not have access to important educational experiences that are critical to their development and mental health. For example, children in mixed-status families may be less likely to enroll in public preschool programs and less likely to participate in other development-promoting activities compared to children of U.S. citizens or legal permanent residents for fear of being found out as undocumented and reported to immigration authorities (Kalil & Crosnoe, 2009; Yoshikawa, 2011). Similarly, parents' legal vulnerability poses a detrimental impact on the daily lives of mixed-status families. The possibility of detention, arrest, and separation increases the tension and stress, which can lead to strained relationship among parents and also between parents and children (Dreby, 2012). For example, Chavez, Lopez, Englebrecht, and Viramontez Anguiano (2012) conducted an ethnographic study of 40 families and found that the uncertainty related to living in a mixed-status family increased both the parents' and children's stress levels. Another scholar asserts that immigrant parents' heightened anxiety levels and state of worry about their immigration status are transmitted to their children through their words and actions (Yoshikawa, 2011). Several ethnographic studies have concluded that children of undocumented parents experience

depression, anxiety, social isolation, fears of separation, withdrawal, and aggression (Brabeck & Xu, 2010; Chavez et al., 2012; Dreby, 2012). Thus, several studies conclude that having an undocumented status affects the well-being of undocumented parents and their children. This dissertation further contributes the literature by utilizing quantitative methods and examining variables that have not been studies before including maternal mental health, children's behavioral functioning, and family processes (e.g., marital conflict, parenting stress).

Family Systems and Children's Well-Being

Family plays an important role in the emergence of internalizing and externalizing behavioral problems during childhood (Cowan & Cowan, 2002). The bioecological model related to determinants of parenting (Belsky, 1984) shows that parents' psychological well-being, contextual sources of stress and support, and child characteristics are among the three factors that determine quality of parenting. Among those three, parents' psychological well-being—including parental depression, parenting stress, marital discord, and poor parent-child relationships—constitutes one of the most influential factors that determine children's developmental and behavioral well-being (Cumming, Davies, & Campbell, 2000; Cummings, Keller, & Davies, 2005). Yet, little research has examined the impact of these family-related constructs on the emergence of externalizing problems among mothers and children in undocumented or mixed-status families and the way in which they may mediate the relations between family stressors related to being undocumented and child behavioral problems.

Maternal depression and the child. Scholars have found that maternal depression is a critical risk factor for the psychological development of children, parent-child relationships, children's interaction with one other, and peer problems (Burke, 2003; Chronis et al., 2007; Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007). People with depression tend to be

more self-focused and have a negative self-perception, making them more likely to exhibit negative behaviors during their interaction with others (Goodman & Gotlib, 1999) that can negatively influence children's psychosocial development (Luoma et al., 2001). Luoma and colleagues (2001) found in their research that maternal depression is linked to high levels of internalizing and externalizing behavioral problems among children.

Additionally, Hammen and Brennan (2001) determined that a mother's depression can be transmitted to the child. In their study, they compared adolescents who had mothers with and without depression; the results showed that those adolescents with depressed mothers were more likely to be depressed as well, and these children were more likely to have higher levels of dysfunction in their interpersonal relationships. Eventually, the child of a depressed mother is likely to be exposed to poor parenting practices such as unresponsiveness, inattention, or inappropriate discipline related to the mother's depressive disorder (Goodman & Gotlib, 1999; Luoma et al., 2001). The external stressors related to immigration status may lead to high levels of psychological distress among undocumented parents such that positive parenting practices that promote positive children's development may be disrupted. Thus, the stressors that undocumented parents face leading to psychological distress may affect family systems that negatively influence children's development.

Marital conflict. Marital conflict is a factor that has been associated with poor parenting and negative child outcomes. For example, scholars have found an association between interpersonal discord and lower quality parenting (Kaczynski, Lindahl, Malik, & Laurenceau, 2006) and also with harsher punishment (Krishnakumar & Buehler, 2000). Children exposed to a negative family environment and ongoing marital discord are more likely to experience stress, unhappiness, and insecurity. As such, children exposed to a family environment characterized by

conflict, anger, and hostility are at an increased risk for developmental behavioral problems such as aggression (Ramos, Wright Guerin, Gottfried, Bathurst, & Oliver, 2009). By contrast, the presence of both good parenting and a good marriage are indicators of positive child development (Belsky & Fearon, 2004). Although marital conflict has been consistently linked to children's negative outcomes, there are very few studies that have been conducted on immigrant families with different immigration statuses.

Parenting stress. Perceived parenting stress is an important factor that influences family functioning, parenting, and children's development. Crnic, Gaze, and Hoffman (2005) assert that parenting stress has a significant association with more child negativity and greater behavioral problems among children. Other studies have also revealed a significant relationship between parenting stress and depression and behavioral problems among children (Huth-Bocks & Hughes, 2008; Williford, Calkins, & Keane, 2007). For example, Rodriguez (2011) collected children's independent reports of internalizing behaviors and their parents' reports of parenting stress from a community sample of 92 mother-child dyads. The results of this study indicated that higher levels of parenting stress were associated with higher levels of anxiety among children. In another study, Ashford, Smit, van Lier, Cuijpers, and Koot (2008) conducted a longitudinal study with 294 children to examine the possible predictors of children's behavioral problems. In this study, children's internalizing problems were measured at age 2 through 3, 4 through 5, and finally at age 11. The findings of this study revealed that parenting stress reported by mothers when children were age 4 through 5 was the strongest predictor of children's internalizing problems at age 11.

Studies indicate that parents from racial and ethnic minority groups experience parenting stress differently compared to their white counterparts as a result of the distinctions in the family

context and social environment (McLoyd, Cauce, Takeuchi, & Wilson, 2000). Unfortunately, there is very little research about parenting stress among racial and ethnic minority groups and immigrant populations, since the majority of existing studies have used samples consisting of white middle-class families (Cardoso, Padilla, & Sampson, 2010). Existing research suggests that family economic resources, maternal and child characteristics, and environmental factors may be moderated by racial and ethnic disparities in negatively influencing parenting stress (Cardoso et al., 2010).

Collective Efficacy

Collective efficacy and mental health. The neighborhood environment may serve as a source of risk or protection for mother and child well-being. Studies demonstrate that higher levels of collective efficacy or related social capital constructs are associated with lower levels of individual depression (Ahern & Galea, 2011; Mair et al., 2009). Research results also show that neighborhoods that apply more social control (the active involvement of adults in a neighborhood to protect neighbors) may decrease the actual or perceived stressful events from occurring (Ahern & Galea, 2011). In addition, more cohesive neighborhoods may provide more social support to residents, buffering the effects of stressful events when they occur. Therefore, there are a variety of specific ways in which collective self-efficacy could influence depression (Cutrona, Wallace, & Wesner, 2006).

For children whose mothers suffer from depression, the presence of protective factors in the community becomes even more critical for positive outcomes, particularly because children residing in high social capital neighborhoods may be able to form supportive relationships with adults outside of their family (Stanton-Salazar, 2011). For mothers struggling with depression, the support they receive from other parents in the neighborhood may be essential in helping them

parent more effectively (Bynes & Miller, 2012). Previous studies of families residing in low-income and minority neighborhoods have suggested that parents form cohesive social networks through agreement on children's behavioral norms, and collaborative action influences the norms for all of the children in the neighborhood (Hanks, 2008). Additionally, children benefit from the social connections parents have with others, including neighbors, teachers, and work colleagues (Crosnoe, 2004; Parcel, Dufur, & Zito, 2010). Although collective efficacy has been widely studied in various populations (i.e., minority populations), no other studies have examined the protective effects among immigrant populations with different immigration statuses.

Collective efficacy and Mexican immigrants. Despite the prevalence of various stressors for immigrants, studies have shown that Mexican immigrants living near other ethnic peers have better mental health outcomes because co-ethnic neighborhoods provide them with social support and access to resources through social networks (Brown et al., 2009). Findings from some studies demonstrate that the immigrant health paradox operates at the neighborhood level as well as the individual level and that the context of Mexican enclaves independently promotes well-being (Eschbach, Ostir, Patel, Markides, & Goodwin, 2004). Scholars have proposed that a strong social network; which is an important cultural characteristic for Latinos, particularly Mexicans, enhances their mental health (Ostir, Eschbach, Markides, & Goodwin, 2003). Some scholars hypothesize that Mexican culture fosters community trust and shared expectations for mutual support and informal social control leading to a variety of positive outcomes for individual residents including mental and physical health (Almeida, Ichiro, Beth, & Subramanian, 2009; Eschbach et al., 2004). The norms of trust and reciprocity also transcend social networks to benefit the contextual environment of the Mexican ethnic enclave through high levels of social cohesion.

Theoretical Framework

All of the papers in this dissertation are guided by a blending of Bronfenbrenner 's bioecological model of development (Bronfenbrenner & Morris, 2006), with family systems theory through the stages of migration lens. Along with the bioecological model of development, the stages of migration framework help to better contextualize the distress experienced by immigrants. The stages of migration framework (Pine & Drachman, 2005) suggest that immigrants face cumulative stress during the different stages of migration including experiences that led them to migrate, dangerous and traumatic events during their migration journey, and their resettlement experience. The bioecological model (Bronfenbrenner & Morris, 2006), indicates that undocumented immigrants face chronic stressors imposed by social and cultural structures which requires them to exert greater effort to cope with stress compared documented immigrants, which in turn increases vulnerability for psychological distress. Both of the aforementioned theories are helpful to explore psychological problems in response to immigration experience within a broader context. Together with the other theories, the family systems theory is also used in this study to help explore how immigration status and related factors beyond the family, influences the family systems and dynamics within the family. The theories are described and discussed in the sections below.

Bioecological Model of Development

Bronfenbrenner's bioecological model of development (Bronfenbrenner & Morris, 2006) helps to contextualize the three papers of this dissertation, which emphasizes the importance of understanding the interaction between individuals' development and their immediate environments through proximal processes. In other words, proximal processes are immediate relationships and interactions such as with family, peers, teachers etc. Bronfenbrenner (1986)

also argued that some distal processes influence the individuals' distal processes; namely, the extrafamilial context could influence intrafamilial processes. For example, experiences that parents have (e.g., at work, immigration policies, or their adult social networks) could indirectly influence the development of their children. Specifically, Suarez-Orozco, et al. (2011) argued that the developmental implications of unauthorized status should be examined through the ecological lens.

The first item of the biological model is context, which underlines Bronfenbrenner's earlier presentation of the bioecological model known as ecological systems theory, first introduced in 1979 (Bronfenbrenner, 1979). The ecological perspective is appropriate for the analysis of structural factors that influence Latino immigrant families and children's well-being. This part of the model highlights multiple factors as multiple systemic levels intersect to influence individuals' development and well-being. Bronfenbrenner conceptualized the context in which individuals live as four nested systems including micro-, meso-, exo-, and macrosystems (Bronfenbrenner, 1979).

The microsystem consists of immediate environments such as the home and school in which a significant amount of interaction occurs such as the relationship among parents and the relationship between parents and children (i.e., marital conflict, parenting stress). One of the most influential components of microsystems for children is their nuclear family (e.g., parents and siblings) and the family's well-being. For immigrant families, their immediate postmigration context, experiences in their social settings, and family processes are some of the context that may account for the child health, behavior, and academic outcomes due to a parent's undocumented status (Yoshikawa & Kalil, 2011). After arriving in the United States, undocumented parents may deal with anxiety over the uncertainty of being deported. As

demonstrated throughout the literature review, parental stress can have a negative effect on parenting practices (Crnic & Low, 2002).

The mesosystem involves the interactions between microsystems; for example, children's interaction with their parents may influence their interactions at school. The exosystem refers to systems or environmental factors that affect individuals indirectly through the microsystems. Research indicates that outside of the immediate family context, undocumented immigrants and their children face social exclusion (Yoshikawa & Kalil, 2011). Finally, the macrosystem includes influences such as national political climate and policies. For example, anti-immigrant sentiment and immigration policies at the macro level can influence Mexican immigrant children and undocumented parents through their community environment, work and school environments, and everyday life experiences.

Additionally, Bronfenbrenner asserted that proximal processes, or the interactions with others within different environments, are considered a fundamental mechanism of human development (Bronfenbrenner & Ceci, 1994). Proximal processes are influenced by microsystem interactions, such as mother-child relationships and interactions. In addition, other environments at the exosystem and macrosystem levels, such as the community environment or federal laws, can influence proximal processes (i.e., mother's depression, mother's self-efficacy, parental stress, marital conflict).

A third important feature of the bioecological model is the person, who is understood to be an influential feature of proximal processes and developmental outcomes (Bronfenbrenner & Morris, 2006). Bronfenbrenner identified three personal characteristics that influence proximal processes, named demand, resource, and force characteristics. Demand characteristics, such age, gender, and ethnicity, support or hinder how proximal processes operate. Resource

characteristics include mental and emotional resources such as past experiences, skills, and knowledge, as well as access to material resources (e.g., access to housing, education, and responsive caregivers). Force characteristics are related to individuals' motivation, persistence, and temperament. Some of these personal characteristics such as gender, age, and mother's mental health will be part of the models in this dissertation, which will explore how the children's behavioral function differ based on their age, gender, and mother's mental health.

Family Systems Theory

In addition to the bioecological model that guides each study in this dissertation, the studies will also be guided by family systems theory (Bowen, 1978), in which the family is conceptualized as an organized group and all the members are interdependent (Bowen, 1978). Consistent with a family systems approach, the manner in which a family functions has consequences for the well-being of other members (Goldenberg & Goldenberg, 2008). Thus, it is important to understand the struggles of the different family members because those struggles might impact other family members including the children.

Further, the family system framework predicts that a parent's internalizing symptomatology and related mental health problems are likely related to the functioning of other family members, including the offspring. For example, maternal depression has been associated with mental health and behavioral problems among children (Cho, Kim, Lim, Lee, & Shin, 2014; Yeh, Huang, & Liu, 2016). Likewise, adolescents' internalizing symptoms and related disorders have been related to parenting practices, family dysfunction, and negative interaction patterns within the family system (Hughes & Gullone, 2008). Hence, family theory is particularly relevant in this dissertation because it examines how one family member's (e.g. the undocumented mother) experience of psychological distress, can cause imbalance in the family

unit and thus, might also affect other family members and their functioning (e.g. child's behavioral functioning).

Stages of Migration Framework

The three papers in this dissertation will be informed by the stages of migration framework (Pine & Drachman, 2005), which outlines key variables that should be considered when applying child welfare practice principles to immigrant children and families. The stages of migration include the pre-migration or departure stage; the transit or intermediate stage; the reception from the resettlement country or resettlement stage; and in some cases, the return to the country of origin stage. The three studies in this dissertation do not include variables related to the pre-migration and transit stage since they are not part of the data used for this study. However, the stages of migration framework helps contextualize the studies in regards to the cumulative stress that they experience during the different stages, which may influence their current mental health. The mothers and children from whom data were collected in the current dissertation were interviewed while residing in Los Angeles County (Peterson et al., 2004); therefore, they were in the resettlement stage of the migration process. Some common issues in the resettlement stage include the degree of cumulative stress experienced by the family, the reception in the new country (e.g., policies about inclusion or exclusion), quality of life, and opportunities in the receiving country (Cohen & Merino Chavez, 2013). In addition, different cultural issues may arise such as views between the home and host country on health, mental health, help-seeking behavior, education, child-rearing practices, gender role behavior, and different levels of acculturation among members (Ayón, 2014). In this study, immigration status is a salient factor in the resettlement stage. The various immigration statuses have different implications for the right to benefits and services, as well as different legal rights (Pine &

Drachman, 2005). In addition, some scholars assert that a family's status structures the immigration experience, which influences families and children's adaptation (Suárez-Orozco & Suárez-Orozco, 2001). Therefore, this framework guides this dissertation by highlighting how the cumulative stress immigrant families face during their migration journey affects their mental health during the resettlement stage.

<div align="center">**Overview of the Three Papers**</div>

The following section provides an overview of each of the three studies that are part of this dissertation. Based on the findings of the literature that establishes a relationship between immigration status and well-being of undocumented parents and their children, this dissertation seeks to fill in the gaps in the literature related to immigration status and maternal and child well-being.

Paper #1- Depression among Mexican Immigrant Mothers: The Mediating Role of Self-Efficacy

Paper #1 aims to understand the relationships among immigration status and neighborhood collective efficacy, self-efficacy beliefs, and major depression among Mexican immigrant mothers in the United States. Specifically, it examines how the mother's immigration status (U.S.-born Mexican-American, documented, and undocumented) and neighborhood collective efficacy could shape mothers' self-efficacy and, in turn, depression. Studies have shown that Latino immigrants have better mental health than their U.S. counterparts and non-Latino whites, despite the acculturative stressors and socioeconomic disadvantage (Cook et al., 2009).

While great advances have been made in the area of the immigrant health paradox, there is a lack of research investigating whether the immigrant health paradox also applies to

immigrants with varying immigration statuses, such as undocumented immigrants. Therefore, this study attempts to expand the literature by comparing U.S.-born, documented, and undocumented mothers in the sample. Given the high prevalence of undocumented immigrants among foreign-born Mexicans (Passel & Cohn, 2011), mothers' immigration status is a critical factor that should be studied, since it is likely that it may affect their well-being negatively despite the cultural protective factors they possess.

Data for this paper were drawn from data from the first wave of the Los Angeles Family and Neighborhood Survey (L.A. FANS). In L.A. FANS, researchers interviewed a stratified random sample of census tracts in Los Angeles County in 2000–2001 and then later in 2006–2008 (Peterson et al., 2004). Because of the high attrition rate among undocumented immigrants in Wave 2, this study utilizes data from Wave 1 of the study. Path analysis was utilized to examine the relationship among variables. The findings of this study show that self-efficacy mediates the relationship between immigration status, collective efficacy, and maternal major depression. This paper discusses the implications for social work policy, practice, research, and based on the findings.

Paper #2: The Relationship Between Immigration Status and Externalizing and Internalizing Behavioral Problems Among Mexican-Origin Children: The Influence of Age, Gender, Maternal Mental Health, and Family Environment

The aim of paper #2 is to examine the association between mother and child immigration status (U.S.-born Mexican-American, documented, mixed status, or undocumented) and externalizing and internalizing behaviors among children of Mexican origin. Similar to paper #1 on immigrant mothers and the immigrant health paradox, previous studies have shown that foreign-born children have better mental health and behavioral outcomes compared to U.S.-born

children of immigrants (Salas-Wright et al., 2016) and that children of immigrants have better mental health and behavioral outcomes compared to children of natives (Marks et al., 2014). As a result, it is also important to study whether the protective effects of the immigrant health paradox also apply to children who live in undocumented or mixed-status households.

This study also explores how factors such as age group and family context (i.e., mother's self-efficacy, maternal depression, parenting stress, and marital conflict) can buffer or exacerbate effects of immigration status on externalizing and internalizing behaviors. The moderators were identified based on previous research and theory. For example, age or developmental stage is an important moderator since evidence shows that the social-ecological environments have unique experiential and developmental implications at each developmental stage (Yoshikawa & Kalil, 2011). It is also important to assess maternal factors and familial processes, since studies faced on family system theory, have shown that familial and maternal factors can serve as either risk or protective in the midst of stressful circumstances (Hartley, Vance, Elliott, Cuckler, & Berry, 2008).

This study also utilizes data from Wave 1 of L.A. FANS dataset. Multiple linear regression analysis was utilized to estimate the relationship between a family's immigration status and children's internalizing and externalizing behavioral outcomes. The first model includes factors that have been identified in the literature as explaining the outcome of externalizing and internalizing behaviors, including mother's mental health and familial processes. The second model includes an interaction effect between immigration status and age to estimate whether the effects of immigration status are more harmful to older children. This model also includes three-way interaction terms to assess whether maternal and familial factors together with immigration status and gender can either exacerbate or ameliorate the effects of

internalizing problems and whether the results vary by gender. The results show the importance of maternal mental health and family environments in the midst of immigration factors that could potentially be stressful for children and influence their well-being. Implications for policy and practice are included in this paper based on findings.

Paper #3 - The Link Between Family Immigration Status and Behavioral Problems Among Children of Mexican Origin: The Mediating Influence of Maternal Self-Efficacy, Depression, and Parenting Stress

Paper #3 tests a model in which maternal factors (maternal self-efficacy, depression, and parenting stress) mediate the relationship between immigration status and behavioral problems among children of Mexican immigrant mothers. This study proposes that a mother who is undocumented may have lower self-efficacy beliefs, which may in turn influence maternal depression and parenting stress, leading to poor internalizing and externalizing behavioral outcomes among their children. The model tests a direct link between family immigration status and children's behavioral outcomes. This paper is also guided by bioecological model of development, which emphasizes that family is one of the most influential aspects of the microsystem in a child's development. Family systems theory also conceptualizes the family as an organized and interdependent group (Minuchin, 1985), and as such the functioning of a member influences the whole family system and its subsystems. (e.g., spousal subsystem, parent-child subsystem, and sibling subsystem) (Rootes et al., 2010). Drawing data from L.A. FANS, Wave 1, this study utilizes path analysis to examine the direct and indirect link between the different variables. The findings of this study show that immigration status has a relationship with children's internalizing behavior problems, particularly among older children. However, the relationship between immigration status and externalizing behavior problems was mediated

through the mother's well-being (i.e., maternal self-efficacy, major depression and parental stress), rather than the mother's and child's immigration status' direct influence on children's externalizing behavior problems. Implications based on the findings are also provided in this paper.

References

Abidin, R. R. (1990). *Parenting stress index-short form manual*. Los Angeles, CA: Western

    Psychological Services.

Ahern, J., & Galea, S. (2011). Collective efficacy and major depression in urban neighborhoods.

    American Journal of Epidemiology, *173*(12), 1453–1462. doi:10.1093/aje/kwr030

Alegría, M., Canino, G., Shrout, P. E., Woo, M., Duan, N., Vila, D., … Meng, X. (2009).

    Prevalence of mental illness in immigrant and non-immigrant U.S. Latino groups.

    American Journal of Psychiatry, 165(3), 359–369. doi:0.1176/appi.ajp.2007.07040704

Almeida, J., Ichiro, K., Beth, E. M., & Subramanian, S. V. (2009). A multilevel analysis of social

    ties and social cohesion among Latinos and their neighborhoods: Results from Chicago.

    Journal of Urban Health, 86(5), 745–759. doi: 10.1007/s11524-009-9375-2

American Immigration Council. (2017). *U.S. citizen children impacted by immigration

    enforcement.* Retrieved from https://www.americanimmigrationcouncil.org/research/us-

    citizen-children-impacted-immigration-enforcement

American Psychological Association, Presidential Task Force on Immigration (2012).

    Crossroads: The psychology of immigration in the new century. Retrieved from

    http://www.apa.org/topics/immigration/immigration-report.pdf

Arbona, C., Olvera, N., Rodriguez, 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:

    10.1177/07399866310373210

Ashford, J., Smit, F., van Lier, P. A. C., Cuijpers, P., & Koot, H. M. (2008). Early risk indicators of internalizing problems in late childhood: A nine-year longitudinal study. *Journal of Child Psychology and Psychiatry, 49,* 774–780. doi:10.1111/j.1469- 7610.2008.01889.x

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*(1), 206–228.

Ayón, C., Gurrola, M., Salas, L. M., Androff, D., & Krysik, J. (2012). Intended and unintended consequences of the employer sanction law on Latino families. *Qualitative Social Work, 11*, 587–603. doi: 10.1177/1473325011418871

Ayón, C. (2014). Service needs among Latino immigrant families: Implications for social work practice. Social Work, 59(1), 13-23. doi: 10.1093/sw/swt031

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191–215.

Bandura, A. (1989). Self-regulation of motivation and action through internal standards and goal systems. In L. A. Pervin (Ed.), *Goal concepts in personality and social psychology* (pp. 19–85). Hillsdale, NJ: Lawrence Erlbaum Associates.

Bandura, A. (Ed.). (1995). *Self-efficacy in changing societies*. New York, NY: Cambridge University Press.

Belsky, J. (1984). *The determinants of parenting: A process model. Child Development, 55*(1), 83-96. doi: 10.2307/1129836

Belsky, J., & Fearon, R. M. P. (2004). Exploring marriage-parenting typologies and their contextual antecedents and developmental sequelae. *Development and Psychopathology, 16*(3), 501–523.

Bornstein, M. H., Hahn, C. S., & Haynes, O. M. (2010). Social competence, externalizing, and internalizing behavioral adjustment from early childhood through early adolescence: Developmental cascades. *Developmental Psychopathology, 22*(4), 717–735. doi:10.1017/S0954579410000416

Bostean, G. (2013). Does selective migration explain the Hispanic paradox? A comparative analysis of Mexicans in the U.S. and Mexico. *Journal of Immigrant and Minority Health, 15*, 624-635. doi:10.1007/s10903-012-9646-y

Bowen, M. (1978). Family therapy in clinical practice. New York: Aronson.

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*(3), 341–361. doi: 10.1177/0739986310374053

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

Bronfenbrenner, U., & Ceci, S. J. (1994). Nature-nurture reconceptualized in developmental perspectives: A bioecological model. *Psychological Review, 101*, 568–586. http://dx.doi.org/10.1037/0033-295X.101.4.568

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. Lerner (Eds.), *Handbook of child psychology* (pp. 793–828). New York, NY: Wiley.

Brown, S. C., Mason, C. A., Spokane, A. R., Cruza-Guet, M. C., Lopez, B., & Szapocznik, J. (2009). The relationship of neighborhood climate to perceived social support and mental health in older Hispanic immigrants in Miami, Florida. *Journal of Aging and Health, 21*(3), 431–459. doi:10.1177/0898264308328976

Burke, L. (2003). The impact of maternal depression on familial relationships. *International Review of Psychiatry, 15*(3), 243–255. doi:10.1080/0954026031000136866

Bynes, H., & Miller, B. (2012). The relationship between neighborhood characteristics and effective parenting behaviors: The role of social support. *Journal of Family Issues, 33*, 1658–1687. doi: 10.1177/0192513X12437693

Cardoso, J. B., Padilla, Y. C., & Sampson, M. (2010). Racial and ethnic variation in the predictors of maternal parenting stress. *Journal of Social Service Research*, *36*, 429– 444. doi:10.1080/01488376.2010.510948

Cavazos-Rehg, Zayas, & Spitznagel. (2007). Legal status, emotional well-being and subjective health status of Latino immigrants. *Journal of National Medical Association, 99*(10), 1126-1131.

Chavez, J. M., Lopez, A., Englebrecht, C. M., & Viramontez Anguiano, R. P. (2012). Sufren los niños: Exploring the impact of unauthorized immigration status on children's well-being. *Family Court Review, 50*(4), 638–649. doi: 10.1111/j.1744-1617.2012.01482.x.

Cho, S-M., Kim, E. J., Lim, K-Y., Lee, J. W., & Shin, Y-M. (2015). The effects of maternal depression on child mental health problems based on gender of the child. *Community Mental Health Journal, 51*, 354–358. doi:10.1007/s10597-014-9824-6

Chronis, A. M., Lahey, B. B., Pelham, W. E., Hall, S., Baumann, B. L., Kippe, H., … Chronis-Tuscano, A. M. (2007). Maternal depression and early positive parenting predict future conduct problems in young children with attention-deficit/hyperactivity disorder. *Developmental Psychology, 43*(1), 70–82. doi: 10.1037/0012-1649.43.1.70

Cohen, J. H., & Merino Chavez (2013). Latino immigrants, Discrimination, and Reception in Columbus, Ohio. *International Migration*, 51(2), 21-31. doi: 10.1111/imig.12032.

Cook, B., Alegría, M., Lin, J. Y., & Guo, J. (2009). Pathways and correlates connecting Latinos'

    mental health with exposure to the United States. *American Journal of Public Health,*

    99(12), 2247–2254. doi:10.2105/AJPH.2008.137091

Cowan, P. A., & Cowan, C. P. (2002). Interventions as tests of family systems theories: Marital

    and family relationships in children's development and psychopathology. Development

    and Psychopathology, 14, 731–759. doi:10.1017/S0954579402004054

Crnic, K. A., Gaze, C., & Hoffman, C. (2005). Cumulative parenting stress across the preschool

    period: Relations to maternal parenting and child behavior at age 5. *Infant and Child*

    Development, 14, 117–132. doi:10.1002/icd.384

Crosnoe, R. (2004). Social capital and the interplay of families and schools. *Journal of Marriage*

    and the Family, 66, 267–280. doi:10.1111/j.1741-3737.2004.00019.x

Cummings, E. M., Davies, P. T., & Campbell, S. B. (2000). *Developmental psychopathology and*

    the family process: Theory, research, and clinical implications. New York, NY: Guilford

    Press.

Cummings, E. M., Keller, P. S., & Davies, P. T. (2005). Toward a family process model of

    maternal and paternal depressive symptoms: Exploring multiple relations with child and

    family functioning. *Journal of Child Psychology and Psychiatry, 46*, 479–489. doi:.

    10.1111/j.1469-7610.2004.00368.x

Cutrona, C. E., Wallace, G., Wesner, K. A. (2006). Neighborhood characteristics and depression:

    An examination of stress processes. *Current Directions Psychological Science, 15*(4),

    188–192. doi:10.1111/j.1467-8721.2006.00433.x

Díaz-Lázaro, C. M., Verdinelli, S., & Cohen, B. B. (2012). Empowerment feminist therapy with

Latina immigrants: Honoring the complexity and socio-cultural contexts of clients' lives.

Women & Therapy, 35(1–2), 80–92. doi:10.1080/02703149.2012.634730

Dreby, J. (2012). The burden of deportation on children in Mexican immigrant families. *Journal*

of Marriage and the Family, 74, 829–845. doi: 10.1111/j.1741-3737.2012.00989.x

Durand, J., Massey, D. S., & Parrado, E. A. (1999). The new era of Mexican migration to the

United States. *The Journal of American History, 86*(2), 518-536.

Elgar, F. J., Mills, R. S. L., McGrath, P. J., Waschbusch, D. A., & Brownridge, D. A. (2007).

Maternal and paternal depressive symptoms and child maladjustment: The mediating role

of parental behavior. *Journal of Abnormal Child Psychology, 35*, 943–955.

doi:10.1007/s10802-007-9145-0

Eschbach, K., Ostir, G. V., Patel, K. V., Markides, K. S., & Goodwin, J. S. (2004).

Neighborhood context and mortality among older Mexican Americans: Is there a barrio

advantage? *American Journal of Public Health, 94*(10), 1807–1812.

doi:10.2105/AJPH.94.10.1807

Falicov, C. J. (2009). Commentary: On the wisdom and challenges of culturally attuned

treatments for Latinxs. *Family Process, 49*, 292-309.

Gonzales, N. A., Fabrett, F. C., & Knight, G. P. (2009). Psychological impact of Latino youth

acculturation and enculturation. In F. Villarruel (Ed.), *Handbook of Latino psychology:*

*Developmental and community-based perspective (*pp. 115–134). Los Angeles, CA: Sage.

Gonzales, N. A., Germán, M., Kim, S. Y., Preethy, G., Fabrett, F. C., Millsap, R., & Dumka, L.

E. (2008). Mexican American adolescents' cultural orientation, externalizing behavior

and academic engagement. *American Journal of Community Psychology, 41*, 151–164.

doi:10.1007/s10464-007-9152-x

Goodman, S. H., & Gotlib, I. H. (1999). Risk for psychopathology in the children of depressed

    mothers: A developmental model for understanding mechanisms of transmission.

    Psychological Review, 106(3), 458–490. doi:10.1037/0033-295X.106.3.458

Guttmannova, K., Szanyi, J. M., & Cali, P. W. (2008). Internalizing and externalizing behavior

    problem scores: Cross-ethnic and longitudinal measurement invariance of the Behavior

    Problem Index. *Educational and Psychological Measurement, 68*, 676–694.

    doi:10.1177/0013164407310127

Gutierrez, D. G. (1995). *Walls and mirrors: Mexican Americans, Mexican immigrants, and the*

    politics of ethnicity. Berkeley: University of California Press.

Haidar, A. (2017). Social workers and the protection of immigrant and refugee rights. Chicago

    School of Social Service Administration. Retrieved from

    http://www.ssa.uchicago.edu/social-workers-and-protection-immigrant-and-refugee-

    rights

Hammen, C., & Brennan, P. A. (2001). Depressed adolescents of depressed and nondepressed

    mothers: Tests of an interpersonal impairment hypothesis. *Journal of Consulting and*

    Clinical Psychology, 106(3), 458–490. doi:10.1037//0022-006X.69.2.284

Hanks, C. A. (2008). Social capital in an impoverished minority neighborhood: Emergence and

    effects on children's mental health. *Journal of Child and Adolescent Psychiatric Nursing,*

    21(3), 126–136. doi:10.1111/j.1744-6171.2008.00145.x

Hansan, J. (2011). Settlement houses: An introduction. Social Welfare History Project. Retrieved

    from http://socialwelfare.library.vcu.edu/settlement-houses/settlement-houses/

Hartley, S. M., Vance, D. E., Elliott, T. R., Cuckler, J. M., & Berry, J. W. (2008). Hope, self-

efficacy, and functional recovery after knee and hip replacement surgery. *Rehabilitation Psychology, 53*, 521–529. doi:10.1037/a0013121

Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: A meta-analysis of studies comparing the experience of parenting stress in parents of children with and without autism spectrum disorder. *Journal of Autism and Developmental Disorders, 43*, 629–642. doi:10.1007/s10803-012-1604-y

Hughes, E. K., & Gullone, E. (2008). Internalizing symptoms and disorder in families of adolescents: A review of family systems literature. *Clinical Psychology Review, 28*, 92–117. doi:10.1016/j.cpr.2007.04.002

Huth-Bocks, A. C., & Hughes, H. M. (2008). Parenting stress, parenting behavior, and children's adjustment in families experiencing intimate partner violence. *Journal of Family Violence*, *23*, 243–251. doi: 10.1007/s10896-007-9148-1

Kaczynski, K. J., Lindahl, K. M., Malik, N. M., & Laurenceau, J. (2006). Marital conflict, maternal and paternal parenting, and child adjustment: A test of mediation and moderation. *Journal of Family Psychology, 20*(2), 199–208. doi:10.1037/0893-3200.20.2.199

Kalil, A., & Crosnoe, R. (2009). Two generations of educational progress in Latin American immigrant families in the United States. In E. Grigorenko & R. Takanishi (Eds.), *Immigration, diversity, and education* (pp. 188–204). New York, NY: Routledge.

Krishnakumar, A., & Buehler, C. (2000). Interparental conflict and parenting behaviors: A meta-analytic review. *Family Relations, 49*, 25–44. doi:10.1111/j.1741-3729.2000.00025.x

Lacayo, E. (2010). *The impact of Section 287(g) of the Immigration and Nationality Act on the Latino community.* National Council of La Raza. Retrieved from

http://publications.unidosus.org/bitstream/handle/123456789/1067/287g_issuebrief_pubst ore.pdf;sequence=1

Luoma, I., Tamminen, T., Kaukonen, P., Laippala, P., Puura, K., Salmelin, R., & Almqvist, F. (2001). Longitudinal study of maternal depressive symptoms and child well-being. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*(12), 1367– 1374. doi:10.1097/00004583-200112000-00006

Maddux, J. E., & Gosselin, J. T. (2003). Self-efficacy. In M. R. Leary and J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 218–238). New York, NY: Guilford.

Mair, C., Diez Roux, A. V., Shen, M., Shea, S., Seeman, T., Echevierría, S. E., & O'Meara, E. S. (2009). Cross-sectional and longitudinal associations of neighborhood cohesion and stressors with depressive symptoms in the multiethnic study of atherosclerosis. *Annals of Epidemiology, 9*(1), 49–57. doi:10.1016/j.annepidem.2008.10.002

Marks, A. K., Ejesi, K., & Garcia Coli, C. (2014). Understanding the U.S. immigrant paradox in childhood and adolescence. *Child Development Perspectives, 8*(2), 59–64. doi**:**10.1111/cdep.12071

Massey, D., Durand, J., & Malone, N. J. (2002). *Beyond smoke and mirrors: Mexican immigration in an era of economic integration*. New York: Russell Sage Foundation.

McLoyd, V. C., Cauce, A. M., Takeuchi, D., & Wilson, L. (2000). Marital processes and parental socialization in families of color: A decade review of research. *Journal of Marriage and the Family, 62*(4), 1070–1093. doi:10.1111/j.1741-3737.2000.01070.x

Migration Policy Institute. (2015). Profile of unauthorized population: United States. Retrieved from https://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/US

Migration Policy Institute. (2017). Immigration under Trump: A review of policy shifts in the

year since election. Retrieved from file:///Users/anayelilopez/Downloads/TrumpatOne-final.pdf

Minuchin, P. (1985). Families and individual development: Provocations from the field of family therapy. *Child Development, 56*, 289–302. doi:10.2307/1129720

Moreno, O., & Cardemil, E. (2018). The role of religious attendance on mental health among Mexican populations: A contribution toward the discussion of the immigrant health paradox. *American Journal of Orthopsychiatry, 88*(1), 10-15. doi:10.1037/ort0000214

Motomura, H. (2008). Immigration outside the law. *Columbia Law Review, 108*(8). (UCLA School of Law Research Paper No. 09-01). Retrieved from http://ssrn.com/abstract=1323914

Mulder, T., Guzmán, B., & Brittingham, A. (2001). *Evaluating components of international migration: Foreign-born emigrants* (Population Division Working Paper #62). Washington, D.C.: U.S. Census Bureau.

National Association of Social Workers. (2015). Immigrants and refugees. In Social Work Speaks: NASW Policy Statements, 2015-2017. (10th ed). Washington, D.C.: NASW Press.

Niven, J. (2012). Mental health libraries manage stress for detainees in ICE custody. *Corrections Today*, 51-54. doi:10.1192/pb.38.2.89a

Ortega, A. N., Fang, H., Perez, V. H., Rizzo, J. A., Carter-Pokras, O., Wallace, S. P., & Gelberg, L. (2007). Health care access, use of services, and experiences among undocumented Mexicans and other Latinos. *Archives of Internal Medicine, 167*(21), 2354–2360.

Ortega, A. N., Horwitz, S. M., Fang, H., Kuo, A. A., Wallace, S. P., & Inkelas, M. (2009). Documentation status and parental concerns about development in young US children of

Mexican origin. *Academic Pediatrics, 9*(4), 278–282. doi: 10.1016/j.acap.2009.02.007

Ostir G. V., Eschbach, K., Markides, K. S., & Goodwin, J. S. (2003). Neighborhood composition and depressive symptoms among older Mexican Americans. *Journal of Epidemiology & Community Health, 57*(12), 987–992. doi:10.1136/jech.57.12.987

Parcel, T. L., Dufur, M. J., & Zito, R. C. (2010). Capital at home and at school: A review and synthesis. *Journal of Marriage and Family, 72*, 828–846. doi:10.1111/j.1741-3737.2010.00733.x

Passel, J. S., & Cohn, D. (2011). *Unauthorized immigrant population: National and state trends, 2010.* Retrieved from Pew Hispanic Center website: http://www.pewhispanic.org/files/reports/133.pdf

Perez, M. C., & Fortuna, L. (2005). Psychological stressors, psychiatric diagnoses, and utilization of mental health services among undocumented immigrant Latinos. *Journal of Immigrant and Refugee Services, 3*, 107-123. *doi: 10.1300/J191v03n01_06*

Peterson, C. E., Sastry, N., Pebley, A. R., Ghosh-Dastidar, B., Williamson, S., & Lara-Cinisomo, S. (2004). *The Los Angeles family and neighborhood survey: Codebook* (Dru- 2400/2-1-LAFANS). Santa Monica, CA: RAND.

Pew Hispanic Center. (2017). 5 facts about illegal immigration in the U.S.. Retrieved from Pew Research Center website: http://www.pewresearch.org/fact-tank/2017/04/27/5-facts-about-illegal-immigration-in-the-u-s/

Pew Hispanic Center. (2005). Rise, peak and decline: Trends in U.S. immigration 1992-2004. Retrieved from Pew Research Center website: http://www.pewhispanic.org/2005/09/27/rise-peak-and-decline-trends-in-us-immigration-1992-2004/

Pine, B. A., & Drachman, D. (2005). Effective child welfare practice with immigrant and refugee

  children and their families. *Child Welfare, 84*, 537−562.

Ramos, M. C., Wright Guerin, D., Gottfried, A. W., Bathurst, K., & Oliver, P. H. (2009). Family

  conflict and children's behavior problems: The moderating role of child temperament.

  Structural Equation Modeling: A Multidisciplinary Journal, 12(2), 278–298.

  doi:10.1207/s15328007sem1202_6

Rodriguez, C. M. (2011). Association between independent reports of maternal parenting stress

  and children's internalizing symptomatology. *Journal of Child and Family Studies, 21*,

  631–639. doi:10.1007/s10826-010-9438-8

Rootes, K. M., Jankowski, P. J., & Sandage, S. J. (2010). Bowen family systems theory and

  spirituality: Exploring the relationship between triangulation and religious questing.

  Contemporary Family Therapy, 32, 89–101. doi:10.1007/s10591-009-9101-y

Ross, C. E., & Mirowsky, J. (2009). Neighborhood disorder, subjective alienation, and distress.

  Journal of Health and Social Behavior, 50(1), 49–64. doi:10.1177/002214650905000104

Salas-Wright, C. P., Vaughn, M. G., Schwartz, S. J., & Córdova, D. (2016). An "immigrant

  paradox" for adolescent externalizing behavior?: Evidence from a national sample. *Social

  Psychiatry and Psychiatric Epidemiology, 51*(1), 27–37. doi:10.1007/s00127-015-1115-1

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A

  multilevel study of collective efficacy. *Science, 277*(15), 918–924.

  doi:10.1126/science.277.5328.918

Stanton-Salazar, R. D. (2011). A social capital framework for the study of institutional agents

  and of the empowerment of low-status youth. *Youth & Society, 43*(3), 1066–1109.

  doi:10.1177/0044118X10382877

Stocker, C. M., Richmond, M. K., Low, S. M., Alexander, E. K., & Elias, N. M. (2003). Marital conflict and children's adjustment: Parent hostility and children's interpretations as mediators. *Social Development*, *12*(2), 149–161. doi: 10.1111/1467-9507.00226

Suárez-Orozco, C., & Suárez-Orozco, M. (2001). *Children of immigration*. Cambridge, MA: Harvard University Press.

Sullivan, M. M., & Rehm, R. (2005). Mental health of undocumented Mexican immigrants: A review of the literature. *Advances in Nursing Science*, *28*(3), 240–251. doi:10.1097/00012272-200507000-00006

Valentino, N. A., Brader, T., & Jardina, A. E. (2013). Immigration opposition among U.S. whites: General ethnocentrism or media priming of attitudes about Latinos? *Political Psychology, 34*(2), 149–166. doi:10.1111/j.1467-9221.2012.00928.x

Vega, W. A., Rodriguez, M. A., & Gruskin, E. (2009). Health disparities in the Latino population. *Epidemiologic Reviews, 31*, 99-112. doi:10/1093/epi-rev/mxp008

Waldrop, D., Lightsey, O. R., Ethington, C. A., Woemmel, C. A., & Coke, A. L. (2001). Self-efficacy, optimism, health competence, and recovery from orthopedic surgery. *Journal of Counseling Psychology, 48*, 233–238. doi: 10.1037/0022-0167.48.2.233

Williford, A. P., Calkins, S. D., & Keane, S. P. (2007). Predicting change in parenting stress across early childhood: Child and maternal factors. *Journal of Abnormal Psychology*, *35*, 251–263. doi:10.1007/s10802-006-9082-3

Xu, Q., & Brabeck, K. (2012). Service utilization for Latino children in mixed-status families. *Social Work Research 36*(3), 209–221. doi: 10.1093/swr/svs015

Yeh, Z. T., Huang, Y., & Liu, S. I. (2016). Maternal depression and adolescent emotions: The role of family functioning. *Journal of Child and Family Studies, 25*(7), 2189–2200.

doi:10.1007/s10826-016-0399-4

Yoshikawa, H. (2011). *Immigrants raising citizens: Undocumented parents and their children.*
New York, NY: Sage.

Yoshikawa, H., & Kalil, A. (2011). The effects of parental undocumented status on the
developmental contexts of young children in immigrant families. *Child Development
Perspectives, 5*(4), 291–297. doi:0.1111/j.1750-8606.2011.00204.x

CHAPTER II: PAPER 1

Depression among Mexican Immigrant Mothers: The Mediating Role of Self-Efficacy

Abstract

Immigration status may serve as an important indicator of depression since unauthorized immigrants experience unique stressors that could contribute to poor mental health outcomes (Cavazos-Rehg, Zayas, & Spitznagel, 2007). It is particularly important to study the association between immigration status and depression among Mexican immigrant mothers since depression influences maternal well-being, which has an effect on mother's functioning and parenting abilities (Cummings, Keller, & Davies, 2005). Further, few studies have explored how immigration status and neighborhood collective efficacy are associated with major depression among Mexican immigrant mothers and whether self-efficacy serves as a mediator. As such, the aim of this study is to examine how immigration status and neighborhood collective efficacy could shape mothers' self-efficacy and, in turn, depression. Path analysis was conducted drawing data from 578 Mexican-American and Mexican immigrant mothers who participated in the first wave of the Los Angeles Family and Neighborhood Survey (L.A. FANS). Path analysis is an appropriate technique for this study since it is a method for studying direct and indirect effects and it allows the researcher to test the goodness of fit between the data and models (Kline, 2011). One of the major limitations is that it cannot establish direction of causality. The results of this study revealed that both neighborhood collective efficacy beliefs and undocumented status are mediated by personal self-efficacy beliefs. This dynamic suggests the importance of addressing the self-efficacy of undocumented mothers, and, as such, this study provides implications for practice in targeting self-efficacy to reduce the risk of major depression among Mexican immigrant mothers.

Introduction

Immigration status is an important predictor of mental health and social well-being. Undocumented immigrants, or individuals living in a host country with an unauthorized immigration status, confront various stressors which could affect their mental health (Arbona, Olvera, Rodriguez, Hagan, Linares, & Wiesner, 2010; Cavazos-Rehg, Zayas, & Spitznagel, 2007). Stressors range from deplorable work conditions in low-paying jobs, to discrimination, and risk of deportation. Research shows the types of stressors that undocumented immigrants are likely to experience are associated with poor mental health outcomes (Arbona et al. 2010; Cavazos et al., 2007). In addition, the increasingly anti-immigrant policies in the United States, create a restrictive social and health care environment for immigrants (Martinez, et al., 2015). Throughout history to the present day, politicians and the public have denounced and demonized undocumented immigrants through anti-immigrant rhetoric, motivating federal and state policies that limit the access to healthcare and many other social services and increasing the number of apprehensions and deportations (Martinez, et al., 2015). Most recently on January 2017, President Donald Trump signed an executive order entitled "Enhancing Public Safety in the Interior of the United States," which focuses on the enforcement of immigration policies in the interior of the United States. This executive order made all undocumented immigrants a priority for deportation, drastically expanded the powers and budget of the Department of Homeland Security and ICE, and deputized local law enforcement officials to enforce immigration laws (Immigration Policy Center, 2017). In fiscal 2017, there were a total of 143,470 arrests by U.S.

Immigration and Customs Enforcement (ICE), an increase of 30 percent from fiscal 2016 (Pew

Research Center, 2018). This notable increase began after President Donald Trump took office in

January 2017. Detention and deportations not only affect those who are deported, but they create

concern about discrimination and racial profiling and raise immigrant fears about deportation

(Martinez, et al., 2015). All of these stressors could potentially affect the mental health of

immigrants. Despite the fact that this is such a pressing issue in the United States, undocumented

immigrants are remarkably understudied.

In the U.S., there were an estimated 11-12 million undocumented immigrants as of 2014

(American Immigration Council, 2014). Approximately 60% of these 11 million unauthorized

immigrants were from Mexico and nearly 46% of all unauthorized immigrants had children

under the age of 18. Yet very little research has been conducted on the mental health of Mexican

immigrant mothers. Depression among Mexican immigrant mothers is an important topic to

study given its debilitating effects on how well mothers function as a whole and in the home

(Luoma et al., 2001). Maternal depression can negatively affect mothers' parenting abilities,

leading to behavior problems in their children. Given the relevance of this issue, size of this

population, and the limited research on Mexican immigrant mothers, immigration status, and

mental health, it is important to bridge the gaps in the research in an attempt to inform policies

and social work practice that address the need of this population.

The link between immigration status and depression among Mexican immigrant mothers

is still unclear. For example, empirical research suggests that Mexican immigrants have better

mental health outcomes compared to U.S.-born Mexican-Americans and the general U.S.

population. However, less is known about whether the *immigrant health paradox* ─ a

phenomenon shown in previous studies where foreign nativity seems protective against

psychiatric and substance abuse disorders, despite the stressful experiences and poverty often associated with immigration—applies to the undocumented population (Canino & Alegría, 2009). Very little research has been conducted on how undocumented status influences the mental health of immigrant mothers, and much of what is known about the challenges faced by undocumented populations comes from ethnographic studies (e.g., Abrego & Menjívar, 2011; Dreby, 2012). While these studies give us depth in understanding the issue, quantitative research is needed to understand the relationship among different factors related to immigration status.

This study proposes that neighborhood collective efficacy and immigration status (i.e. U.S. born, documented, and undocumented) influence Mexican immigrant mothers' sense of self-efficacy, which in turn affects their mental health. This proposition is guided by other research conducted among nonimmigrant adults, which demonstrates that social contextual factors can either serve as a risk or a protection for the self-efficacy beliefs of individuals. For example, contextual stressors are associated with perceptions of powerlessness and low self-efficacy, which in turn are associated with internalizing problems such as anxiety and depression (Ross & Mirowsky, 2009). In addition, as mentioned above, previous research has found that immigrants have better mental health than their U.S. counterparts, but the lack of documentation status has not been taken into consideration. While the mediating role of self-efficacy has been examined among nonimmigrant populations, almost nothing is known about how self-efficacy would mediate the relationship between immigration status and maternal depression, particularly among mothers who are undocumented. Therefore, this paper addresses this gap in the literature by examining the role that self-efficacy plays in mediating the relationship.

Background and Literature Review

Immigrant Paradox and Mental Health of Mexican Immigrants

Previous studies have consistently shown that Latino immigrants have better mental health than their U.S.-born counterparts and non-Latino whites, despite having a socioeconomic disadvantage (Cook, Alegría, Lin, & Guo, 2009). This phenomenon consistently found in previous research is known as the immigrant health paradox (Alegría et al., 2009). The immigrant health paradox is often explained by the balance of risk and protective factors among adult immigrants. For example, Flores (2013) asserts that Mexican immigrant adults are insulated from the negative consequences of socioeconomic and environmental factors by collectivist and familistic values, and strong ethnic identities. On the other hand, U.S.-born Latinos may have a weaker affiliation with traditional Latino values that buffer against mental illness as compared to Latino immigrants (Alegría et al., 2007b).

Another hypothesis is that U.S.-born Latinos may have higher expectations for their quality of life than immigrant Latinos do because of their citizenship status and acquisition of skills similar to those possessed by non-Latino whites. However, these expectations may be unfulfilled because of discrimination, resulting in social stress and declining levels of mental health (Alegría et al., 2007b). While great advances have been made in this research area for Latinos, specifically Mexican immigrants and the immigrant health paradox, there is a lack of research investigating whether the immigrant health paradox also applies to immigrants with varying immigration statuses, such as undocumented immigrants. Therefore, this study attempts to expand the literature by comparing U.S.-born, documented, and undocumented mothers in the sample. Given the high prevalence of undocumented immigrants among foreign-born Mexicans (Passel and Cohn, 2011), the immigration status of mothers may be a critical factor that should be studied, since it is likely that it may affect their well-being negatively despite the cultural protective factors they possess.

Harmful Immigration Policies

It is important to consider the political context that may influence the well-being of participants in the sample since several studies have shown that the enforcement of immigration policies by local and state law enforcement has been detrimental to the well-being of immigrant individuals and communities (Ayon & Becerra, 2013; Becerra, Castillo, Silva Arciniega, Bou Ghosn Naddy, & Nguyen, 2018; Becerra, Wagaman, Androff, Messing, & Castillo, 2017). Scholars argue that most immigration policies throughout the 20th century have followed a pattern of racialization and criminalization of non-white immigrants, which excluded and blamed people of color, poor people, and other undesirable groups (Hernandez, 2008). Current immigration policies also follow these patterns and criminalize all undocumented immigrants, limit their access to public programs, and make them a priority for deportation (Immigration Policy Center, 2017). However, given the time frame of this study's data collection, this paper only covers studies related to policies that could have potentially affected mothers during the period from the 1990s to 2002.

In 1994, Proposition 187 was passed in California—an initiative, that prohibited unauthorized immigrants from obtaining public social services, public education, and nonemergency health care (Valentino, Brader, & Jardina, 2013). Under this law, physicians would have been required to report immigrants to immigration authorities. After this law was enacted, there was a significant decline in the utilization of preventive mental health services among Latinos that was followed by a surge in use of mental health crisis services (Fenton, Catalano, & Hargreaves, 1996).

While Proposition 187 was found unconstitutional on the basis that it infringed upon the jurisdiction of the federal government on matters related to immigration, the federal Personal

Responsibility and Work Opportunity Reconciliation Act (PRWORA) was enacted in 1996 (Kullgren, 2003). Like Proposition 187, PRWORA greatly restricted the provision of the majority of federal, state, and local publically funded services to undocumented immigrants, negatively affecting undocumented immigrants and communities. For example, a representative survey conducted in El Paso, Houston, Los Angeles, and Fresno, where there are significant concentrations of Latinos, indicated that 39% of undocumented immigrants expressed fear about seeking medical services due to their undocumented status (Berk & Schur, 2001). Not only were undocumented immigrants' ineligible to receive most public benefits, but they were also unlikely to seek assistance for their U.S. citizen children because of fears of deportation (Huang, Yu, & Ledsky, 2006). The component of PRWORA that aimed to restrict public services to undocumented immigrants is still in effect to this day.

In addition to PRWORA, in 1996 another federal law entitled Illegal Immigration Reform and Immigrant Responsibility Act (IIRIRA) was enacted, leading to stricter U.S. immigration policies and aggressive deportation practices. This law expanded the list of crimes for which immigrants could be deported, and this included legal permanent residents (Menjívar & Kanstroom, 2014). The findings of a study conducted in Texas after IIRIRA was enacted also indicated that IIRIRA had major effects on communities and families (Rodriguez & Hagan, 2004). Social service providers and community leaders who participated in the study discussed how legislative changes in IIRIRA increased levels of fear and anxiety among their immigrant clients. A local school principal expressed that after the implementation of IIRIRA, there was a 15 percent drop in immigrant student enrollment due to fear caused by the legislation. This law continues to serve as a foundation for various immigration initiatives today.

Furthermore, passed in 1996, Section 287(g) of the 1996 Immigration and Nationality Act was largely ignored and not fully implemented until 2001. After the terrorist attacks of September 11, lawmakers argued that the federal government alone could not effectively enforce immigration policies (Lacayo, 2010). As such, this led to the implementation of 287(g), allowing the federal government to enter into partnerships with state and local law enforcement officers (Becerra, 2016). The development of this program, which was named "Secure Communities," meant that state and local law enforcement officers could enforce federal immigration law and could aid in the apprehension of undocumented immigrants at the local and state levels (Lacayo, 2010). This initiative led to arrests of nonthreatening and nonviolent immigrants, and exacerbated racial profiling of Latinos at the local level. A 2008 Pew Hispanic Center survey of Latinos also found that after "Secure Communities" went into effect, nearly one in ten Latino adults had been asked about their immigration status by local police or other authorities, creating a threating and unsafe environment for all Latinos, regardless of their immigration status (Lacayo, 2010). Thus, the aforementioned studies show that the political context and the consequences of anti-immigrant policies and enforcement at the local, state, and federal levels do not only affect well-being of undocumented immigrants; the negative effects go beyond into their families and communities.

Risk Factors for Undocumented Immigrants' Mental Health Concerns

Beyond the anti-immigrant legislations and patterns of discrimination, multiple and cumulative stresses surround the migration experience, that could potentially affect the mental health of undocumented immigrants. Knowledge of the migration experience of undocumented immigrants and related risk factors is essential to effectively understand how the lack of immigration status influences the mental health of undocumented immigrants. According to the

stages of migration framework (Pine & Drachman, 2005), multiple factors influence the experience of immigrants during the different stages of migration, including the pre-migration, transit, and resettlement stages, and in some cases the return to the country of origin. These stages provide understanding of the cumulative stresses that could influence the mental health of undocumented immigrants.

In the pre-migration and departure stage, social, political, economic, and educational factors are significant. For example, Cassarino (2004) asserts, the majority of immigrants immigrate to the U.S. because of economic hardships in their home countries, political turmoil and persecution, or the desire to reunify with family already residing in the U.S. According to the Migration Policy Institute (2013), the Mexican immigrant adults who immigrated to the U.S. between 1995 and 2000 came to the United States seeking better economic opportunities. Many had lower levels of education and lived in poverty in Mexico prior to immigrating. Previous studies show that having low income, low social status, and low levels of formal education prior to immigrating to the United States can increase immigrants' risk for mental health problems, including depressive symptoms and major depressive episodes (Nicklett & Burgard, 2009).

Undocumented immigrants may also experience different traumatic events during the transit stage. For example, some studies have identified salient stressors during the immigrant's journey that could exacerbate the psychological well-being of undocumented immigrants (DeLuca, McEwen, & Keirn, 2010; Paris 2008). Some of these stressors include dangerous border crossings, violence from organized crime and immigration authorities, exposure to environmental hazards, witnessing death of others while crossing, and abandonment by "coyotes" or crossing guides. Therefore, the experience of undocumented immigrants is shaped even prior to arriving in the United States.

During the resettlement stage, immigrants in general are affected by stressors related to the process of navigating life in a new country, such as racial discrimination, language barriers, changes in family structure, and neighborhood environment, which can increase their risk for depressive symptoms (Ornelas & Perreira, 2011). The effects of these stressors can be compounded for undocumented immigrants by additional challenges they face, such as having limited rights, being unable to visit family in their home countries, and facing stigmatization and isolation (Sullivan & Rehm, 2005). Undocumented immigrants also live in constant fear of being deported to their home country, which they left as a result of violence, political instability, or severe poverty. This is a significant threat that may impact their mental health (Cavazos-Regh, Zayas, & Spitznagel, 2007; Viramontez Anguiano, & Lopez, 2012).

Additionally, during the resettlement stage, undocumented immigrants may be forced to take jobs in the informal economy or use false documents to obtain work because of the lack of work authorization, most likely in low-paying jobs with poor working conditions, long hours, and unfair labor practices (Carbonell, 2005). Few undocumented Latinos speak up about unfair practices for fear of having their immigration status discovered, leaving individuals powerless over their situations. These negative work experiences have a detrimental impact on the mental health of undocumented Latinos (Carbonell, 2005).

As Pine and Drachman (2005) indicate, undocumented immigrants' mental health is influenced by various factors throughout the different stages of the immigration process and the stresses they experience accumulate over time. In addition, not only are undocumented immigrants more likely to be at risk of mental health problems, they are less likely to have access to mental health care services compared to U.S. citizens and permanent residents' due to restrictive immigration policies (Ortega et al., 2007).

Collective Efficacy and Mental Health

One of the contextual factors that may serve as a source of risk or protection for maternal well-being is the neighborhood or community environment and social ties. In particular, higher levels of collective efficacy or related social capital constructs have been shown to be associated with lower levels of depression (Ahern & Galea, 2011; Mair et al., 2009). Neighborhood collective efficacy is a form of social capital and it is defined as the process of initiating social ties among neighborhood residents to obtain collective goals, such as controlling crime or other neighborhood problems. (Sampson, Raudenbush, & Earls, 1997). Among the studies that have examined neighborhoods' characteristics and individual depression, results show that neighborhoods that apply more social control may decrease the actual or perceived stressful events from occurring (Ahern & Galea, 2011). In addition, neighborhoods that are more cohesive may provide more social support to residents, buffering the effects of stressful events when they occur. Therefore, there are a variety of specific ways in which collective self-efficacy could influence depression (Cutrona, Wallace, & Wesner, 2006).

Despite the prevalence of various stressors for immigrants, Latinos living near other Latinos have better mental health because co-ethnic neighborhoods provide them with social support and access to resources through social networks (Brown et al., 2009). The strong social network, which is an important cultural characteristic for Latinos and particularly Mexicans, provides a beneficial effect (Ostir, Eschbach, Markides, & Goodwin, 2003). In particular, Mexican culture fosters community trust and shared expectations for mutual support and informal social control, leading to a variety of positive outcomes for individual residents (Almeida, Ichiro, Beth, & Subramanian, 2009; Eschbach et al., 2004). The norms of trust and reciprocity also transcend social networks to benefit the contextual environment of the Mexican

ethnic enclave, which also has high levels of social cohesion. Therefore, in this study, collective efficacy will be included as part of the path model to test how it influences the mental health of Mexican immigrant mothers through self-efficacy.

Self-Efficacy Beliefs as a Mediator of Depression

Self-efficacy beliefs is another concept that has acquired significant research support in regard to predicting positive mental health outcomes; specifically, it has been identified as a key variable in helping researchers understand the development of depression (Bandura, 1997). This concept has been defined as the beliefs an individual has that they can influence the conditions in their lives (Bandura, 1995). Bandura (1995) asserted that the lack of belief in the ability to address negative events will affect a person's neurotransmitter functions, which can develop into depression. In more recent studies, this finding continues to hold true, given that high self-efficacy has been linked with lower levels of depression and anxiety (Maddux & Gosselin, 2003). Additionally, individuals with high self-efficacy beliefs have been found to cope with stressful life events more effectively (Hartely, Vance, Elliott, Cuckler, & Berry, 2008). Such findings are consistent with the *learned helplessness theory of depression*, which suggests that depressed individuals experience life events as beyond their control (Seligman, 1975). Therefore, previous studies have found that supporting people to believe that they have control over their lives and helping them positively handle negative life events help relieve depression (Linde et al., 2004; Maciejewski, Prigerson, & Mazure, 2000). These findings highlight the importance of self-efficacy beliefs in predicting the development of depression, and they indicate that a person's sense of control over important life events serves as an important protective factor by influencing symptoms of depression. However, other studies have not explored the idea of how

undocumented status may lead to low self-efficacy or powerlessness, which in turn may affect depression.

The Purpose of the Study

The purpose of this study is to examine how immigration status, neighborhood collective efficacy, and self-efficacy beliefs are linked with maternal depression among Mexican immigrant mothers. Specifically, it proposes that neighborhood collective efficacy and immigration status influence Mexican immigrant mothers' internal coping mechanisms (i.e., self-efficacy beliefs), which in turn affect their mental health. The following hypotheses will be tested:

Hypothesis 1: Undocumented status will have a direct effect on maternal depression among Mexican immigrant mothers, leading to greater symptoms of depression (direct effect). Undocumented status will lead to low self-efficacy (powerlessness), which in turn will lead to greater symptoms of depression (indirect effect).

Hypothesis 2: Documented status will have a direct effect on maternal depression among Mexican immigrant mothers, leading to fewer symptoms of depression (direct effect). Documented status will lead to high self-efficacy, which in turn will lead to fewer symptoms of depression. (indirect effect)

Hypothesis 3: Collective efficacy will lead to high self-efficacy, which will in turn affect depression positively (indirect effect).

Methods

Data and Sample

Data for this study were drawn from data from the first wave of the Los Angeles Family and Neighborhood Survey (L.A. FANS). L.A. FANS is a survey of households in which researchers interviewed a stratified random sample of census tracts in Los Angeles County in

2000–2001 and then later in 2006–2008 (Peterson et al., 2004). This study utilized the first wave instead of the second wave of the survey since the sample of undocumented Mexican parents and youth was considerably larger in the first wave of the study. The second wave of the study included a mixed sample of follow-up respondents from Wave 1 (some of these respondents had already moved out of Los Angeles County) and also a cross-sectional sample of Los Angeles County that had moved into Los Angeles County neighborhoods.

The L.A. FANS survey oversampled households with children who lived in poor or very poor neighborhoods. In households with children, the primary caregiver (typically the mother) was interviewed. The interviews for this survey were conducted in English and Spanish, and some were a mix of both. A total of 3,085 households were interviewed, with an 85% response rate for randomly selected respondents who were sampled and eligible (Peterson et al., 2004). However, this study focuses only on mothers of Mexican origin; thus, mothers from other ethnic and racial groups were excluded from the analysis. After excluding participants who are from other ethnic origins, the sample for this study consisted of 578 mothers.

This data set is unique in that it asks parents about whether they were born in the U.S. and if they have U.S. citizenship, a green card or permanent residence, or a temporary visa or refugee status. It also asks parents the same immigration status questions about their children. For the purpose of this study, non-Hispanic U.S.-born respondents, Asian immigrants, and non-Mexican Hispanic immigrants were excluded. The undocumented Mexican immigrants in California are not representative of all the undocumented immigrants in the U.S. given that California has more undocumented immigrants than any other state (Vargas Bustamante et al., 2012). However, because of the large number of undocumented immigrants in Los Angeles County, it is a good site for such a study.

Measures

  Maternal depression. The depression variable served as an indicator of whether a mother had major depression based on the Composite International Diagnostic Interview-Short Form (CIDI-SF) (Kessler, Andrews, Mroczek, Ustrun, & Wittchen, 1998). This diagnostics instrument was utilized by L.A. FANS and was adopted by the World Health Organization. The CIDI-SF screens for a major depressive episode for a 12-month period before the interview was conducted and estimates the probability that respondents had major depression based on the criteria for a major depressive episode found in the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Editio*n (DSM-IV) (Wang & Patten, 2002). Previously, the CIDI-SF has been identified as a valid and reliable diagnostic interview and demonstrated 93% classification accuracy for major depressive disorders (Kessler et al., 1998).

  The criteria for major depression could be met by either responding yes to all the items about dysphoric mood (i.e., sadness or anxiety) or responding yes to items about anhedonia (i.e., inability to experience joy). To meet the classification of major depression, respondents had to have dysphoric or anhedonic symptoms for the last two weeks for most of the day, and these symptoms should have happened almost every day during the period (Kessler et al., 1998). This study does not assess the severity or duration of major depression. The probability rates were calculated based on the responses of the participants and the criteria described previously. The CIDI-SF measure creates a probability-of-caseness score that ranges from 0.0 to 1.0. The closer the score is to 1, the greater the probability that a participant would meet diagnostic criteria for a major depressive episode. The Cronbach's alpha reliability score for the CIDI-SF scale is .87.

  Immigration status. All L.A. FANS foreign-born adult respondents were asked a series of questions about themselves and about their children that can be utilized to classify their

families' immigration status. They were first asked if they were naturalized citizens. Those who were not citizens then were asked if they had a green card or permanent residence. Respondents who said no were then asked if they had refugee, asylee, or temporary protected status. Finally, those who did not have one of those statuses were asked whether they had a valid visa for temporary residence. This series of questions was used to determine which respondents were documented (i.e., naturalized citizen, permanent resident) and which ones were undocumented to live in the U.S. Immigrants who were not naturalized, not permanent residents, not refugees/asylees, and did not hold a valid visa were coded as undocumented. However, visa holders and those with refugee/asylum status were excluded from the sample since the numbers for Mexican immigrants in these categories were too small to analyze and their experiences are different compared to permanent residents' experiences. Bachmeier, Van Hook, and Bean (2014) showed that L.A. FANS respondents were willing to answer questions regarding their immigration status, and the procedure proposed in this study to determine immigration status is consistent with profiles created by other researchers. For this paper, mothers were assigned to three categories: U.S. born/Mexican-American, documented immigrant (i.e., citizens or green card holders), and undocumented immigrants.

Collective Efficacy. The neighborhood collective efficacy measure was developed by Sampson et al. (1997) and consists of intergenerational closure (ties between adults and children in a neighborhood), social cohesion (trust between neighbors), and informal social control (the active involvement of adults in a neighborhood to protect children). All the items were rated on a 5-point Likert-type scale ranging from 1 (strongly agree) to 5 (strongly disagree). These items were reverse coded so that a higher score indicated higher levels of collective efficacy. The subscale was created by obtaining the mean score for the three items. The Cronbach's alpha

reliability score for the child-centered social control subscale is .71. Intergenerational closure, informal social control, and social cohesion were combined to create the collective efficacy scale. The Cronbach's alpha reliability score for all the subscales combined was .86, which it is still above the recommended .80 score (Cohen, Inagami, & Finch, 2008).

Data Analysis

Following data screening and examination of descriptive data, a Pearson's correlations matrix was run to explore the relationship among the study variables. Then, path analysis was conducted to examine the direct and mediated relationships between the exogenous variables (immigration status and collective efficacy) and the endogenous variables (self-efficacy and maternal depression). One of the advantages of using path analysis is that it is a statistical technique that permits researchers to specify and test the goodness of fit between the data and theoretical models designed to represent the causal relationships between observed variables (Kline, 2011). Multiple indicators can be utilized to evaluate the goodness of fit of path models. For example, the chi-square should have a value close to the number of degrees of freedom (*df*) and a probability greater than .05 (Schumaker & Lomax, 2010); however, it can be greatly influenced by sample size and other factors (Kline, 2011). Therefore, given the uncertainty of the chi-square statistic, other measures should be used to determine the goodness of fit, including the root mean square error of approximation (RMSEA), comparative fit index (CFI), and Tucker-Lewis index (TLI). The RMSEA value should be below .05 and no greater than .08, and the CFI and TLI should be above .90.

<center>**Results**</center>

Descriptive information about the sample is presented in Table 1. The number of participants in the sample was 578. Over 80% of the total sample consisted of foreign-born

mothers, including 42.50% documented and 37.14% undocumented. The majority of the mothers, specifically 81.55%, had lived in the U.S. for at least 10 years. However, close to 40% of the mothers who were undocumented had lived in the U.S. for less than 5 years. In addition, 68.14% of the sample spoke Spanish at home. The majority of mothers in the sample were married (61.67%), and their average age was 35.76 years. Approximately 62.91% of the mothers had less than a high school education. Approximately 31.09% of them lived at 100% of the federal poverty level or below, and about 13.65% lived between 101% and 200% of the federal poverty level.

Table 2 shows bivariate correlations between the endogenous and exogenous variables in the study. Being U.S. born was significantly correlated with having moderately higher self-esteem ($r = .15$, $p < .001$); being a documented immigrant was correlated with having higher collective efficacy ($r = .13$, $p < .01$); being an undocumented immigrant was correlated with having lower depression ($r = -.02$, $p < .05$); being an undocumented immigrant was correlated with having lower levels of self-efficacy beliefs ($r = -.15$, $p < .001$); collective efficacy and self-efficacy were positively correlated ($r = .15$, $p < .001$); and self-efficacy and depression were negatively correlated ($r = -.16$, $p < .001$);

[insert Table 1 about here]

[insert Table 2 about here]

Table 3 shows the goodness-of-fit statistics for this model, indicating that the model has a good fit. First, the chi-square was insignificant ($\chi^2 = .53$, $df = 1$, $p > .05$); in addition, the RMSEA value of .02, the CFI value of 0.98, and TLI value of 0.97 indicated a good range of goodness-of-fit values. No problems were identified in terms of model identification, and additional plausible model modifications were identified.

Table 3 also shows the direct and indirect effects and their associated 95% confidence intervals. The first hypothesis for this study was that the mother's undocumented status would be directly linked greater symptoms of depression; however, the hypothesis was not supported since the direction was the opposite of what was hypothesized. As shown in Table 3 undocumented status had a direct significant relationship with depression, but in the opposite direction (B = -.09 $p < .001$). It was also hypothesized that self-efficacy would mediate the relationship between undocumented status and depression, and this hypothesis was supported. Undocumented status had a significant negative effect on self-efficacy (B = -.31 $p < .001$), which in turn had a significant indirect effect on depression (B = .03 $p < .001$). On the other hand, the second hypothesis was not supported. Documented status did not have a significant direct or indirect effect on depression.

The third hypothesis proposed that collective efficacy would an indirect effect on depression. The results showed that collective efficacy did not have a significant association with depression, but it had a significant relationship with self-efficacy (B = .10 $p < .01$), which in turn had a significant indirect link to depression (B = -.10 $p < .05$). Figure 3 represents the path diagram for the relationship between immigration status (Mexican-American, documented immigrant, and undocumented immigrant), collective efficacy, toward high self-efficacy, and then toward depression.

[Insert Table 3 about here]

[Insert Figure 1 about here]

Discussion

The purpose of this study was to examine the relationships between immigration status and neighborhood collective efficacy, self-efficacy beliefs, and depression among mothers of Mexican origin in the United States. The first hypothesis that the mother's undocumented status would have a direct effect on maternal depression (increasing depression), was not completely supported. Surprisingly, the association was significant, but in the opposite direction. The results indicated that being undocumented had a direct association with having fewer symptoms of depression compared to U.S. born Mexican American mothers. This study had hypothesized that undocumented status would be linked to having more symptoms of major depression since previous qualitative studies have found that undocumented immigrants face additional cumulative stresses during the different stages of migration. This unexpected finding is consistent with the *immigrant health paradox*, where surprising initial advantages in the mental health of immigrants, despite the socioeconomic status and acculturation stress (Alegría et al., 2009), indicating that the immigrant health paradox is also relevant to the mental health of undocumented immigrants. This unexpected finding may be related to lack of acculturation of undocumented immigrants. Because undocumented immigrants are more recent arrivals and they are more likely to possess the cultural capital that protects against health and mental health problems. It has been shown that the mental health of immigrants declines over time in the host country (the *acculturation hypothesis*) (Alegría et al. 2009). Findings from the National Latino and Asian American Study (NLAAS) on the prevalence of psychiatric disorders among Latinos in the U.S. suggest that foreign nativity among Latino groups is protective for Mexicans (Alegría et al., 2007a). There is also evidence that risk of psychopathology increases with length of time spent in the U.S. and with younger age of arrival. For example, Mexican immigrants who have

lived in the U.S. for 13 years or more have higher rates of psychiatric disorders, mood disorders, alcohol abuse, and drug abuse than Mexican immigrants who have lived in the U.S. for fewer than 13 years (Alegría, et al., 2007b).

The hypothesis that undocumented status would lead to low self-efficacy, which would then decrease the likelihood of depression, was supported. In particular, being undocumented was associated with having lower levels of self-efficacy beliefs, which predicted symptoms of depression. This finding is consistent with previous literature that identifies self-efficacy as a mediating factor for depression, since it gives people a sense of control over stressful life events (Maciejewski et al., 2000). Other research conducted among adults demonstrates that exposure to social contextual stressors is associated with perceptions of powerlessness and low self-efficacy, which in turn are associated with internalizing problems such as anxiety and depression (Dupéré, Leventhal, & Vitaro, 2012). In addition, in a study conducted among Chinese Australian immigrants, found higher levels of psychological distress among immigrants who perceived having been racially discriminated against (Mak & Nesdale, 2001). In the same study, immigrants who possessed enough strong internal coping resources (e.g. generalized self-efficacy; high self-esteem) were less likely to show higher levels of psychological distress (Mak & Nesdale, 2001). In particular, Mexican undocumented immigrants shared in a qualitative study that their self-esteem was lowered due to being undocumented and that they felt inferior to those who were documented (Samaniego-Estrada, 2014). One of the immigrants provided examples of discrimination at work and a sense of helplessness in having to withstand injustices for fear of being reported to immigration authorities. Therefore, the results of this study, in light of previous research, shows that the stressors related to being undocumented influence the internal coping resources (i.e. self-efficacy or self-esteem) of undocumented immigrants. Having greater internal

coping resources (i.e. self-efficacy or self-esteem) can help immigrants cope with daily stressors. When internal coping resources are low, it can lead to higher levels of psychological distress.

Because previous studies have confirmed that low self-efficacy beliefs predict depression (Bandura et al., 1999), the third hypothesis proposed that self-efficacy beliefs could mediate the association between neighborhood collective efficacy and depression. Similar to other studies (Badura et al., 1999), the results indicated that self-efficacy beliefs mediated the relationship between collective efficacy and depression. This finding suggests that the protective effect of neighborhood collective efficacy is not direct in nature but rather may be accounted for by means of increasing self-efficacy beliefs. In addition, the results may also suggest that neighborhood collective efficacy beliefs are more distal in nature and, as such, are likely to influence maternal depression only indirectly. This is also consistent with the *condition-cognition-emotion* model in earlier research, which indicates that neighborhood processes are thought to influence individuals' perceptions of themselves and consequently, their emotional state (Ross & Mirowsky, 2009).

It has been well documented by previous studies that Latino immigrants experience high levels of stress during the different stages of migration, as a result of adapting to a new society, which increases their risk for developing physical and emotional problems (Cavazos-Regh, Zayas, Walker, & Fisher, 2006). Separation from family, cultural barriers, language difficulties, and economic difficulties make the settlement experience very stressful (Cabassa, Zayas, & Hansen, 2006). This accumulated stress is exacerbated for individuals who are undocumented because of the dangerous borders crossings and constant fear of being found and deported. In a study of undocumented immigrants, a majority of the respondents indicated that they did not seek social or government agencies for fear of deportation (Cavazos-Regh et al., 2007). This

study reveals, that despite the difficult challenges undocumented mothers face, they still are less likely to have symptoms of major depression compared to their U.S. born counterparts, consistent with the immigrant health paradox. However, undocumented immigrants may be at risk of developing depression when their self-efficacy is low. This may be an indication that the accumulated stresses that undocumented immigrants experience during the different stages of migration and the inability to deal with the stresses and challenges related to being undocumented, may raise their sense of helplessness, affecting their self-efficacy and leading to depression. Previous literature indicates that undocumented immigrants may feel vulnerable to immigration laws in their day-to-day experiences and have a sense of being hunted by law enforcement. These negative experiences may give them the sense that they do not have control over their lives, lowering their self-efficacy beliefs (Arbona et al., 2010; Ellis & Chen, 2013).

Limitations of the Study

This study has limitations. First, the data are cross-sectional in nature because of the high attrition of undocumented participants across the two waves, thus making the conclusions in this study associational, and thus causality cannot be established. Second, the measure of major depression does not rely on a clinician's diagnostic interview, nor does it provide a second rater to confirm the measure.

Furthermore, while the data for this study are based on a representative sample of the population of Los Angeles County, it may not be generalizable to other regions of the United States. Future research should examine some of the similar issues in other geographic areas in the United States. Los Angeles County has one of the largest minority populations among counties in the United States, meaning that more than half of the residents self-identify as being in a racial-ethnic category other than non-Hispanic white. In addition, Los Angeles County has

traditionally been an immigrant destination for Mexican immigrants. This study sheds light on the experience of Mexican-American and Mexican immigrant mothers living as a racial-ethnic minority in multiethnic neighborhoods. However, future research should examine whether similar findings would be observed in other types of residential environments, such as new destination counties that are not heavily populated with co-ethnic residents or other minority groups (Singer, 2009).

This study also combined two different categories (i.e., naturalized citizen; legal permanent resident or green card holder) into "documented" status because of the small numbers in the sample. This may blur the differences among documented Mexican mothers. Future research should examine the differences between legal permanent resident mothers and naturalized permanent resident mothers, as their situation may differ in regards to the stresses they live day-to-day and the access they have to resources.

While this study sheds light on the mechanism through which self-efficacy beliefs influence maternal depression, it does not really capture how the day-to-day experiences of undocumented immigrants influence their self-efficacy beliefs and in turn increases symptoms of depression. It would be important to conduct qualitative research to examine how the experiences of being undocumented shape self-efficacy beliefs and symptoms of depression among immigrant mothers. Finally, the current sociopolitical context for immigrants has changed over the years, suggesting that the results may be similar or could be exacerbated for immigrants living in today's context. Research should be conducted to fully capture the new reality of immigrants and how the current anti-immigrant environment shapes their experiences and well-being.

Implications

Given the results found in this study, it is important to consider the implications for social work practice. In particular, the findings highlight the importance of increasing self-efficacy beliefs to prevent depression; this would be crucial, particularly among undocumented immigrants, as a way of preventing symptoms of depression. In particular, interventions that seek to prevent depression are likely to benefit from understanding the chronological nature of developmental factors of depression among Mexican immigrant mothers and giving importance to implementing interventions at points that will be most beneficial for clients.

Social workers should also increase their understanding of the challenges that may influence undocumented immigrants' self-efficacy to enhance coping skills. For example, one such challenge mentioned in previous literature is the constant threat of being detained and deported. Discrimination and mistreatment in their places of employment has also been identified as an issue. Social workers need to engage in efforts to inform immigrants about their rights and disseminate information on available resources in culturally appropriate ways, such as, by developing a Promotora program or lay helper program. Promotora programs have been found to be effective at engaging difficult-to-reach communities and have been use to disseminate information, deliver interventions, and mobilize and empower communities (Gonzalez-Arizmendi & Ortiz, 2004). These types of intervention are important in helping empower clients and help them manage their anxieties and fears by helping them gain greater internal coping resources (i.e. self-efficacy, self-confidence).

While little may be done about individuals' immigration status and their experiences related to that status, findings point out that developing interventions to increase neighborhood or community collective efficacy may be an important way to increase self-efficacy and protect against major depression among marginalized and oppressed communities. For example, a

community-based intervention that focused on improving collective efficacy around depression care succeeded in increasing collective efficacy and community engagement to address depression in an African-American community (Chug et al., 2009), suggesting that collective efficacy can be successfully addressed by interventions to target depression among ethnic-minority communities.

The community efforts led by social workers should also include building ties among community members by encouraging participation in political advocacy. For example, a study conducted on a policy advocacy project with Mexican immigrant undocumented mothers, found that the project was successful in strengthening individual and collective efficacy among the participants (Gates, 2017). Participants in the project lobbied state legislators on bills to expand the rights of undocumented immigrants related to granting access to driver's licenses and in-state tuition. The community-based policy advocacy project provided a chance for participants to see the broader societal issues related to their personal challenges, and also to understand their role in influencing policies by working together with allies to bring about change. Mothers described that as a result of their participation in the project, they felt more confident in themselves and in their ability to make a difference in conditions affecting their family and community. This type of project can serve as a model for how to work with undocumented immigrant Mexican mothers' population in order to increase individual and collective efficacy beliefs.

Conclusion and Future Research

The results of the study generally are consistent with the proposed model suggesting that neighborhood collective efficacy and immigration status shape undocumented Mexican immigrant mothers' self-efficacy beliefs, and, in turn, the development of depression. It was unexpectedly found that undocumented mothers had fewer symptoms of depression than

documented and Mexican American mothers. This was consistent with the immigrant health paradox. Self-efficacy also mediated the relationship between undocumented status and depression, suggesting that undocumented status decreases self-efficacy beliefs, leading to symptoms of depression. This means that even though undocumented mothers had fewer symptoms of depression compared to U.S. born Mexican Americans and documented immigrants, when undocumented mothers have low self-efficacy beliefs, they are at risk of depression, and thus, interventions should address self-efficacy beliefs of undocumented immigrants to prevent depression.

In the light of previous qualitative studies, these findings shed light on how the everyday experiences that undocumented immigrants face such as discrimination and threat of being deported may leave them feeling helpless. Cumulative stressors that they encounter during the different stages of migration may affect negatively their internal coping mechanisms (i.e. self-efficacy, self-esteem) making them more vulnerable to depression. Finally, the results demonstrated that self-efficacy mediated the relationship between neighborhood collective efficacy and depression. This suggests that interventions efforts should address self-efficacy beliefs of Mexican immigrant mothers by increasing the perceptions of neighborhood collective efficacy, preventing depression.

In order to build on the current study, future research should continue to examine the unique roles of immigration status, collective efficacy, and self-efficacy in predicting the development of symptoms of depression among mothers of Mexican origin with an undocumented status. The use of longitudinal design in future research would likely produce results that would be more sensitive to the predictive sequence of events. The direct link between undocumented status and depression was found to go in the opposite direction from what was

hypothesized. Therefore, it is important to replicate the findings of this study and to continue to investigate whether immigrants, despite the stresses of being undocumented, are less likely to have depression. Studies should also examine how the accumulative stress of being undocumented may lead to low self-efficacy, which in turn may lead to depressive symptoms among undocumented immigrants.

Finally, future research should investigate more clinical applications of the findings of the present study, specifically as it relates to undocumented populations, and should work to develop interventions that might increase levels of self-efficacy in ways most beneficial in protecting Mexican undocumented mothers from developing depression. It is also important to study the impact of other risk and protective factors of undocumented mothers not examined in the present study, such as fears of deportation and its impact on their emotional, psychological, social, and physical well-being. This study contributes to the understanding of the development of depressive disorder among undocumented immigrant mothers, but future studies should continue to examine the wide range of potential mediators that serve as risk or protective factors in the development of psychological problems among this population.

References

Abrego, L., & Menjívar, C. (2011). Immigrant Latina mothers as targets of legal violence.
International Journal of Sociology of the Family, 37(1), 9–26.

Ahern, J., & Galea, S. (2011). Collective efficacy and major depression in urban neighborhoods.
American Journal of Epidemiology, 173(12), 1453–1462. doi:10.1093/aje/kwr030

Alegría, M., Canino, G., Shrout, P. E., Woo, M., Duan, N., Vila, D., … Meng, X. (2009).
Prevalence of mental illness in immigrant and non-immigrant U.S. Latino groups.
American Journal of Psychiatry, 165(3), 359–369. doi: 0.1176/appi.ajp.2007.07040704

Alegría, M., Mulvaney-Day, N., Torres, M., Polo, A., Cao, Z., & Canino, G. (2007a). Prevalence
of psychiatric disorders across Latino subgroups in the United States. *American Journal
of Public Health, 97*(1), 68–75. doi:10.2105/AJPH.2006.087205

Alegría, M., Sribney, W., Woo, M., Torres, M., & Guarnaccia, P. (2007b). Looking beyond
nativity: The relation of age of immigration, length of residence, and birth cohorts to the
risk of onset of psychiatric disorders for Latinos. *Research in Human Development, 4*(1),
19–47. doi:10.1080/15427600701480980

Almeida, J., Ichiro K., Beth, E. M., & Subramanian, S. V. (2009). A multilevel analysis of social
ties and social cohesion among Latinos and their neighborhoods: Results from Chicago.
Journal of Urban Health, 86(5), 745–759. doi:10.1007/s11524-009-9375-2

American Immigration Council. (2014). Unauthorized immigrants today: A demographic profile.
Retrieved from
https://www.americanimmigrationcouncil.org/sites/default/files/research/profile_of_the_
unauthorized_ii_final_1_0.pdf

Arbona, C., Olvera, N., Rodriguez, 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

Ayon, 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.

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

Bandura, A. (1995). *Self-efficacy in changing societies*. New York: Cambridge University Press.

Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: W. H. Freeman and Company.

Bandura, A. et al. (1999). Bandura, A. (1999). A social cognitive theory of personality. In L. Pervin & John, O. P. (Ed.), *Handbook of personality: Theory and research* (2nd ed., pp. 154-196). New York: Guilford Publications.

Becerra, D. (2016). Anti-immigration policies and fear of deportation: A human rights issue. *Journal of Human Rights and Social Work, 1*, 109–119. doi:10.1007/s41134-016-0018-8

Becerra, D., Castillo, J., Silva Arciniega, M. R., Bou Ghosn Naddy, M. & Nguyen. (2018). Increased immigration enforcement and perceived discrimination among Latino immigrants. *Journal of Sociology and Social Welfare, 45*(2), 39-65.

Becerra, D., Wagaman, M. A., Androff, D., Messing, J., & Castillo. (2017). Policing immigrants: Fear of deportations and perceptions of law enforcement and criminal justice. *Journal of Social Work, 17*(6), 715-731. doi: 10.1177/1468017316651995

Berk, M. L., & Schur, C. L. (2001). The effect of fear on access to care among undocumented Latino immigrants. *Journal of Immigrant Health, 3*, 151-156.

Brown, S. C., Mason, C. A., Spokane, A. R., Cruza-Guet, M. C., Lopez, B., & Szapocznik, J. (2009). The relationship of neighborhood climate to perceived social support and mental health in older Hispanic immigrants in Miami, Florida. *Journal of Aging and Health*, *21*, 431-451.

Cabassa, L. J., Zayas, L. H., & Hansen, M. C. (2006). Latino adults' access to mental health care: A review of epidemiological studies. *Administration and Policy in Mental Health and Mental Health Services Research, 33*(3), 316–330. doi:10.1007/s10488-006-0040-8

Canino, G., & Alegría, M. (2009). Understanding psychopathology among the adult and child Latino population: An epidemiologic perspective. In F. A. Villarruel (Ed.), *Handbook of Latino psychology: Developmental and community-based perspectives* (pp. 31–44). Los Angeles, CA: Sage.

Carbonell, S. (2005). Immigration and hardship: Living with fear. In K. Holt Barrett & W. George (Eds.), *Race, culture, psychology & law* (pp. 435–445). Thousand Oaks, CA: Sage.

Cassarino, J. P. (2004). Theorizing return migration: The conceptual approach to return migration revisited. *International Journal of Multicultural Societies, 6*(2), 253–279. doi:10.1590/S1980-85852013000200003

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 the National Medical*

Association, 99, 1126–1131.

Cavazos-Rehg, P. A., Zayas, L. H., Walker, M. S., & Fisher, E. B. (2006). Evaluating an

abbreviated version of the Hispanic stress inventory for immigrants. *Hispanic Journal of*

Behavioral Sciences, 28, 498–515. doi:10.1177/0739986306291740

Chug, B., Jones, L., Jones, A., Corbett, C. E., Booker, T., Wells, K. B., & Collins, B. (2009).

Using community arts events to enhance collective efficacy and community engagement

to address depression in an African American community. *American Journal of Public*

Health, 99(2), 237–244. doi:10.2105/AJPH.2008.141408

Cohen, D. A., Inagami, S., & Finch, B. (2008). The built environment and collective efficacy.

Health and Place, 14, 198–208. doi:10.1016/j.healthplace.2007.06.001

Cook, B., Alegría, M., Lin, J. Y., & Guo, J. (2009). Pathways and correlates connecting Latinos'

mental health with exposure to the United States. *American Journal of Public Health,*

99(12), 2247–2254. doi:10.2105/AJPH.2008.137091

Cummings, E. M., Keller, P. S., & Davies, P. T. (2005). Toward a family process model of

maternal and paternal depressive symptoms: Exploring multiple relations with child and

family functioning. *Journal of Child Psychology and Psychiatry, 46*, 479–489. doi:

10.1111/j.1469-7610.2004.00368.x

Cutrona, C. E., Wallace, G., & Wesner, K. A. (2006). Neighborhood characteristics and

depression: An examination of stress processes. *Current Directions Psychological*

Science, 15(4), 188–192. doi:10.1111/j.1467-8721.2006.00433.x

DeLuca, L., McEwen, M., & Keim, S. (2010). United States-Mexico border crossing:

Experiences and risk perceptions of undocumented male immigrants. *Journal of*

Immigrant and Minority Health / Center for Minority Public Health, *12*(1), 113-123.

doi:10.1007/s10903-008-9197-4.

Dreby, J. (2012). The burden of deportation on children in Mexican immigrant families. *Journal of Marriage and Family, 74*(4), 829–845. doi:10.1111/j.1741-3737.2012.00989.x

Dupéré, V., Leventhal, T., & Vitaro, F. (2012). Neighborhood processes, self-efficacy, and adolescent mental health. *Journal of Health and Social Behavior, 53*(2), 183–198.

Ellis, L. M., & Chen, E. C. (2013). Negotiating identity development among undocumented immigrant college students: A grounded theory study. *Journal of Counseling Psychology, 60*(2), 251–264. doi:10.1037/a0031350

Eschbach, K., Ostir, G. V., Patel, K. V., Markides, K. S., & Goodwin, J. S. (2004). Neighborhood context and mortality among older Mexican Americans: Is there a barrio advantage? *American Journal of Public Health, 94*(10), 1807–1812. doi:10.2105/AJPH.94.10.1807

Fenton, J. J. Catalano, R., & Hargreaves, W. A., (1996). Effect of proposition 187 on mental health service use in California: a case study. *Health Affairs, 15*(1), 182-190. doi: 10.1377/hithaff.15.1.182

Flores, Y. G. (2013). *Chicana and Chicano mental health*. Tucson, AZ: University of Arizona Press.

Gates, A. B. (2017). No one will speak for us: Empowering undocumented immigrant women through policy advocacy. *Journal of Community Practice, 21*(1), 5-28. doi: 10.1080/10705422.2016.1270244

Gonzalez-Arizmendi, L., & Ortiz, L. (2004). Neighborhood and community organizing in colonias: Acase study in the development and use of promotoras. *Journal of Community Practice, 12*(1/2), 23–35.

Hartley, S. M., Vance, D. E., Elliott, T. R., Cuckler, J. M., & Berry, J. W. (2008). Hope, self-efficacy, and functional recovery after knee and hip replacement surgery. *Rehabilitation Psychology, 53*, 521–529. doi:10.1037/a0013121

Hernandez, D. M. (2008). Pursuant to deportation: Latinos and immigrant detention. *Latino Studies*, 6(1-2), 35-63. doi: 10.1057/lst.2008.2

Huang, Z. J., Yu S. M., & Ledsky, R. (2006). Health status and health service access and use among children in U.S. immigrant families. *American Journal of Public Health*, *96*(4), 634-640. doi: 10.2105/AJPH.2004.049791

Kessler, R. C., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H-U. (1998). The World Health Organization composite international diagnostic interview short-form (CIDI-SF). *International Journal of Methods in Psychiatric Research, 7*(4), 171–185. doi:10.1002/mpr.47

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

Kullgren, J. T. (2003). Restrictions on undocumented immigrants' access to health services: The public health implications of welfare reform. *American Journal of Public Health*, *93*(10), 1630-1633.

Lacayo, A. E. (2010). The impact of section 287(g) of the Immigration and Nationality Act on the Latino community. Retrieved from National Council of La Raza website: http://www.nclr.org/images/uploads/publications/287gReportFinal.pdf

Linde, J. A., Jeffrey, R. W., Levy, R. L., Sherwood, N. E., Utter, J., Pronk, N. P., & Boyle, R. G. (2004). Binge eating disorder, weight control self-efficacy, and depression in overweight men and women. *International Journal of Obesity, 28*(3), 418–425.

doi:10.1038/sj.ijo.0802570

Luoma, I., Taminen, T., Kaukonen, P., Laippala, P., Puura, K., & Salmelin, R. (2001). Longitudinal study of maternal depressive symptoms and child well-being. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*(12), 1367–1374. doi:10.1097/00004583-200112000-00006

Maciejewski, P. K., Prigerson, H. G., & Mazure, C. M. (2000). Self-efficacy as a mediator between stressful life events and depressive symptoms: Differences based on history of prior depression. *British Journal of Psychiatry, 176*, 373–378. doi:10.1192/bjp.176.4.373

Maddux, J. E., & Gosselin, J. T. (2003). Self-efficacy. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 218–238). New York: The Guilford Press.

Mair, C., Diez Roux, A. V., Shen, M., Shea, S., Seeman, T., Echeverria, S., & O'Meara, E. S. (2009). Cross-sectional and longitudinal associations of neighborhood cohesion and stressors with depressive symptoms in the multiethnic study of atherosclerosis. *Annals of Epidemiology, 9*(1), 49–57. doi:10.1016/j.annepidem.2008.10.002

Mak, A. S., & Nesdale, D. (2001). Migrant distress: The role of perceived racial discrimination and coping resources. *Journal of Applied Social Psychology, 31*(12), 2632-2647. doi: 10.1111/j.1559-1816.2001.tb00194.x

Martinez, O., Wu, E., Sandfort, T., Dodge, B., Carballo-Dieguez, A., Pinto, R., et al. (2015). Evaluating the impact of immigration policies on health status among undocumented immigrants: A systematic review. *Journal of Immigrant and Minority Health*, 17(3), 947-970.

Menjívar, C., & Kanstroom, D. (2014). *Constructing immigrant "illegality"* [eBook]. New York: Cambridge University Press.

Migration Policy Institute (2013). Mexican migration to the United States: Underlying economic

    factors and possible scenarios for future flows. Retrieved from

    www.migrationpolicy.org/pubs/RMSG-MexicoFlows.pdf

Migration Policy Institute. (2017). Immigration under Trump: A review of policy shifts in the

    year since the election. Retrieved from

    file:///Users/anayelilopez/Downloads/TrumpatOne-final.pdf

Nicklett, E. J., & Burgard, S. A. (2009). Downward social mobility and major depressive

    episodes among Latino and Asian-American immigrants to the United States. *American*

    Journal of Epidemiology, 170(6), 793–801. doi:10.1093/aje/kwp192

Ornelas, I. J., & Perreira, K. M. (2011). The role of migration in the development of depressive

    symptoms among Latino immigrant parents in the U.S. *Social Science & Medicine, 73*(8),

    1169–1177. doi:10.1016/j.socscimed.2011.07.002

Ortega, A. N., Fang, H., Perez, V. H., Rizzo, J. A., Carter-Pokras, O., Wallace, S. P., & Gelberg,

    L. (2007). Health care access, use of services, and experiences among undocumented

    Mexicans and other Latinos. *Archives of Internal Medicine*, *167*, 2354–2360.

    doi:10.1001/archinte.167.21.2354

Ostir, G. V., Eschbach, K., Markides, K. S., & Goodwin, J. S. (2003). Neighborhood

    composition and depressive symptoms among older Mexican Americans. *Journal of*

    Epidemiology & Community Health, 57(12), 987–992. doi:10.1136/jech.57.12.987

Paris, R. (2008). "For the dream of being here, one sacrifices...": voices of immigrant mothers in

    a home visiting program. *The American Journal of Orthopsychiatry*, *78*(2) 141-151.

    doi:10.1037/0002-9432.78.2.141

Passel, J. S., & Cohn, D. (2011). Unauthorized immigrant population: National and state trends,

2010.Retrieved from Pew Hispanic Center website:

http://www.pewhispanic.org/files/reports/133.pdf

Peterson, C. E., Sastry, N., Pebley, A. R., Ghosh-Dastidar, B., Williamson, S., & Lara-Cinisomo, S. (2004). *The Los Angeles Family and Neighborhood Survey: Codebook* (2400/2-1-LAFANS). Santa Monica, CA: RAND.

Pew Research Center (2018). ICE arrests went up in 2017, with biggest increases in Florida, northern Texas, Oklahoma. Retrieved from http://www.pewresearch.org/fact-tank/2018/02/08/ice-arrests-went-up-in-2017-with-biggest-increases-in-florida-northern-texas-oklahoma/

Pine, B. A., & Drachman, D. (2005). Effective child welfare practice with immigrant and refugee children and their families. *Child Welfare, 84*, 537−562.

Rodriguez, N. & Hagan, J. M. (2004). Fractured families and communities: Effects of immigration reform in Texas, Mexico, and El Salvador. *Latino Studies, 2,* 328-351. doi: 10.1057/palgrave.lst.8600094

Ross, C. E., & Mirowsky, J. (2009). Neighborhood disorder, subjective alienation, and distress. *Journal of Health and Social Behavior, 50*(1), 49–64. doi:10.1177/002214650905000104

Sampson, R. J., Raudenbush, S. W., & Earls, F. (1997). Neighborhoods and violent crime: A multilevel study of collective efficacy. *Science, 277*(15), 918–924. doi:10.1126/science.277.5328.918

Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling.* New York: Routledge.

Seligman, M. E. P. (1975). *Helplessness: On depression, development, and death*. San Francisco: W. H. Freeman.

Singer, A. (2009). *The new geography of United States immigration*. Washington, DC:

    Brookings Institution.

Sullivan, M. M, & Rehm, R. (2005). Mental health of undocumented Mexican immigrants: A

    review of the literature. *Advances in Nursing Science, 28*(3), 240–251.

Valentino, N. A., Brader, T., & Jardina, A. E. (2013). Immigration opposition among U.S.

    whites: General ethnocentrism or media priming of attitudes about Latinos? *Political

    Psychology, 34*(2), 149–166. doi:10.1111/j.1467-9221.2012.00928.x

Viramontez Anguiano, R. P., & Lopez, A. (2012). El miedo y el hambre: Understanding the

    familial, social, and educational realities of undocumented Latino families in north

    central Indiana. *Journal of Family Social Work, 15*(4), 321–336.

    doi:10.1080/10522158.2012.695324

Table 1. Descriptive Statistics for Mothers/Household ($n = 578$)

Variable	%
Mothers/Household Demographic Characteristics	
Mother's immigration status	
U.S. born	20.36%
Documented	42.50%
Undocumented	37.14%
Lived in the U.S.	
Less than 5 years	8.45%
5–9 years	15.85%
10–19 years	39.61%
20 years or more	36.09%
Language	
English	31.86%
Spanish	68.14%
Marital status	
Married	61.67%
Cohabitating	12.31%
Single	26.03%
Educational attainment	
Less than high school	62.91%
High school	18.35%
College or more	18.74%
Family poverty level	
100% FPL or below	31.09%
101–200% FPL	13.65%
201–400% FPL	6.99%

Table 2. Correlations between Study Variables (n=578)

Variable	1	2	3	4	5	6
1. U.S. born	--					
2. Documented	-.47	--				
3. Undocumented	-.31	-.69	--			
4. Collective Efficacy	.01	.13**	-.14**	--		
5. Self-Efficacy	.19***	.01	-.15***	.15***	--	
6. Depression	0.03	-.01	-.02*	-.05	-.16***	--

*$p<.05$; **$p<.01$; ***$p<.001$.

Table 3. Direct and Indirect Effects and 95% Confidence Intervals (CIs) for the Final Model (*n*=578)

Model pathways	Coefficient (B)	95% CI
Direct effects		
Immigration status (Mexican-American - reference) → Self-efficacy	-	-
Immigration status (documented) → Self-efficacy	-.11	-.12-(-.38)
Immigration status (undocumented) → Self-efficacy	-.31***	-.45-(-.18)
Collective efficacy → Self-efficacy	.13**	.03-.18
Immigration status (undocumented) → Depression	-.09**	-.16-(-.02)
Self-efficacy → Depression	-.09*	-.14-(-.06)
Indirect effects		
Immigration status (documented) → Depression	.01	-.005-.04
Immigration status (undocumented) → Depression	.03***	.01-.05
Collective efficacy → Depression	-.010*	.02-(-.002)

Note. χ2 = 0.87, *df* = 1, *p* > .05; CFI = 0.98, TLI = 0.97, RMSEA = .02. *df* = degrees of freedom; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation.
*p < .05. ***p* < .01. ****p* < .001.

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Figure 1. Path diagram for the mediation model (*n* = 578).
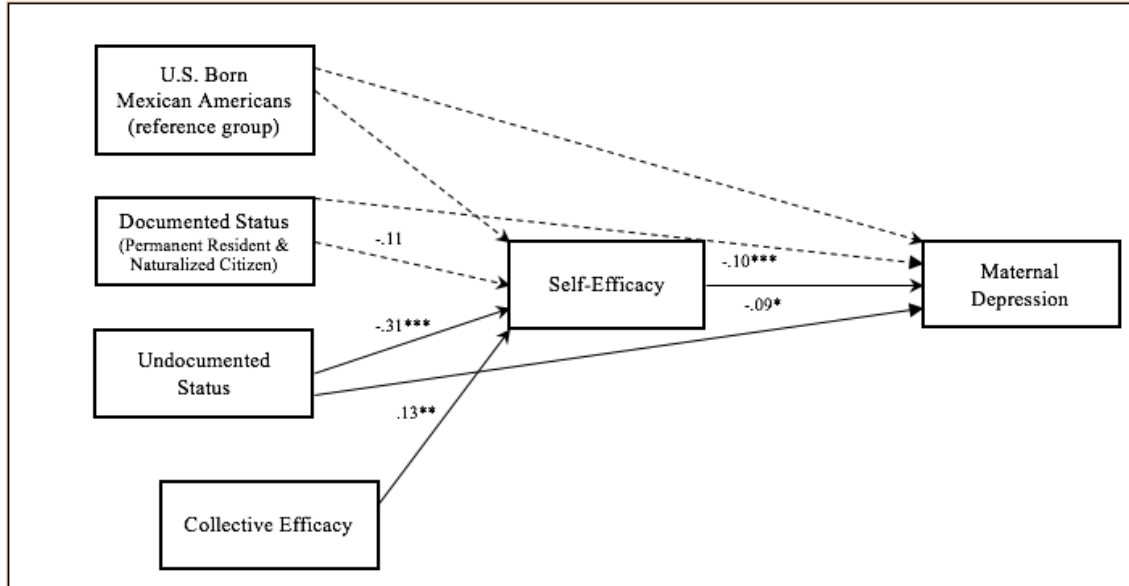
Note. χ² = 0.53, *df* = 1, *p* > .05; CFI = 0.98, TLI = 0.97, RMSEA = .020. *df* = degrees of freedom; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation.
*p < .05. **p < .01. ***p < .001.

CHAPTER III: PAPER 2

The Relationship Between Parent and Child Immigration Status and Externalizing and

Internalizing Behavioral Problems Among Mexican-Origin Children: The Influence of

Age, Gender, Maternal Mental Health, and Family Environment

Abstract

Little is known about how immigration status influences children's emotional and behavioral
well-being. The current study helps to develop a better understanding of the relationship between
family immigration status and children's well-being by investigating how family immigration
status (U.S. born, documented family, mixed-status family, and undocumented family) is
associated with internalizing and externalizing behaviors in children and adolescents of Mexican
origin living in the Unites States. This study further contributes to the knowledge in this
understudied area by examining how these relationships are moderated by age, gender, maternal
mental health, and family environment. The study uses hierarchical regression linear models and
data from the first wave of the Los Angeles Family and Neighborhood Survey (L.A. FANS). The
sample included 678 children and adolescents. The results revealed that children in mixed-status
and undocumented families had worse internalizing behavioral problems than children in U.S.-
born and documented families. Even though family immigration status was not associated with
externalizing problems, the interaction between family immigration status and children's age was
significantly related to children's behavioral problems. Among girls, parents' marital conflict
exacerbated the negative influence of undocumented or mixed status. On the other hand, high
maternal self-efficacy attenuated the relationship between immigration status and externalizing
behavioral problems among girls. The results show the importance of maternal mental health and

family environments in the midst of immigration factors that could potentially be stressful for children and influence their well-being.

Keywords: immigration status; externalizing and internalizing problems; maternal mental health; parenting; marital conflict

Introduction

According to the American Immigration Council, there are approximately 4.5 million U.S. citizen children under the age of 18 living in a mixed-status immigrant family (American Immigration Council, 2017a). In addition, as of 2013 approximately 775,000 children and youth in the United States were of undocumented status (Passel, Cohn, Krogstad, & Gonzalez-Barrera, 2014). This indicates that over a quarter of the 18.7 million children of immigrants in the United States are impacted by undocumented status (Child Trends, 2013). These children will be referred to as children of undocumented immigrants in this study. While undocumented immigrants in the United States are of many nationalities, 58% of the 11.7 million are of Mexican origin (6.5 million) are of Mexican origin, making up the largest single group (Krogstad & Passel, 2015).

Despite the large number of children of undocumented immigrants in the U.S., the immigration debate, as well as the scientific literature, have focused their attention on undocumented adult immigrants, most who immigrant to the United States in search of economic opportunities (Connor, Cohn, & Gonzalez-Barrera, 2013). The children of undocumented immigrants are still not well understood in the immigration debate or scientific literature.

It has been documented consistently in studies in the United States that immigrant children and adolescents will have more positive developmental outcomes than children who have been living in the U.S. longer or to those who were born in the U.S. to immigrant parents

(e.g., Garcia Coll & Marks, 2012). This population phenomenon is known as the *immigrant health paradox*. Although empirical research (Canino & Alegría, 2009; Crosnoe, 2012) suggests that children of immigrants of Mexican origin have better mental health and behavioral outcomes compared to Mexican-origin youth from U.S.-born parents, less is known about how family immigration status affects the mental health outcomes of Mexican children of immigrants (Canino & Alegría, 2009). The large number of children in immigrant families and the impact of parent and child immigration status on children's well-being are greatly ignored in the literature. (e.g., Abrego & Menjívar, 2011; Dreby, 2012).

Emerging qualitative research in the area of immigration status and child well-being has shown that youth and young adults who are undocumented have worse educational, economic, and mental health outcomes compared to their documented and U.S.-born peers. Undocumented status, for example, has been associated with lower levels of education and higher rates of poverty across generations (Bean, Brown, & Bachmeier, 2015). Studies have also found that undocumented young adult workers have lower wages and worse work conditions compared to their documented and U.S.-born peers (Bernhart et al., 2009; Hall, Greenman, & Farkas, 2010). Findings from two large-scale data sets also revealed that undocumented college students reported having higher levels of anxiety symptoms compared to their documented counterparts (Teranishi, Suárez-Orozco, & Suárez-Orozco, 2015).

Developmental and mental health issues associated with undocumented status are not limited to youth who are undocumented themselves. Having a parent who is undocumented is linked to various developmental and educational risks, such as lower levels of cognitive development, achievement, and educational progress in children (Yoshikawa, 2011). Menjívar (2006) found that having at least one family member with an undocumented status can generate

fear of being detained and deported for the entire family, including the children who are U.S. citizens. This stress, associated with living in a mixed status family, can have consequences on children's mental well-being, including depression, anxiety, fear, rule-breaking behaviors, and attention problems (Delva, Horner, Martinez, Sanders, Lopez, & Doering-White, 2013; Landale, Hardie, Oropesa, & Hillemeier, 2015).

The present study contributes to the limited body of literature in the area of family immigration status and children's well-being. More specifically, this study makes a significant contribution to the body of knowledge by addressing the immigrant health paradox and examining the association between mother and child immigration status and externalizing and internalizing behaviors. This study utilizes Bronfenbrenner bioecological model and family systems theory to explore how key factors such as age, maternal mental health, and family environment may exacerbate or buffer the negative effects of parent and child immigration status on children's internalizing and externalizing problems.

Literature Review

Anti-Immigrant Policies

Different policies enacted in the United States at the federal and state levels in the past several decades affect children of undocumented immigrants. It is crucial to review and understand how some policies may have influenced the well-being of children in the study. One of these policies is Plyler *v. Doe* sustaining that it is unconstitutional for states to deny students a free public education on the basis of their immigration status (American Immigration Council, 2016). However, under *Plyler v. Doe*, students face limited opportunities for higher education if they are undocumented because students are ineligible for financial aid and they have to pay out-of-state tuition (American Immigration Council, 2016). Although *Plyler v. Doe* ensured access to

elementary and secondary education regardless of immigration status, anti-immigrant policies continued to threaten that right through state policies (American Immigration Council, 2016). For example, in 1994 California constituents voted in favor of Proposition 187, prohibiting undocumented students from admission into public elementary or secondary schools and requiring schools to disclose students' immigration status. In addition, Proposition 187 limited access to a wide range of resources to undocumented immigrants, including government assistance programs, housing, and nonemergency health care (Valentino, Brader, & Jardina, 2013). Even though the U.S. Supreme Court repealed Proposition 187, the voter support that enacted it revealed the anti-immigrant sentiment in California and left a mark of hatred and fear for undocumented families (Berk & Schur, 2001).

In 1996, the United States Congress passed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which expanded the categories of immigrants who could be subject to deportation, restricted immigrants from appealing deportation, expanded the category of crimes for which immigrants could be deported, and barred undocumented immigrants from accessing public services (Jones-Correa & de Graauw, 2013). A few years after the enactment of PRWORA, studies began to examine its impact on immigrant families and communities. These studies found that there was an increase in deportations and family separations, greater economic hardship among immigrant families, and a loss of federally funded services among U.S.-born children of undocumented immigrants. This led to an increase of health and mental health problems among this population (Hagan, Rodríguez, Capps, & Kabiri, 2003).

Due to the expansion of Section 287(g) of the 1996 Immigration and Nationality Act after the 9/11 World Trade Center attacks, partnerships between local law enforcement officers were

established to act as federal immigration enforcement authorities (Becerra, 2016). The goal of this partnership was to capture and facilitate the removal of immigrants who committed major crimes and who were potential terrorists. However, the program led to numerous arrests of nonviolent and nonthreatening immigrants and those with non-violent offenses and worsened racial profiling of Latinos at the community level (Lacayo, 2010). For example, after conducting a study in North Carolina, the American Civil Liberties Union, found that 83% of those detained in Gaston County were charged for traffic violations. Additional arrest data of 280 immigrants identified by the 287(g)-program found that only 9% of the immigrants has been arrested for serious offense. This racial profiling of Latinos at the local level created an unsafe environment for all Latinos, including those who are U.S. citizens. It also created an unsafe environment for all Latinos, including those who are U.S. citizens. For example, a study conducted on Latinos in North Carolina found that after the expansion of 287(g), 35% of U.S. citizen respondents worried about the deportation of a family member (Lacayo, 2010). It is also important to note that previous studies indicate that increasing immigration enforcement and anti-immigrant policies at the federal, state, and local levels creates fear among Latino communities (Ayón & Becerra, 2013), exacerbating the social, emotional, and mental health problems of these communities (Becerra et al., 2015).

Risk Factors Related to Immigration Status

Undocumented status is likely to affect child well-being through a variety of contextual and psychological risk factors. According to the *stages of migration* framework (Pine & Drachman, 2005), there are key variables that should be considered when applying child welfare practice principles to immigrant children and families. The stages of migration include pre-migration stage, transit stage, resettlement stage, and in some cases, the return to the country of

origin stage. Specifically, in this study the immigration status of mothers and children is a salient factor in the resettlement stage, since it structures the immigration experience, influencing families' and children's adaptation and well-being (Suárez-Orozco & Suárez-Orozco, 2001)**.**

Specifically, for children who are undocumented, their immigration status may have severe implications on their well-being during the resettlement stage, such as not being eligible for government public programs including sources of health and mental health care (Yoshikawa, Suárez-Orozco, & Gonzalez, 2016). Undocumented youth may also experience different situations that may cause unexpected stress and anxiety (Abrego & Gonzalez, 2010; Suárez-Orozco, Yoshikawa, Teranishi, & Suárez-Orozco, 2011). For example, they face obstacles in pursuing a higher education, since they are not eligible for federally funded grants, loans, and work-study (Gonzalez, 2016), and policies vary across states as to whether students can pay in-state as opposed to out-of-state tuition (Teranishi et al., 2015). In addition, undocumented youth who were brought to the United States at a very young age without documents may have few memories of their home countries; as such, they may fear being detained and deported to a country they do not know (Arbona, Olvera, Rodriguez, Hagen, Linares, & Weisner, 2010; Becerra, Quijano, Wagaman, Cimino, & Blanchard, 2015). Finally, undocumented adolescents may come to a realization of their status when they find themselves unable to apply for a driver's license permit, unable to work after school or during the summer, and unable to apply for college as their peers do (Ellis & Chen, 2013).

Furthermore, parents' undocumented status may influence the well-being of their children in various ways even when the child is a U.S.-born citizen. For example, studies have revealed that citizen-children of undocumented parents are less likely to enroll in public programs, even though the children are entitled to these programs based on their U.S. citizenship

(Brabeck, Lykes, & Hunter, 2015; Yoshikawa et al., 2016), for fear of being identified as undocumented and deported (Yoshikawa, 2011). Another study conducted by Vargas and Pirog (2016) revealed that undocumented mothers of U.S.-born children are less likely to participate in the Women, Infant, and Children (WIC) program. These families fear of deportation is also likely to influence their access to regular doctor and dentist visits (Huang, Yu, & Ledsky, 2006). Finally, one of the most pervasive and devastating family events related to undocumented status is the deportation of a family member from the United States. Evidence shows that the deportation of a caretaker can result in a decline in family income and disruption in attachments due to separation from caregivers. A study after a large-scale workplace raid found that children's behavioral problems and depressive symptoms increased after their parents were detained and deported (Chaudry et al., 2010). Fear of having their parents deported can also affect children, even when the parent is not actually detained. For example, qualitative studies have found that fear of being removed can be transmitted to children either directly or indirectly though parental stress, affecting child well-being negatively (Brabeck, Lykes, & Hershberg, 2011).

Theoretical Framework and Moderator Factors

The social-ecological environment in which children of undocumented immigrants grow up in include various types factors that can either promote positive outcomes or detract from them (Bronfenbrenner & Morris, 2006). Bronfenbrenner's bioecological model, which guides this study, emphasizes the importance of understanding the interaction between individuals' development and their surrounding environments. The interactions between the individual (age, gender, ethnicity) and his/her immediate environment (the microsystem, including family, school or daycare, and peers) take place within nested systems. The nested systems include the

mesosystem (interactions among microsystems), the exosystem (parent work factors, neighborhood, and community), and the macrosystem (cultural, societal, and policy belief systems) (Bronfenbrenner & Morris, 2006). Finally, the chronosystem represents change over time. For undocumented immigrants' parents and their children, this include developmental changes, acculturation, obtaining documentation, or immigration policy changes over time. An ecological systems perspective, then, is appropriate for this study since it considers multiple factors that impact the outcomes of children and youth growing up in undocumented homes.

Informed by the bioecological model of development, this study examined how different factors that interact with immigration status, influencing children and youth behavioral functioning. Specifically, this study examined how the harmful effects of undocumented/mixed-status on the behavioral functioning of the children may differ by developmental age group. In addition, gender was also taken into consideration since research suggests that the prevalence of internalizing and externalizing problems and sensitivity to stress is different for males and females (Bouma, Ormel, Verhulst, & Oldehinkel, 2008). Girls tend to display fewer externalizing problems compared to boys, and internalizing problems is more common in girls because of biological, cognitive, and social buffers (Moffitt, Caspi, Rutter, & Silva, 2001). Therefore, the associations between immigration status and internalizing and externalizing problems cannot be studied without taking into account the different developmental stages and gender differences.

This study also examined how at the microsystem level maternal and familial factors interacted with immigration status to influence behavioral problems among children and youth in the study. Together with *family systems theory,* it examined how maternal mental health and family environment can be either protective or a risk factor for the mental health of the child.

Family systems theory conceptualizes the family as an organized group in which all the members are interdependent (Minuchin, 1985), influencing the functioning of the whole family system and its subsystems (e.g., spousal subsystem, parent-child subsystem, and sibling subsystem) (Rootes, Jankowski, & Sandage, 2010). For example, maternal depression, parenting stress, and marital conflict are likely to influence the increased risk of emotional and behavioral problems in children (Cho, Kim, Lim, Lee, & Shin, 2015; Yeh, Huang, & Liu, 2016). Previous scholarly work has also found that when children have greater support from families, they are less likely to develop depression and behavioral problems, even during stressful circumstances (Ge, Natsuaki, Neiderhiser, & Reiss, 2009). Likewise, a negative family environment and parenting practices may exacerbate the impact of stressful life events. Hence, family environmental factors could potentially moderate the effect of immigration status on children's internalizing and externalizing problems.

The Purpose of the Study and Hypotheses

Based on previous findings and theoretical underpinnings, this study aims to fill the existing gap in the literature related to the relationship between immigration status and internalizing and externalizing problems. Additionally, this study further contributes to the literature by examining the moderating effects of maternal mental health, family environment, age, and gender on that relationship. Specifically, the following hypotheses will be tested:

Hypothesis 1: Family immigration status will be associated with children's internalizing and externalizing problems. Children in undocumented and mixed-status families will have worse internalizing and externalizing behaviors compared to children in U.S.-born families.

Hypothesis 2a: Maternal depression, parenting stress, and marital conflict will have a negative influence on children's internalizing and externalizing problems. **Hypothesis 2b:** Mothers' high

self-efficacy will have a positive influence on children's internalizing and externalizing problems. **Hypothesis 3a:** Maternal depression, parenting stress, and marital conflict will exacerbate internalizing and externalizing problems for children in mixed-status and undocumented families. These results will vary by gender. **Hypothesis 3b:** Mothers' high self-efficacy will ameliorate internalizing and externalizing problems for children in mixed-status and undocumented families. These effects will vary by gender. **Hypothesis 4:** Being either in an undocumented or mixed-status household will lead to worse internalizing and externalizing problems for older children than for younger children.

Methods

Data and Sample

Data for this study were drawn from the first wave of the Los Angeles Family and Neighborhood Study (L.A. FANS). L.A. FANS is a survey of households (n = 3,085) in which adults and children were selected from a stratified random sample of census tracts in Los Angeles County between April 2000 to January 2002 and then later in 2006–2008 (Peterson et al., 2004). The study oversampled households with children who lived in poor or very poor neighborhoods, providing a large number of respondents in poor households. In households with children, the primary caregiver (typically the mother) was interviewed. English or Spanish was used to conduct the surveys, and some families preferred to use a mix of both (Peterson et al., 2004). For the purpose of this study, only data from Wave 1 were used because the attrition rate for undocumented immigrants, particularly families with children, was high for Wave 2. In addition, this study focuses on mothers and children of Mexican origin, and as such, other ethnic and racial populations were excluded from the analysis (Vargas Bustamante et al., 2012). After excluding other participants based on their ethnic origin the sample for this study consisted of

678 mothers of children, ages 3-17. This study also divides children into three different developmental age groups: early childhood (3-5 years old); middle childhood (6-12 years old); and adolescence (13-17 years old).

Measures

Dependent variables.

Child behavioral problems. The independent variables in this study are externalizing and internalizing behavioral problems. It utilizes the Behavior Problems Index (BPI), which was created to measure children's behavioral problems, including anxiety, depression, and aggression (Peterson & Zill, 1986). This instrument has been widely used in numerous studies and was validated in 30 different societies (Ivanova et al., 2007). The BPI instrument consists of 26 items, and it is divided into two subscales: internalizing and externalizing. The internalizing subscale consists of 11 items that indicate the presence of withdrawn and sad behaviors on the part of the child, and it includes items such as "has been too fearful or anxious," "has felt worthless or inferior," and "has cried too much." The externalizing subscale consists of 15 items and measures the presence of aggressive and other related behaviors that are directed outward toward others. Some of the items that are part of the externalizing subscale include "has argued too much," "has been impulsive or acted without thinking," and "has demanded a lot of attention." Using the BPI instrument, primary caregivers were asked about their children's (ages 3 to 17) behavior problems. Primary caregivers responded to the BPI questions using responses that ranged from 0 = not true to 2 = often true (0 = not true; 1 = sometimes true; 2 = often true), so that a higher score indicates more behavioral problems. The scales were created by averaging the scores of the items for the subscale and for the scale. The Cronbach's alpha reliability score for the internalizing subscale is .73 and for the externalizing subscales is .87. The Cronbach's alpha

reliability score for the two subscales combined is .89, which is comparable to the Cronbach's reliability alpha score for the full instrument reported in previous studies and ranging from .89 to .90 (Peterson & Zill, 1986).

Independent variables.

Marital conflict. The Conflict and Problem-Solving Scales (Kerig, 1996) were utilized to evaluate couples' destructive approaches to handling conflict. The eight-item scale included questions related to physical and verbal aggression (e.g., name-calling, insulting, cursing, grab partner, push, pull, shove). For each item, participants rated on a 4-poing scale ranging 0 = never to 3 = often true regarding the frequency they used each behavior in the past year. Internal consistency, test-retest reliability, and different forms of validity have been established for the CPS (Kerig, 1996). Internal constancy for the scale in the sample was of .72, which was satisfactory.

Immigration status. L.A. FANS foreign-born adult participants responded to a series of questions related to their immigration status as well as their children's status, if they had any. They were first asked if they were naturalized citizens. Those who were not citizens then were asked if they had a green card or permanent residence. Respondents who said no were then asked if they had refugee, asylee, or temporary protected status. Finally, those who did not have one of those statuses were asked whether they had a valid visa for temporary residence. This series of questions was used to determine their immigration status (i.e., U.S. born, naturalized citizen, permanent resident, or visa holder). Immigrants who did not fit any of those categories were coded as undocumented. However, visa holders and those with refugee/asylum status were excluded from the sample in this particular study since the numbers of Mexican immigrants in these categories was too small to analyze and their experiences are different from other

categories. A study conducted on L.A. FANS data determined that respondents were willing to answer questions regarding their immigration status (Bachmeier, Van Hook, & Bean, 2014); this means that the procedure proposed in this study to determine immigration status is consistent with profiles created by other sources.

For this study, children were assigned to four types of immigrant families. Children in the native/U.S.-born families' category will be those children who are U.S.-born and whose mothers are U.S.-born of Mexican origin. Children in the documented immigrant families' category will include mothers who have a green card or are naturalized citizens and children who are U.S. born or have a green card. The mixed-status family category will include mothers who are undocumented (no green card or visa) and children who are U.S. born or documented immigrants. The children in the documented and mixed-status families are U.S. born. The undocumented category includes mothers who are undocumented as well as children who are undocumented.

Maternal depression. Based on items from the Composite International Diagnostic Interview-Short Form (CIDI-SF), the maternal depression variable measured the probability of whether a mother had major depression (Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998). Specifically, the instrument was utilized to screen respondents for a major depressive episode during the 12 months prior to participating in the interview. The instrument helps estimate the probability that a respondent met the criteria for major depression based on the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV) (Wang & Patten, 2002). The CIDI-SF has been identified as a valid and reliable diagnostic tool, having a 93% classification accuracy for major depressive disorders (Kessler et al., 1998).

The criteria for major depression could be met by either responding yes to questions about anhedonia (i.e., inability to experience joy) or yes to all the questions about dysphoric mood (i.e., sadness or anxiety). Dysphoric or anhedonic symptoms should have lasted for two weeks for most of the day and should have happened almost every day during the period to meet the requirement for classification (Kessler et al., 1998). In addition, the CIDI-SF screener only identifies individuals who have a high probability of being classified as having major depression (Kessler et al., 1998). Neither the severity nor duration of major depression was assessed in the study. Probability rates were calculated based on the responses of the participants and the criteria described previously. The CIDI-SF measure creates a probability-of-caseness score that ranges from 0.0 to 1.0. The closer the score is to 1, the greater the probability that a participant would meet diagnostic criteria for a major depressive episode. The Cronbach's alpha reliability score for the CIDI-SF scale is .87.

Mother's self-efficacy. The self-efficacy index is composed of five items that asked mothers how strongly they agreed with statements regarding their self-efficacy, or perception that they can achieve complete tasks and control the events affecting them. These items were based on a modified version of the Pearlin Mastery scale (Pearlin, Lieberman, Menaghan, & Mullan, 1981). The following items were included in the scale: "I feel that I'm a person of worth, at least on an equal plane with others," "Overall, I am satisfied with myself," "I am able to do things as well as most other people," "I have little control over things that happened to me," and "I can just do about anything I set my mind to." Respondents were asked to rate the items on a Likert scale ranging from 1 = disagree to 5 = strongly agree. One of the items was reverse coded so that it would be consistent with the direction of the other items. A high score indicated greater self-efficacy. The Cronbach's alpha reliability score of .75 indicates good internal consistency.

Parenting stress. A measure of parenting stress was included, which utilizes items from the Parenting Stress Index-Short Form (PSI-SF) (Abidin, 1990). This scale provides information about the levels of distress the primary caregiver experienced in her role as a parent. The five items include statements such as "Being a parent is harder than I thought it would be," "I feel trapped by my responsibilities as a parent," "I find that taking care of my child/children is much more work than pleasure," and "I often feel tired, worn out, exhausted from raising a family." The responses were rated using a 5-point Likert-type scale ranging from 1 = completely false to 5 = completely true, with higher scores indicating greater levels of distress. The PSI-SF is highly correlated with the full-length PSI instrument ($r = .94$), and the two-week test-retest reliability of the full-length PSI with the PSI/SF is .95 (Abidin, 1990; Haskett, Ahern, Ward, & Allaire, 2006). A validation study of the PSI-SF with African-American and Latino primary caregivers assessed the validity of the instrument with that population and found that it has a good validity (Sang Jung, Gopalan, & Harrington, 2016). The score was created by averaging the five items. The Cronbach's alpha reliability score was .67. The Cronbach's alpha reliability score for this measure has been reported as .84, which is much higher than the index used in this study. This could be due to the low number of items available in the data set to measure parenting stress, as well as the small sample.

Child demographic information. The variables of sex (1 = female; 0 = male) and age (three age groups: 3–5 years old/early childhood; 6–12 years old/middle childhood; 13–17 years old/adolescence) served as demographic control variables for the children.

Maternal demographic information. The study includes mother's age (in years) and maternal education (1 = less than high school; 2 = high school; 3 = some college or more).

Mother's marital status. Mother's marital status was measured with a variable that will have the following categories: 0 = married; 2 = cohabitating, 3 = single.

Family poverty levels. The study accounted for total household annual income using the federal poverty level (1 = 100 % federal poverty level or below; 2 = 101–200% federal poverty level; 3 = 201–400% federal poverty level; 4 = 401% federal poverty level and above).

Neighborhood socioeconomic disadvantage. The L.A. FANS included a factor score for neighborhood socioeconomic disadvantage where higher scores indicate that a neighborhood is more impoverished. The indicators for these factors include the percent of the census-tract residents who live in poverty, the percent of families with an annual income less than $24,000, the percent of families headed by females with children, the percent of households receiving public assistance, the percent of the population who is not white and not Asian or Pacific Islander. The data were drawn from the 2000 Census, and the factor score was created by the RAND Corporation for use with the L.A. FANS data (Peterson et al., 2004). In this study, the neighborhood socioeconomic variable had two categories (0 = not impoverished; 1 = impoverished).

Data Analysis

Multiple linear regression analysis was utilized to estimate the relationship between a family's immigration status and children's internalizing and externalizing behavioral outcomes. Two different models were estimated for each dependent variable. The first model examined the association between immigration status and internalizing behaviors, controlling for children's and maternal and familial characteristics. The first model also includes factors that have been identified in the literature that explain the outcome of externalizing and internalizing behaviors, including mother's mental health and familial processes. The second model includes moderator

effects. Specifically, the second model includes an interaction effect between immigration status and age to estimate whether the effects of immigration status are more harmful to older children. This model also includes three-way interaction terms to assess whether maternal and familial factors together with immigration status and gender can either exacerbate or ameliorate the effects on internalizing problems and whether the results vary by gender. The sequence of the two models is repeated for externalizing problems. The significance of all variables and interaction terms were assessed at the p=0.05 level.

In addition, sampling weights were utilized to account for three aspects of L.A. FANS design, including stratification of tracts by poverty level, clustering of children within tracts, and ensuring that the use of sampling weights was equal to the inverse probability that children were sampled for the study. Controlling for the clustering of children within neighborhoods ensured that the regression models had unbiased standard-error estimates. The use of the sampling weights and controlling for stratification also ensured that estimates would be generalizable to all the neighborhoods and households in Los Angeles County. STATA was utilized for the analysis, and the SVY command was used to control for factors described above in the models.

<div align="center">**Results**</div>

Descriptive Statistics

Descriptive information about the sample for this study is presented in Table 1. The number of children in the sample was 678. In regard to the mother's and household's characteristics, about 25% of the families were mixed status, meaning that the mother was undocumented and the child was U.S. born. In addition, in about 14% of the households both mother and child were undocumented, and the rest of the sample was either composed of documented families (44.13%) or U.S.-born/native families (17.26%). The majority of the

mother's (76.77%) had lived in the U.S. for at least 10 years. Close to 70% of the sample spoke

Spanish at home. The majority of mothers in the sample were married (86.85%) and their

average age was 35 years. Approximately 66% of the mothers had less than a high school

education, and about 37.48 % of the families lived at 200% or below of the federal poverty level.

In regard to the children's sample, about half of the sample was female (51.34%). Children in the

different developmental age groups were distributed in the following ways: early childhood (3-

to 5-year-olds) made up 23.51% of the sample, middle childhood (6- to 12-year-olds) made up

47.07% of the sample, and adolescents made up 29.41% of the sample.

Multivariate Analysis

     Internalizing problems. The results of multiple regression analyses are shown in Table 2.

The results showed that this model was significant with adjusted $R^2 = .19$, $F(17, 659) = 6.16$, $p <$

.001. As it was hypothesized, children in a mixed-status or undocumented family showed greater

internalizing problems. Specifically, being a child in a mixed-status family (B = 1.97, $p < .001$)

or in an undocumented family (B = 1.78, $p < .001$) were both significantly associated with

greater internalizing problems. Several maternal and familial factors were significant predictors

of internalizing. The following results were found: maternal depression was associated with

greater internalizing problems (B = 1.57, $p < .001$); children who had a mother with high self-

efficacy were associated with lesser internalizing problems (B = -.59, $p < .001$); (B = .87, $p <$

.01); and children having a mother with higher parenting stress were associated with higher

levels of internalizing problems (B = .48, $p < .05$). In addition, being a child from a cohabitating

household as opposed to a married household was also significantly associated with greater

internalizing problems (B = 1.10, $p < .05$). Parental marital conflict was not significantly

associated with internalizing problems.

Externalizing problems. The results for externalizing problems are also found in Table 2. This model also significantly predicted externalizing problems with $R^2 = .13$, $F(17, 660) = 4.66$, $p < .001$. Unlike the results for internalizing problems, being a child in a mixed-status or undocumented family was not associated with having externalizing problems. The strongest predictor of externalizing problems was maternal depression (B = 3.24, $p < .001$), which was associated with higher externalizing problems. Mother's self-efficacy was associated with less externalizing problems (B = -.99, $p < .05$). Parents' marital conflict was also associated with more externalizing problems (B = .46 $p < .05$).

Interaction Effects

A more comprehensive overview of the model with interaction effects is found in Table 2. This section focuses more on the moderating effects (i.e., immigration status, age, gender, and familial and maternal factors) and how they jointly influence the internalizing and externalizing behaviors of children. The inclusion of the interaction terms in Model 2 of internalizing behaviors significantly improved the model, with $R^2 = .25$, $F(29, 647) = 6.39$, $p < .001$. First, as was hypothesized, the impact of immigration status had a more severe impact on children in middle childhood and/or adolescence as opposed to early childhood. Specifically, the following interaction terms between immigration status categories and age were significant: being in a mixed-status family and in middle childhood (B = 3.13, $p < .01$) and being undocumented and being an adolescent (B = 2.35, $p < .05$). Female undocumented children who experienced parental marital conflict at home were more likely to have internalizing problems (B = 4.27, $p < .01$), meaning that undocumented status combined with parents' marital conflict exacerbated the internalizing problems for girls in the sample. In addition, it was also found that being a female in a mixed-status family (B = -.79, $p < .05$) or undocumented family (B = -1.40, $p < .01$) and

having a mother with high self-efficacy ameliorated the negative effects of immigration status on internalizing problems for female children.

Model 2 of externalizing problems also included interaction effects. The model significantly predicted externalizing problems with an adjusted $R^2 = .17$, $F(29, 648) = 4.08$, $p < .001$. The interaction effects showed that even though immigration status was not directly associated with externalizing problems, when combined with age, immigration status was more severe for children in middle childhood and adolescence as opposed to early childhood. The interaction effect between being a child in a mixed-status family and being in middle childhood was associated with higher externalizing problems ($B = 5.30$, $p < .01$). Being a child in an undocumented family and in middle childhood also was associated with higher externalizing problems ($B = 3.62$, $p < .05$). Being an undocumented female in a home with high levels of parental marital conflict was also associated with higher externalizing problems ($B = 4.80$, $p < .01$). Mother's self-efficacy beliefs also buffered the negative effects of immigration status for undocumented girls ($B = -1.65$, $p < .05$).

Discussion

The first goal of the study was to test the relationship between the mother's and child's immigration status and internalizing (e.g., feeling fearful, worthless) and externalizing problems (e.g., demanding attention, arguing). Being a child in a mixed-status or undocumented family was one of the most significant predictors of internalizing problems. This finding was particularly pronounced for children in middle childhood as well as adolescence compared to early childhood, reporting greater internalizing behaviors. This means that the hypothesis was supported: children in undocumented and mixed-status families had worse internalizing problems compared to children in documented and U.S.-born families, suggesting that the

immigrant health paradox does not hold true for children of undocumented and mixed-status families. This could potentially be related to some of the disadvantages or stressors that undocumented and mixed-status families encounter such as working in low paying jobs, lack of access to healthcare and publically funded programs, experiencing discrimination, and being in constant fear of being deported (Yoshikawa, & Kalil, 2011).

For externalizing problems, however, coming from an undocumented or mixed-status family did not have a significant effect. Previous findings consistently find that children of immigrants and foreign-born children report favorable mental health and lesser internalizing and externalizing problems compared to their U.S.-born counterparts. In other words, prior studies identify an increased risk of externalizing behavior for children of native-born mothers compared to children with foreign-born mothers. This coincides with the immigration health paradox (Gonzales et al., 2008).

The results of this study are also consistent with the bioecological model, suggesting that the social-ecological environment holds different experiential and developmental implications depending on the specific developmental period of a child. Despite failing to find an association between the main effect of immigration status and externalizing problems when moderated by age, middle childhood children and adolescents of undocumented immigrants reported greater externalizing problems than children in early childhood. Insight into the developmental stages in children at different ages might explain this finding. Although very little is known about how immigration status may affect children in different developmental stages, researchers posit that parents may conceal their unauthorized status, leaving young children to be unaware it (Yoshikawa & Kalil, 2011). However, a parent's unauthorized status still shapes the developmental context of citizen children in early developmental ages. Due to anti-immigrant

policies, undocumented parents may be less likely to seek resources for their citizen children in fear of being detained and deported. Having limited access to healthcare and quality of life resources (e.g., insurance, housing) would likely risk the health and mental health on the children of undocumented immigrants. Greater insight necessitates further research in this area.

Starting in middle childhood, children may start becoming aware of their family's legal vulnerabilities and the culture of fear they live (Yoshikawa & Kalil, 2011). Undocumented adolescents are able to better comprehend the implications of their status and the associated barriers they face in their everyday lives (Chavez, Lopez, Englebrecht, & Viramontez Anguiano, 2012). During middle childhood and adolescence, children in mixed-status families, even when they are U.S. citizens, may become aware of their parents' immigration status, which may induce fear and stress over the possible deportation of their parents (Menjívar, 2006). Thus, the findings indicate that taking into consideration the developmental periods of children of undocumented immigrants may help explain the implications that immigration status can have on children during their different developmental stages.

The findings of this study also suggest that multiple factors in different ecological contexts contribute to the behavioral functioning of Mexican-origin children of undocumented parents. Factors from different levels of ecological systems can interact with one another to shape their behavioral functioning. Specifically, the results revealed that the familial/maternal contexts together with immigration status help predict the behavioral functioning of children.

Gender emerged as a significant moderator of self-efficacy, marital conflict and children's behavioral problems. Girls with a mother who had high levels of self-efficacy were less likely to have internalizing problems, even when they lived in a mixed-status or undocumented family. This pattern did not hold true for boys. Self-efficacy also ameliorated the

negative effects of undocumented status for female adolescents. Previous findings reveal that negative or stressful life events increase depressive symptoms among children and adolescents (Ge, Conger, & Elder, 2001). This is also consistent with family systems theory, whereby maternal depression is associated with mental health and behavioral problems among children (Yeh et al., 2016), High self-efficacy serves as a protective factor among mothers by helping them feel that they have control over stressful situations and thus having better coping skills (Hartley, Vance, Elliott, Cuckler, & Berry, 2008). The current study shows that the protective influence of maternal self-efficacy positively impacts on the children of these immigrant mothers, buffering the negative effects associated with being undocumented. Mothers' high self-efficacy beliefs serve as a protective factor since evidence illustrates the effect self-efficacy has on the quality of care provided to children (Sanders & Woolley, 2005). Mothers who have high self-efficacy beliefs tend to be more proactive and responsive caregivers (Dumka, Gonzalez, Wheeler, & Millsap, 2011). Maternal self-efficacy is also associated with better-quality mother-child interactions, maternal sensitivity, and warmth. These maternal characteristics protect children and adolescents from developing behavioral problems, anxiety, and depression (Sanders & Woolley, 2005).

On the other hand, marital conflict exacerbated the negative effects of undocumented status on externalizing problems for girls. Girls in undocumented families with a mother who reported high levels of marital conflict showed higher levels of externalizing problems than boys. Thus, when girls in the sample experienced challenges in multiple contexts, it compounded the negative effects on their externalizing problems. This is consistent with other research that highlights that family conflict appears to be a "vulnerability-reactive" factor, meaning that it intensifies the disadvantages associated with increasing levels of risk (Luthar, 1993). This

highlights the importance of identifying family-level moderators to help adolescents deal with negative societal factors associated with undocumented status. Scholarly research also widely confirms that marital conflict has negative consequences on children's adjustment (Ablow, Measelle, Cowan, & Cowan, 2009). Ge et al. (2009) also revealed that the negative effects of stressful life events are more severe for children who live in a negative family environment. This study further contributes to the literature by identifying that the effects of being undocumented are more severe for girls who also experience parents' marital conflict at home. This could indicate that girls experience greater sensitivity to stressful circumstances, as suggested by other studies (e.g., Bouma et al., 2008). In addition, this study also documents that a negative family context can also intensify externalizing behavioral problems for girls in undocumented families.

Limitations

Although this research study makes new contributions to the literature by examining the critical role of maternal immigration status on the behavioral functioning of Mexican children of immigrants, it does have some limitations. First, Los Angeles County is one of the largest majority-minority counties in the United States, indicating that at least 50% of the population self-identifies as being in a racial-ethnic category. Thus, this paper highlights the experience of Mexican-origin children growing up as a racial-ethnic minority in a multiethnic environment, but it does not necessarily reflect the experiences of Mexican children in other destination areas with less ethnic diversity. Future research should examine whether the experience of children of Mexican immigrants living in new destination counties with a low density of other minority groups or co-ethnic residents.

Further, although this study includes different measures related to important intervening processes, the L.A. FANS dataset does not include measures of other important variables such as

discrimination, fear of deportation, acculturation, or coping strategies utilized by youth or their parents. This limits the ability to examine other possible mechanisms through which maternal documents status may influence children internalizing and externalizing behavioral problems.

Another limitation of this study is that it does not capture the everyday experiences of undocumented immigrants such as threat of deportation and discrimination that may affect children's behavior functioning. Therefore, it is crucial for future studies to use qualitative methods to compliment quantitative findings, such as those in this study.

The authors of this study chose to only use data from Wave 1 of L.A. FANS given the large amount of attrition at Wave 2; thus, all findings in this study are correlational in nature and claims of causality are limited. Future studies should use longitudinal data to show patterns of a variable over time and learn about the cause-and-effects relationships among variables.

Finally, this research also sheds light on an important topic relevant to the experience of thousands of families in the United States today. Nevertheless, the data for this study were collected between 2002 and 2004, and as a result it may not reflect the complete experience of immigrants in the current political environment. For example, President Trump has intensified the immigration debate after taking office and has implemented new immigration policies enhancing immigration enforcement. Thus, it is important to research how the experience of undocumented immigrants and their children during the Trump administration may be similar or different compared to mother and children in this study, taking into account the new sociopolitical context at the federal level.

Implications

This study also provides implications for public policy. For example, children of undocumented mothers are likely to experience behavior problems which will have

consequences for their future life opportunities (e.g., via school performance). These children also often live in families that lack sufficient resources. Undocumented mothers may lack awareness of community resources. Even if they are aware and their children are eligible U.S. citizens, they may be reluctant to seek assistance from government-funded programs because they fear being detected and deported. Thus, a challenge for researchers, social workers, and other professionals who might work with children of undocumented immigrants (e.g., teachers, health professionals)) is to assess the extent to which there is unmet need among undocumented or mixed-status families.

In addition, social workers must engage in anti-oppressive responses to anti-immigrant policies at the federal, state, and local level in their practice and research. The National Association of Social Workers (NASW) acknowledges that immigrants encounter unique challenges due to immigration policies. The NASW calls on social workers to advocate for temporary relief programs for families facing deportation, as well as a path to citizenship to protect children from living in fear and insecurity (National Association of Social Workers, 2015). Building coalitions across organizations, organizing communities around issues of immigration and racial injustice, and engaging with political representatives about policies that impact immigrants will be key to answering NASW's call.

In addition to advocating for immigrant families, social workers should acknowledge that undocumented status harms children in the different stages of development and that these children's experiences may vary by their developmental period. The maternal mental health and family environment should be taken into consideration when working with undocumented and mixed status families since research has shown that the negative effects of stressful life circumstances can be more severe for children in negative family environments (Ge et al., 2009).

Specifically, this study highlights that a mother's high self-efficacy beliefs protect girls from behavioral problems and marital conflict exacerbates behavioral problems. Therefore, it is crucial to consider maternal mental health and family environment as a point of intervention when working with children in undocumented or mixed-status families. For example, a program known as the Family Strengthening Program, is an intervention that focuses on increasing family strengths by teaching parents to manage stress when facing adversities and trauma and developing a positive parent-child relationship amidst among these adversities (Center for the Study of Social Policy, 2017). One of the overall goals of the program is to reduce child behavioral problems. Although the aforementioned intervention has not been implemented specifically with undocumented and mixed-status families, it addresses the findings of this study.

Conclusion and Future Research

Overall, this research contributed to the literature by examining the crucial role of maternal immigration status on the behavioral functioning of Mexican children of immigrants. This study highlights that maternal immigration status matters for the mental health of youth with immigrant parents. In particular the findings shed light on how immigration status can have different implications for children depending on their developmental period. Further, it also shows that when maternal and familial context interacts with immigration status, they can either mitigate or exacerbate the behavioral problems associated with undocumented and mixed-status.

These findings reinforce the need for future research focused on the different risk and protective factors associated with the well-being of mixed-status and undocumented families over time. Factors such as discrimination, fear of deportation, familial processes, and coping skills of parents and children and how they either buffer or exacerbate the negative effects of immigration status. Further research should also explore specifically why undocumented status

has a more severe impact on children in middle childhood and adolescence. Additionally, further studies should also examine whether immigration status affects the behavioral outcomes of children in early childhood indirectly through maternal mental health and family environment.

Immigration policies, as well as the anti-immigrant climate, have changed at the state and federal levels over the past 15 years. Most recently, on January 2017 President Trump passed an immigration executive order titled Enhancing Public Safety in the Interior of the United States, which places all unauthorized individuals at risk of deportation, including families and longtime residents (American Immigration Council, 2017b). This law also authorized states and local law enforcement to enforce immigration policies. The impact of these current laws and the anti-immigrant climate can further exacerbate the negative effects of undocumented immigration status on maternal and children's mental health. As such, additional research would increase the understanding of how immigrant children and their families' experience today's anti-immigrant climate and how it impacts their well-being.

References

Abdin R. R. (1990). *Parenting stress index/short form manual.* Los Angeles, CA: Western

    Psychological Services.

Ablow, J. C., Measelle, J. R., Cowan, P. A., & Cowan, C. P. (2009). Linking marital conflict and

    children's adjustment: The role of young children's perceptions. *Journal of Family*

    Psychology, 23(4), 485–499. doi:10.1037/a0015894

Abrego, L. J., & Gonzales, R. G. (2010). Blocked paths, uncertain futures: The postsecondary

    education and labor market prospects of undocumented Latino youth. *Journal of*

    Education for Students Placed at Risk, 15, 144–157. doi:10.1080/10824661003635168

Abrego, L., & Menjívar, C. (2011). Immigrant Latina mothers as targets of legal violence.

    International Journal of Sociology of the Family, 37(1), 9–26.

American Immigration Council. (2016). *Public education for immigrant students:*

    Understanding Plyler v. Doe. Retrieved from

    https://www.americanimmigrationcouncil.org/sites/default/files/research/public_educatio

    n_for_immigrant_students_understanding_plyer_v_doe.pdf

American Immigration Council. (2017a). *U.S. citizen children impacted by immigration*

    enforcement. Retrieved from https://www.americanimmigrationcouncil.org/research/us-

    citizen-children-impacted-immigration-enforcement

American Immigration Council. (2017b). *Summary of the executive order "Enhancing Public*

    Safety in the Interior of the United States." Retrieved from

    https://www.americanimmigrationcouncil.org/sites/default/files/research/summary_of_ex

    ecutive_order_enhancing_public_safety_in_the_interior_of_the_united_states.pdf

Arbona, C., Olvera, N., Rodriguez, N., Hagan, J., Linares, A., & Weisner, 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

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*(1), 206–228.

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

Bean, F. D., Brown, S. K., & Bachmeier, J. D. (2015). *Parents without papers: The progress and pitfalls of Mexican-American integration*. New York, NY: Russell Sage Foundation.

Becerra, D. (2016). Anti-immigration policies and fear of deportation: A human rights issue. *Journal of Human Rights and Social Work, 1*, 109–119. doi:10.1007/s41134-016-0018-8

Becerra, D., Quijano, L. M., Wagaman, M. A., Cimino, A. M., & Blanchard, K. N. (2015). How immigration enforcement affects the lives of older Latinos in the U.S. *Journal of Poverty, 19*(4), 357–376. doi:10.1080/10875549.2014.999969

Berk, M. L., & Schur, C. L. (2001). The effect of access to care among undocumented Latino immigrants. *Journal of Immigrant Health, 3*(3), 151-160. doi: 0.1023/A:1011389105821

Bernhardt, A., Milkman, R., Theodore, N., Heckathorn, D., Auer, M., DeFilippis, J., . . . Spiller, M. (2009). *Broken laws, unprotected workers: Violations of employment and labor laws in America's cities*. Retrieved from National Employment Law Project website: http://www.nelp.org/page/-/brokenlaws/BrokenLawsReport2009.pdf? nocdn=1

Bouma, E. M., Ormel, J., Verhulst, F. C., & Oldehinkel, A. J. (2008). Stressful life events and depressive problems in early adolescent boys and girls: The influence of parental depression, temperament, and family environment. *Journal of Affective Disorder, 105*, 185–193. doi:10.1016/j.jad.2007.05.007

Brabeck, K., Lykes, M. B., & Hershberg, R. (2011). Framing immigration to and deportation from the United States: Central American immigrants make meaning of their experiences. *Community, Work, & Family, 13*, 275–296. doi:10.1080/13668803.2010.520840

Brabeck, K., Lykes, M. B., & Hunter, C. (2015). The psychosocial impact of detention and deportation on U.S. migrant children and families. *American Journal of Orthopsychiatry, 84*(5), 496–505. doi:10.1037/ort0000011

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. Lerner (Eds.), *Handbook of child psychology* (pp. 793–828). New York, NY: Wiley.

Canino, G., & Alegría, M. (2009). Understanding psychopathology among the adult and child Latino population: An epidemiologic perspective. In F. A. Villarruel (Ed.), *Handbook of Latino psychology: Developmental and community-based perspectives* (pp. 31–44). Los Angeles, CA: Sage.

Chaudry, A., Capps, R., Pedroza, J. M., 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/publications/412020.html

Chavez, J. M., Lopez, A., Englebrecht, C. M., & Viramontez Anguiano, R. P. (2012). Sufren los niños: Exploring the impact of unauthorized immigration status on children's well-being. *Family Court Review, 50*(4), 638–649. doi:10.1111/j.1744-1617.2012.01482.x

Child Trends. (2013). *Immigrant children: Indicators on children and youth.* Retrieved from

    www.childtrends.org/?indicators=immigrant-children

Cho, S-M., Kim, E. J., Lim, K-Y., Lee, J. W., & Shin, Y-M. (2015). The effects of maternal

    depression on child mental health problems based on gender of the child. *Community*

    Mental Health Journal, 51, 354–358. doi:10.1007/s10597-014-9824-6

Connor, P., Cohn, D., & Gonzalez-Barrera, A. (2013). *Changing patterns of global*

    migration and remittances. Washington, DC: Pew Research Center. Retrieved

    from http://www.pewsocialtrends.org/2013/12/17/changing-patterns-of-globalmigration-

    and-remittances/Crenshaw, K. (1991). Mapping

Crosnoe, R. (2012). Studying the immigrant paradox in the Mexican-origin population. In C.

    Garcia Coll & A. K. Marks (Eds.), *The immigrant paradox in children and adolescents:*

    Is becoming American a developmental risk? (pp. 61–76). Washington, DC: American

    Psychological Association.

Delva, J., Horner, P., Martinez, R., Sanders, L., Lopez W. D., & Doering-White, J. (2013).

    Mental health problems of children of undocumented parents in the United States: A

    hidden crisis. *Journal of Community Positive Practices, 23*(3), 25–35.

Dreby, J. (2012). The burden of deportation on children in Mexican immigrant families. *Journal*

    of Marriage and Family, 74(4), 829–845. doi:10.1111/j.1741-3737. 2012.00989.x

Dumka, L. E., Gonzalez, N. A., Wheeler, L. A., & Millsap, R. E. (2011). Parenting self-efficacy

    and parenting practices over time in Mexican American families. *Journal of Family*

    Psychology, 24(5), 522–531. doi:10.1037/a0020833

Ellis, L. M., & Chen, E. C. (2013). Negotiating identity development among undocumented

    immigrant college students: A grounded theory study. *Journal of Counseling Psychology,*

60, 251–264. doi:10.1037/a0031350

García Coll, C., & Marks, A. K. (Eds.). (2012). *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* Washington, DC: American Psychological Association.

Ge, X., Conger, R. D., Elder, G. H. (2001). Pubertal transition, stressful life events, and the emergence of gender differences in adolescent depressive symptoms. *Developmental Psychology, 37*(3), 404–417. doi:10.1037//0012-1649.37.3.404

Ge, X., Natsuaki, M. N., Neiderhiser, J. M., & Reiss, D. (2009). The longitudinal effects of stressful life events on adolescent depression are buffered by parent-child closeness. *Development and Psychopathology, 21*, 621–635. doi:10.1017/S0954579409000339

Gonzales, N. A., Germán, M., Kim, S. Y., Preethy, G., Fabrett, F. C., Millsap, R., & Dumka, L. E. (2008). Mexican American adolescents' cultural orientation, externalizing behavior and academic engagement. *American Journal of Community Psychology, 41*, 151–164. doi:10.1007/s10464-007-9152-x

Hagan, J., Rogriguez, N., Capps, R., & Kabiri, N. (2003). The effects of recent welfare and immigration reform on immigrants' access to health care. *Center for Migration Studies, 37*(2), 444–463.

Hall, M., Greenman, E., & Farkas, G. (2010). Legal status and wage disparities for Mexican immigrants. *Social Forces, 89*(2), 491–514. doi:10.1353/sof.2010.0082

Hartley, S. M., Vance, D. E., Elliott, T. R., Cuckler, J. M., & Berry, J. W. (2008). Hope, self-efficacy, and functional recovery after knee and hip replacement surgery. *Rehabilitation Psychology, 53*, 521–529. doi:10.1037/a0013121

Haskett, M. E., Ahern, L. S., Ward, C. S., & Allaire, J. C. (2006). Factor structure and validity of the parenting stress index-short form. *Journal of Clinical Child and Adolescent Psychology, 35*, 302–312. doi:10.1207/s15374424jccp3502_14

Huang, Z. J., Yu, S. M., & Ledsky, R. (2006). Health status and health service access and use among children in U.S. immigrant families. *American Journal of Public Health, 96*(4), 633–670. doi:10.2105/AJPH.2004.049791

Ivanova, M. Y., Dobrean, A., Dopfner, M., Eron, N., Fombonne, E., Fonseca, A. C., . . . Chen, W. J. (2007). Testing the 8-syndrome structure of the child behavior checklist in 30 societies. *Journal of Clinical Child & Adolescent Psychology, 36*(3), 405–417. doi:10.1080/15374410701444363

Jones-Correa, M., & de Graauw, E. (2013). The illegality trap: The politics of immigration and the lens of illegality. *Daedalus, 142*(3), 185–198. doi:10.1162/DAED_a_00227

Kerig, P. K. (1996). Assessing the links between interparental conflict and child adjustment: The conflicts and problem-solving scales. *Journal of Family Psychology, 10*, 454–473. doi: 10 .1037/0893-3200.10.4.454

Kessler, R. C., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H-U. (1998). The World Health Organization composite international diagnostic interview short-form (CIDI-SF). *International Journal of Methods in Psychiatric Research, 7*(4), 171–185. doi**:**10.1002/mpr.47

Krogstad, J. M., & Passel, J. (2015). *Five facts about illegal immigration in the United States.* Retrieved from Pew Research Center website: http://www.pewresearch.org/fact-tank/2015/11/19/5-facts-about-illegal-immigration-in- the-u-s/

Lacayo, A. E. (2010). *The impact of section 287(g) of the Immigration and Nationality Act on the*

Latino community. Retrieved from National Council of La Raza website:

http://www.nclr.org/ images/uploads/publications/287gReportFinal.pdf

Landale, N. S., Hardie, J. H., Oropesa, R. S., & Hillemeier, M. M. (2015). Behavioral

functioning among Mexican-origin children: Does parent legal status matter? *Journal of*

Health and Social Behavior, 56(1), 2–18. doi:10.1177/0022146514567896

Menjívar, C. (2006). Liminal legality: Salvadoran and Guatemalan immigrants' lives in the

United States. *American Journal of Sociology, 111*, 999–1037. doi: 10.1086/499509

Menjívar, C., & Gómez Cervantes, A. (2016). The effects of parental undocumented status on

families and children. *Children, Youth, & Families (CYF) News*. Retrieved from

American Psychological Association website:

http://www.apa.org/pi/families/resources/newsletter/2016/11/undocumented-status.aspx

Minuchin, P. (1985). Families and individual development: Provocations from the field of family

therapy. *Child Development, 56*, 289–302. doi:10.2307/1129720

Moffitt, T. E., Caspi, A., Rutter, M., & Silva, P.A. (2001). *Sex differences in antisocial*

behaviour: Conduct disorder, delinquency, and violence in the Dunedin Longitudinal

Study. Cambridge: Cambridge University Press.

National Association of Social Workers. (2015). *Immigrants and refugees. In Social Work*

Speaks: NASW Policy Statements, 2015-2017. (10th ed). Washington, D.C.: NASW

Press.

Passel, J. S., Cohn, D., Krogstad, J. M., & Gonzalez-Barrera, A. (2014). *As growth stalls,*

unauthorized immigrant population becomes more settled. Washington, DC: Pew

Research Center.

Pearlin, L. I., Lieberman, M. A., Menaghan, E. G., Mullan, J. T. (1981). The stress

process. *Journal of Health and Social Behavior, 22*, 337–356.

Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavior problems in children. *Journal of Marriage and Family, 48*(2), 295–307. doi:10.2307/352397

Peterson, C. E., Sastry, N., Pebley, A. R., Ghosh-Dastidar, B., Williamson, S., & Lara-Cinisomo, S. (2004). *The Los Angeles family and neighborhood survey: Codebook* (Dru-2400/2-1-LAFANS). Santa Monica, CA: RAND.

Pine, B. A., & Drachman, D. (2005). Effective child welfare practice with immigrant and refugee children and their families. *Child Welfare, 84*, 537−562.

Platt, R., Williams, S. R., & Ginsburg, G. S. (2016). Stressful life events and child anxiety: Examining parent and child mediators. *Child Psychiatry and Human Development, 47*(1), 23–34. doi:10.1007/s10578-015-0540-4

Rootes, K. M., Jankowski, P. J., & Sandage, S. J. (2010). Bowen family systems theory and spirituality: Exploring the relationship between triangulation and religious questing. *Contemporary Family Therapy, 32*, 89–101. doi:10.1007/s10591-009-9101-y

Sanders, M. R., & Woolley, M. L. (2005). The relationship between maternal self-efficacy and parenting practices: Implications for parent training. *Child Care Health Development, 31*(1), 65–73.

Sang Jung, L., Gopalan, G., & Harrington, D. (2016). Validation of the parenting stress index-short form with minority caregivers. *Research on Social Work Practice, 26*(4), 429–440. doi:10.1177/1049731514554854

Suárez-Orozco, C., & Suárez-Orozco, M. (2001). *Children of immigration*. Cambridge, MA: Harvard University Press.

Suárez-Orozco, C., Yoshikawa, H., Teranishi, R. T., & Suárez-Orozco, M. M. (2011). Growing up in the shadows: The developmental implications of unauthorized status. *Harvard Educational Review, 81*(3), 438–472. doi:10.17763/haer.81.3.g23x203763783m75

Teranishi, T., Suárez-Orozco, C., & Suárez-Orozco, M. (2015). *In the shadows of the ivory tower: Undocumented undergraduates in the uncertain era of immigration reform*. Los Angeles, CA: Institute for Immigration, Globalization, and Education, UCLA.

Valentino, N. A., Brader, T., & Jardina, A. E. (2013). Immigration opposition among U.S. whites: General ethnocentrism or media priming of attitudes about Latinos? *Political Psychology, 34*(2), 149–166. doi:10.1111/j.1467-9221.2012.00928.x

Vargas, E. D., & Pirog, M. A. (2016). Mixed-status families and WIC uptake: The effects of risk of deportation on program use. *Social Science Quarterly, 97*(3), 555-572. 10.1111/ssqu.12286

Wang, J., & Patten, S. B., (2002). Prospective study of frequent heavy alcohol use and the risk of major depression in the Canadian general population. *Depression and Anxiety*, *15*(1), 42-50. doi: 10.1002/da.1084

Yeh, Z. T., Huang, Y., & Liu, S. I. (2016). Maternal depression and adolescent emotions: The role of family functioning. *Journal of Child and Family Studies, 25*(7), 2189–2200. doi:10.1007/s10826-016-0399-4

Yoshikawa, H. (2011). *Immigrants raising citizens*. New York, NY: Russell Sage Foundation.

Yoshikawa, H., & Kalil, A. (2011). The effects of parental undocumented status on the developmental contexts of young children in immigrant families. *Child Development Perspectives, 5*(4), 291-297. doi: 0.1111/j.1750-8606.2011.00204.x

Yoshikawa, H., Suárez-Orozco, C., & Gonzales, R. (2016). Unauthorized status and youth

development in the United States: Consensus statement of the society for research on

adolescence. *Journal of Research on Adolescence– 27*(1), 1–16. doi:10.1111/jora.12272

Table 1. Descriptive Statistics for Mothers/Household and Children's Variables ($n = 678$)

Variable	%
Mothers/Household Demographic Characteristics	
Family immigration status	
U.S. born	17.26%
Documented family	44.13%
Mixed-status family	24.75%
Undocumented family	13.86%
Lived in the U.S.	
Less than 5 years	7.11%
5–9 years	16.12%
10–19 years	42.11%
20 years or more	34.66%
Language	
English	30.27%
Spanish	69.73%
Marital status	
Married	86.85%
Single	13.15%
Educational attainment	
Less than high school	66.20%
High school	16.26%
College or more	17.54%
Family poverty level	
100% FPL or below (Reference)	21.78%
101–200% FPL	15.70%
201–400% FPL	8.91%
401% FPL and above	53.61%
Children's characteristics	
Age	
Early childhood (3–5 years old)	23.51%
Middle childhood (6–12 years old)	47.07%
Adolescence (13–17 years old)	29.42%
Sex	
Female	51.34%

Notes: Mother's Age ($M = 35.31$, $SD = 7.71$)

Table 2. Results of Regression Models Predicting Behavioral Outcomes of Mexican-Origin Children (*n* = 678)

	Internalizing Problems				Externalizing Problems			
	Model 1 Without Interaction Effects		**Model 2** *Interaction Effects*		**Model 1** Without Interaction Effects		**Model 2** *Interaction Effects*	
Variables	B	SE	B	SE	B	SE	B	SE
Main Predictor Variable								
Family Immigration Status								
U.S. born (Reference)								
Documented	.89	.47	.72	.74	-.07	.82	-2.72	1.62
Mixed-status	1.97***	.58	.44	.83	1.43	1.02	-1.77	1.77
Undocumented	1.78***	.54	2.61	1.06	1.78	.99	-.25	2.06
Child Characteristics								
Child's Age								
Early Childhood/3–5 years old (Reference)								
Middle Childhood/ 6–12 years old	-.27	.35	-1.59**	.56	-.88	.62	-4.13***	1.25
Adolescence/13–17 years old	.03	.37	-.30	.75	-.81	.70	-3.77*	1.56
Child's Sex (Female=1)	.42	.27	.85	.42	-.43	.50	-.19	.89
Mother/Family Characteristics								
Mother's Educational Level								
Less than high school (Reference)								
High school graduate	-.24	.38	-.24	.39	-.09	.79	-.04	.81
Some college or more	-.24	.38	-.15	.36	-.69	.72	-.84	.70
Mother's Marital Status								
Married (Reference)								
Cohabitating	1.11*	.57	1.00	.57	1.87*	.88	1.86*	.90
Single	.51	.32	.57	.35	.75	.53	.77	.51
Family Poverty Level								
100% FPL or below (Reference)								
101–200% FPL	.11	.43	-.53	.38	.59	.92	.18	.89
201–400% FPL	.15	.49	-.29	.47	-.07	1.12	-.62	1.11
401% and above FPL	.11	.37	-.21	.35	-.33	.78	-.64	.79
Maternal/Familial Factors								
Mother's major depression	1.52**	.52	1.49**	.51	3.24***	.92	3.22***	.90
Mother's self-efficacy (high)	-.59**	.22	-.25	.27	-.99*	.43	-.45	.51
Parenting stress (high)	.46*	.21	.50*	.19	.53	.39	.50	.37
Marital conflict (high)	1.12	.77	.50	.78	2.53*	1.34	1.71	1.42
Neighborhood Factors								

Neighborhood poverty (poor =1)	.47	.33	.51	.31	-.67	.66	-.76	.64
Interaction Effects								
Documented X Child's Developmental Stage								
Documented X Early Childhood (Reference)								
Documented X Middle Childhood			1.09	74			3.46	1.55
Documented X Adolescence			.61	.92			4.24	1.87
Mixed-status family X Child's Developmental Stage								
Mixed-status X Early Childhood (Reference)								
Mixed-status X Middle Childhood			3.13**	.95			5.30**	1.88
Mixed-status X Adolescence			-.62	.96			2.61	2.29
Undocumented Status X Child's Developmental Stage								
Undocumented X Early Childhood (Reference)								
Undocumented X Middle Childhood			-.34	1.09			3.62	2.13
Undocumented X Adolescence			-2.35*	1.17			.84	2.24
Documented X Mother's Self-Efficacy X Female			-.46	.32			-.58	.54
Mixed-status X Mother's Self-Efficacy X Female			-.79*	.41			-1.41	.98
Undocumented X Mother's Self-Efficacy X Female			-1.40**	.48			-1.65*	.78
Documented X Marital Conflict X Female			.21	0.79			1.03	1.40
Mixed-status family X Marital Conflict X Female			1.75	1.10			2.77	2.34
Undocumented X Marital Conflict X Female			4.27**	1.36			4.80*	2.11
Adjusted R^2								

$* p < .05; ** p < .01; *** p < .001$

CHAPTER IV: PAPER III

The Link Between Family Immigration Status and Behavioral Problems Among Children

of Mexican Origin: The Mediating Influence of Maternal Self-Efficacy, Depression, and

Parenting Stress

Abstract

Lack of legal immigration status has been linked to poor mental health outcomes for adults. Yet

very few quantitative studies have examined the link between families' immigration status (U.S.

born, documented, mixed status, and undocumented) and their children's internalizing and

externalizing behavioral outcomes, particularly children of Mexican origin, who comprise a large

percentage of immigrant children in the United States. This study employs path analysis to test a

model that links families' immigration status to children's behavioral outcomes through mothers'

self-efficacy, maternal depression, and parenting stress, using a sample of 1,007 children ages 3

to 17. The sample was divided into three developmental age groups: 256 children in early

childhood (3 to 5 years old), 490 children in middle childhood (6 to 12 years old), and 261

adolescents (13 to 17 years old). This study was based on data from immigrant mothers who

participated in Wave 1 of the Los Angeles Family and Neighborhood Survey (L.A. FANS) and

responded to questions pertinent to their own mental health and their children's internalizing and

externalizing behaviors. The results of the study showed that there is a link between immigration

status and internalizing problems among children in mixed-status and undocumented families

who are in middle childhood and adolescence. Conversely, no direct links were found between

immigration status and externalizing problems; the path was mediated through maternal mental

health and parenting stress for adolescents. Implications for research and practice are included.

Keywords: immigration status; behavioral problems; maternal factors; Mexican children and families

Introduction

In 2015, there were approximately 43 million immigrants in the United States, and of those, approximately 11 million were undocumented and about 56% of the undocumented immigrants were from Mexico (Migration Policy Institute, 2015). According to the American Immigration Council, approximately 4.1 million U.S. citizen children under the age of 18 live with at least one undocumented parent, and an additional 1 million are undocumented themselves (American Immigration Council, 2017). Despite the large number of children of Mexican origin with at least one undocumented parent, very few studies have examined the well-being of these children and families. Previous literature has shown that foreign-born children have better mental health and behavioral outcomes compared to U.S.-born children of immigrants (Salas-Wright, Vaughn, Schwartz, & Cordova, 2016) and that children of immigrants have better mental health and behavioral outcomes compared to native-born children (Marks, Ejesi, & Garcia Coli, 2014). This concept, known as the *immigrant health paradox*, suggests that immigrants and their children tend to have better health and mental health than their U.S.-born counterparts (Horevitz & Organista, 2012).

Yet the extent to which these findings hold true for children in undocumented families is largely unknown, and quantitative studies for this population are very limited. Some of the few qualitative studies available on this population revealed that children in undocumented and mixed-status families (defined as having at least one member of the family who is

undocumented) possess different characteristics that make them more vulnerable to mental health problems compared to children in documented or U.S.-born families of Mexican origin (Menjívar, 2006; Sullivan & Rehm, 2005). Undocumented families may face additional challenges that could harm their psychological well-being, such as the exposure to the trauma of dangerous border crossings, isolation, helplessness, stress of being exploited and marginalized, and fear of being deported (Sullivan & Rehm, 2005). Menjívar (2006) found that having one family member with undocumented status can generate fear and stress for the entire family, potentially contributing to children's poor mental health and to behavioral outcomes among parents and children.

Little is currently known about whether children who are part of an undocumented or mixed-status family are affected directly through their family's immigration status or whether the mother's mental health and parenting stress mediate the relationship. More generally, family and maternal factors have been shown to be particularly important for explaining the origins of externalizing and internalizing behavioral problems among children and adolescents (Roelofs, Meesters, ter Huurne, Bamelis, & Muris, 2006). The current study will contribute to this area of research by testing a model in which maternal factors such as maternal self-efficacy, depression, and parenting stress mediate the relationship between immigration status and behavioral problems among children. This study proposes that a mother who is undocumented may have lower self-efficacy beliefs, which may in turn influence maternal depression and parenting stress, leading to poor internalizing and externalizing behavioral outcomes among their children. The model will also test a direct link between family immigration status and children's behavioral outcomes.

Literature Review and Theoretical Framework

The environment in which children in undocumented households develop contains various risk and protective factors that could protect or hinder healthy and outcomes (Bronfenbrenner & Morris, 2006). As such, this study is guided by Bronfenbrenner's bioecological model of development, together with family systems theory (Bowen, 1978) to better understand how contextual factors may influence the experiences of children and youth of undocumented families. The ecological perspective indicates that multiple systems (i.e., macro, exo, meso, and micro) interact to affect children's and families' well-being (Bronfenbrenner & Morris, 2006). This conceptual viewpoint helps demonstrate how multiple factors affect the outcomes of children and youth growing up in undocumented families. Family systems emphasizes the importance of the family ecology, in the development and treatment of mental health problems (Bowen, 1978). Most recently, a family approach has also been considered critical for the developmental and treatment of child behavior problems (Gardner, Shaw, Dishion, Burton, & Suplee, 2007; McMahon, Long, & Forehand, 2010). This theory emphasizes the interaction of family members and how they influence each other's behavior. These two theories together help guide this study by positing that the extrafamilial conditions (immigration status and experiences associated with their status) could affect their interfamilial experiences, and these could have developmental implications on their children.

Macrosystem Factors

One of the subsystems of Bronfenbrenner's bioecological model is the macrosystem. Factors at the macrosystem level, such as the economy, society, influence the developmental trajectory of children. The macrosystem involves societal norms, public policies, and shared attitudes that may promote or hinder the well-being of unauthorized families and children

(Yoshikawa, 2011). Such factors have an impact on unauthorized children and families even before they immigrate to the United States. The global economy, emigration policies, conditions in the home country, and immigration policies in the United States influence the decision whether to immigrate as well as immigrants' experience in the United States (Yoshikawa & Kalil, 2011). Particular to the United States, Congress passed the Immigration Reform and Control Act in 1986, restricting the access and pathways to citizenship for unauthorized immigrants (Motomura, 2008). In Mexico, after the implementation of the North American Free Trade Agreement (NAFTA) in 1994, many of the cities were not well prepared to compete globally, and thus, NAFTA brought about joblessness, poverty, and growing economic marginalization (Durand, Massey, & Parrado, 1999). Within these regions that were economically marginalized, individuals were left with the decision whether to emigrate or live in extreme poverty.

The attitudes toward undocumented immigrants have also been very negative and harsh over the years. The well-being of respondents in the L.A. FANS study, the source of data for the current study, which was collected in 2000–2001 and then later in 2006–2008 (Peterson et al., 2004), was potentially influenced by immigration policies passed at the state and federal levels. For example, in 1994, voters in California approved Proposition 187, a policy that prohibited undocumented immigrants from accessing public education, government assistance programs, housing, and nonemergency health care (Valentino, Brader, & Jardina, 2013). Then, in 1996, the U.S. Congress enacted the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA), which denied undocumented immigrants access to government-funded programs and services. PRWORA also made immigrants who entered the country as permanent residents ineligible for federal welfare programs for the first five years after entering the United States.

This program also expanded the categories of immigrants who could be subject to deportation and appeal deportation (Jones-Correa & de Graauw, 2013). Another immigration program that was expanded at the federal level was Section 287(g) of the 1996 Immigration and Nationality Act, after September 11, 2001. It gave authority to local law enforcement officers to enforce federal immigration law (Becerra, 2016). All of these anti-immigrant policies could potentially affect the well-being of immigrant families in a detrimental manner.

The U.S. political landscape at the macro level influences the well-being of immigrants. In a survey completed through the Pew Hispanic Center (Passel & Taylor, 2010), it was found that 6 of 10 Latinos worry that they or someone close to them (i.e., a family member or close friend) will be deported. Another study also revealed that when immigration enforcement and anti-immigrant policies at the federal, state, and local levels are increased, it creates fear among Latino immigrant communities (Ayón & Becerra, 2013). The existence of anti-immigrant policies also harms the social, emotional, and mental health well-being of these communities (Becerra, Quijano, Wagaman, Cimino, & Blanchard, 2015). This means that participants in the study could have potentially been impacted negatively by anti-immigrant policies.

Exosystem Factors

Beyond the social and cultural belief systems represented in anti-immigrant legislation and patterns of discrimination, children are influenced through the exosystem, a system in which children do not participate directly but still influences the child. Evidence shows that a range of everyday experiences, including interactions with authorities and threats of being deported, prevent unauthorized parents from accessing resources to help the development of their children (Yoshikawa, 2011). Unauthorized immigrant parents' threat of being deported decreases the likelihood that they will enroll their citizen children in programs that the children would be

eligible for due to their U.S. citizenship, including child-care subsidies, early childhood programs, and government assistance programs. The fear of authorities and public institutions also prevents unauthorized immigrants from reporting crimes to the police (Becerra, Wagaman, Androff, Messing & Castillo, 2017).

Furthermore, unauthorized immigrants encounter poor working conditions that may influence the well-being of their citizen children (Bernhardt et al., 2009). According to recent studies, approximately 40% of unauthorized parents work in low-wage jobs, at rates much higher than authorized immigrants (Bernhardt et al., 2009; Yoshikawa, 2011). The limited access to resources and poor working conditions, which cause economic hardship and psychological distress, have a harmful effect on children's development (Suárez-Orozco, Yoshikawa, Teranishi, & Suárez-Orozco, 2011). As the aforementioned studies have shown, there are various factors that could influence the well-being of children of undocumented immigrants indirectly. Even though factors from the exosystem are not examined in this study because they are not part of L.A. FANS dataset, it is important to acknowledge the type of threats that undocumented immigrants experience at the exosystem level and could potentially impact their mental health.

Microsystem Factors and Family Systems Theory

This study utilizes bioecological model of development and family systems theory together to help explain how the mother's mental health or behavior influences the behavioral functioning of the child. The microsystem is one of the subsystems of bioecological model and it involves immediate interactions in the family, with peers, at school, and in the community. In particular, this study focuses on the immediate interaction or influence that the mother has on the child. Bronfenbrenner believed that interaction of proximal processes is of great importance to a child's development. Specifically, the proximal process between a mother and her child is the

most significant predictor of developmental outcome for the child (Bronfenbrenner, 1994).

Similarly, family systems theory conceptualizes the family as an organized and interdependent

group (Minuchin, 1985) and, as such, the functioning of a member influences the whole family

system and its subsystems (e.g., spousal subsystem, parent-child subsystem, and sibling

subsystem) (Rootes, Jankowski, & Sandage, 2010).

Consistent with family systems theory and bioecological model, scholarly research has

found that maternal depression is a critical risk factor for the psychological development of

children (Burke, 2003), since a mother with depression may communicate negativity to her

children and affect their psychosocial development. Luoma and colleagues (2001) also found

that maternal depression is linked to high levels of internalizing and externalizing behavioral

problems among children. Similarly, parenting stress, which refers to the experience of distress

associated with the demands related to the role of parenting (Anthony et al., 2005), has been

associated with children's behavioral problems (Haskett, Scott, & Ward, 2004; McPherson,

Lewis, Lynn, Haskett, & Behrend, 2009). Research on parenting stress has shown that it is highly

influenced by contextual factors (Mortensen & Barnett, 2015; White, Roosa, Weaver, & Nair,

2009), increasing parental stress, which may in turn increase youth behavioral problems

(Appleyard, Egeland, van Dulmen, & Sroufe, 2005).

Finally, empirical evidence shows that exposure to contextual stresses is associated with

perceptions of powerlessness or low self-efficacy, which is associated with depression and stress

among mothers (Ross & Mirowsky, 2009). It has also been identified that self-efficacy beliefs

serve as a mediating factor in overcoming negative life events (e.g., Maciejewski, Prigerson, &

Mazure, 2000). Findings such as this highlight the importance of self-efficacy beliefs in

predicting the development of depression and stress. They also indicate that a mother's sense of

control over stressful circumstances such as those that undocumented or mixed-status families face serves as an important protective factor for both mother and children.

The Individual Experience

Various social-ecological environments have different implications at each specific developmental stage. The majority of the research on undocumented immigrants has been conducted on adolescents or young adults, and only very limited research has considered the implications for children in early or middle childhood. The unauthorized status of these children's parents will influence their development during their early years, primarily through their experiences at home, in child care, and at preschool. They will also be affected by distal factors that shape their parents' experience, including work, social networks, and state and federal immigration policies (Yoshikawa, 2011; Yoshikawa & Kalil, 2011).

Few studies have examined how a parent or child's unauthorized status might influence development in middle childhood. It is likely that various factors from early childhood may apply, including lower enrollment rates in programs for which children are eligible and greater social isolation due to limited parental social networks (Yoshikawa & Kalil, 2011). Research also demonstrates an association between unauthorized parents' low wages and poor work conditions and lower academic achievement in children in middle childhood (Yoshikawa, Weisner, & Lowe, 2006). Furthermore, by middle childhood, most children develop cognitive skills leading to an awareness of the documentation status of their parents. One of the key developmental tasks of adolescence is construction of a stable sense of identity, along with a sense of belonging beyond the nuclear family, particularly in the community and society (Marcia, 1966). In the United States, these tasks are mastered by marked rites of passage such as getting a first job, obtaining a driver's license, and, for many youth, going off to college. For

unauthorized youth, identity formation becomes more complex when the layer of citizenship is added, which may contribute to feelings of rejection (Suárez-Orozco, 2001). For youth with citizenship who live in mixed-status homes, adolescence is the time when awareness may develop regarding the fragility of and potential risk associated with parents' undocumented status (Suárez-Orozco, Yoshikawa, Teranishi, & Suárez-Orozco, 2011).

Purpose of the Study

This study focuses more specifically on the experience of children in unauthorized households and their interactions with their mothers. The aim of this study is to test a model that explores links between families' immigration status and children's internalizing and externalizing behaviors. This study proposes that living in an undocumented or mixed-status family negatively influences the self-efficacy of mothers (see Figure 1). In turn, mothers' low self-efficacy places them at greater risk of developing depression and high stress related to parenting. The model will also test the direct links between immigration status and children's internalizing and externalizing behavioral problems. This same model will be tested among three developmental age groups for comparison: early childhood, middle childhood, and adolescence. The following hypotheses will be tested:

> **Hypothesis 1:** Undocumented status will have a direct effect on children externalizing and internalizing behavioral outcomes, serving as a risk factor (direct effect). Undocumented status will lead to mother's low self-efficacy (powerlessness), which in turn will increase parenting stress and depression (indirect effect). * This model will be tested for the three-different developmental age groups: H1a. early childhood, H1b. middle childhood, and H1c adolescence.

Hypothesis 2: Mixed-status will have a direct effect on children externalizing and internalizing behavioral outcomes, serving as a risk factor (direct effect). Undocumented status will lead to mother's low self-efficacy (powerlessness), which in turn will increase parenting stress and depression (indirect effect). * This model will be tested for the three-different developmental age groups: H2a. early childhood, H2b. middle childhood, and H2c adolescence.

Hypothesis 3: Documented status will have a direct effect on children externalizing and internalizing behavioral outcomes, serving as a protective factor (direct effect). Documented status will lead to mother's high self-efficacy, which in turn will decrease parenting stress and depression (indirect effect). * This model will be tested for the three-different developmental age groups: H3a. early childhood, H3b. middle childhood, and H3c adolescence.

Methods

Data and Sample

This study uses data from Wave 1 of the Los Angeles Family and Neighborhood Survey (L.A. FANS), which was collected from a sample of 65 census tracts in Los Angeles County between 2000 and 2002. This study utilized the first wave instead of the second wave of the survey which was conducted between 2006 and 2008, since the sample of undocumented Mexican parents and youth was considerably larger in the first wave of the study due to the large attrition rates between the first and second waves.

The study was based on a stratified multistage, clustered sampling design (Santry, Ghosh-Dastidar, Adams, & Pebley, 2006). The study oversampled families with children who lived in

poor or very poor neighborhoods as well as households in which Spanish was the primary and preferred language for the interviews (Peterson et al., 2004).

L.A. FANS's data set is unique in that it reflects parents' immigration status as well as their children's. The survey asked respondents if they were born in the U.S. and if they are naturalized citizens, permanent residents, or have a tourist visa or refugee status. Although immigrants in California are not representative of all undocumented immigrants nationally, Los Angeles County was a good site to conduct the study because of the large percentage of undocumented immigrants residing there (Vargas Bustamante et al., 2012). This study focuses on mothers and children of Mexican origin, and as such, other ethnic and racial populations were excluded from the analysis. After excluding other participants based on their ethnic origin, the sample for this study consisted of 1,007 mothers with children ages 3 to 17. This study also divides children into three different age groups: early childhood (3 to 5 years old), middle childhood (6 to 12 years old), and adolescence (13 to 17 years old). The study will also compare the models in each age group to see if the results differ by age.

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Measurements

</div>

Measures

Child behavioral problems. This study utilizes the Behavior Problems Index (BPI), which was created to measure children's behavioral problems, including anxiety, depression, and aggression (Peterson & Zill, 1986). This instrument has been widely used in numerous studies and was validated in 30 different societies (Ivanova et al., 2007). The BPI instrument consists of 26 items, and it is divided into two subscales: internalizing and externalizing. The internalizing subscale consists of 11 items that indicate the presence of withdrawn and sad behaviors on the part of the child, and it includes items such as "has been too fearful or anxious," "has felt

worthless or inferior," and "has cried too much." The externalizing subscale consists of 15 items and measures the presence of aggressive and other related behaviors that are directed outward toward others. Some of the items that are part of the externalizing subscale include "has argued too much," "has been impulsive or acted without thinking," and "has demanded a lot of attention." Primary caregivers responded to the BPI questions using responses that ranged from 0 = not true to 2 = often true (0 = not true; 1 = sometimes true; 2 = often true), so that a higher score indicates more behavioral problems. The scales were created by averaging the scores of the items for the subscale and for the scale. The Cronbach's alpha reliability score in this study for the internalizing subscale is .73 and for the externalizing subscale is .87. The Cronbach's alpha reliability score for the two subscales combined is .89. The total score from the two subscales is comparable to the Cronbach's reliability alpha score for the full instrument reported in another study and ranging from .89 to .90 (Peterson & Zill, 1986).

Immigration status. L.A. FANS foreign-born adult participants responded to a series of questions related to their immigration status as well as their children's status, if relevant. They were first asked if they were naturalized citizens. Those who were not citizens then were asked if they had a green card or permanent residence. Respondents who said no were then asked if they had refugee, asylee, or temporary protected status. Finally, those who did not have one of those statuses were asked whether they had a valid visa for temporary residence. This series of questions was used to determine their immigration status (i.e., U.S. born, naturalized citizen, permanent resident, or visa holder). Immigrants who did not fit any of those categories were coded as undocumented. However, visa holders and those with refugee/asylum status were excluded from the sample in this particular study since the numbers for Mexican immigrants in these categories was too small to analyze and their experiences are different from other

categories. A study conducted on L.A. FANS data determined that respondents were willing to answer questions regarding their immigration status (Bachmeier, Van Hook, & Bean, 2014); this means that the procedure proposed in this study to determine immigration status is consistent with profiles created by other sources.

For this study, children were assigned to four types of immigrant families. Children in the native/U.S.-born families category are those who are U.S. born and whose parents are U.S. born. Children in the documented immigrant families category have parents who have a green card or are naturalized citizens and children who are U.S. born or have a green card. The mixed-status family category includes parents who are undocumented (no green card or visa) and children who are U.S. born or documented immigrants. The undocumented category includes parents who are undocumented as well as children who are undocumented.

Maternal depression. Based on items from the Composite International Diagnostic Interview-Short Form (CIDI-SF), the maternal depression variable measured the probability of whether a mother had major depression (Kessler, Andrews, Mroczek, Ustun, & Wittchen, 1998). Specifically, the instrument was utilized to screen respondents for a major depressive episode during the 12 months prior to participating in the interview. The instrument helps estimate the probability that a respondent met the criteria for major depression based on the *Diagnostic and Statistical Manual of Mental Disorders – Fourth Edition* (DSM-IV) (Wang & Patten, 2002). The CIDI-SF has been identified as a valid and reliable diagnostic tool with a 93% classification accuracy for major depressive disorders (Kessler et al., 1998).

The criteria for major depression could be met by either responding yes to questions about anhedonia (i.e., inability to experience joy) or yes to all the questions about dysphoric mood (i.e., sadness or anxiety). Dysphoric or anhedonic symptoms should have lasted for two

weeks for most of the day and should have happened almost every day during the period to meet the requirement for classification (Kessler et al., 1998). In addition, the CIDI-SF screener only identifies individuals who have a high probability of being classified as having major depression (Kessler et al., 1998). Neither the severity nor duration of major depression was assessed in the study. Probability rates were calculated based on the responses of the participants and the criteria described previously. The CIDI-SF measure creates a probability-of-caseness score that ranges from 0.0 to 1.0. The closer the score is to 1, the greater the probability that a participant would meet diagnostic criteria for a major depressive episode. The Cronbach's alpha reliability score for the CIDI-SF scale is .87.

Mother's self-efficacy. Self-efficacy refers to the beliefs an individual has about having the ability to deal with problems in life (Waldrop, Lightsey, Ethington, Woemmel, & Coke, 2001). The self-efficacy index is composed of five items that asked mothers how strongly they agreed with statements regarding their self-efficacy or perception that they can achieve complete tasks and control the events affecting them. These items were based on a modified version of the Pearlin Mastery scale (Pearlin, Lieberman, Menaghan, & Mullan, 1981). The following items were included in the scale: "I feel that I'm a person of worth, at least on an equal plane with others," "Overall, I am satisfied with myself," "I am able to do things as well as most other people," "I have little control over things that happened to me," and "I can do just about anything I set my mind to." Respondents were asked to rate the items on a Likert scale ranging from 1 = disagree to 5 = strongly agree. One of the items was reverse coded so that it would be consistent with the direction of the other items. A high score indicated greater self-efficacy. The Cronbach's alpha reliability score of .75 for this study indicates good internal consistency.

Parenting stress. A measure of parenting stress will be included, which utilizes items from the Parenting Stress Index-Short Form (PSI-SF) (Abidin, 1990). This scale provides information about the levels of distress the primary caregiver experienced in her role as a parent. The five items include statements such as "Being a parent is harder than I thought it would be," "I feel trapped by my responsibilities as a parent," "I find that taking care of my child/children is much more work than pleasure," and "I often feel tired, worn out, exhausted from raising a family." The responses were rated using a 5-point Likert-type scale ranging from 1 = completely false to 5 = completely true, with higher scores indicating greater levels of distress. The PSI-SF is highly correlated with the full-length PSI instrument ($r = .94$), and the two-week test-retest reliability of the full-length PSI with the PSI-SF is .95 (Abidin, 1990; Haskett, Ahern, Ward, & Allaire, 2006). A validation study of the PSI-SF with African-American and Latino primary caregivers assessed the validity of the instrument with those populations and found that it has a good validity (Sang Jung, Gopalan, & Harrington, 2016). The score was created by averaging the five items. The Cronbach's alpha reliability score was .67. The Cronbach's alpha reliability score for this measure has been reported as .84 by the authors of this measurement (Abidin, 1990), which is much higher than the index used in the study.

Data Analysis

First, data was screened and descriptive data was examined. Then, a Pearson's correlations matrix was run to explore the relationships among the variables of interest. Path analyses were used to estimate direct and indirect relationships among study variables. Path analysis is regarded as an appropriate method when testing mediation, since an outcome variable could become the predictor of the next variable (Cole & Maxwell, 2003). In addition, this statistical technique allows researchers to specify and test the goodness of fit between data and

theoretical models designed to represent the relationships between observed variables (Kline, 2011). When conducting path analysis, multiple indicators should be used to evaluate the goodness of fit, including a chi-square that has a value close to the number of degrees of freedom (*df*) and a probability greater than .05 (Schumacker & Lomax, 2011). In addition, other values should be utilized to determine the goodness of fit, including the root mean square error of approximation (RMSEA), comparative fit index (CFI), and Tucker-Lewis index (TLI). The RMSEA value should be below .05 and no greater than .08, and the CFI and TLI should be above .90.

Figure 1 illustrates the proposed model. The model consisted of immigration status, mother's self-efficacy, maternal depression, parenting stress, and children's externalizing and internalizing behavioral problems. The model allowed for both direct and indirect effects on the outcome variable. In addition, all analyses are weighted using the child sample weight.

[insert Figure 1 about here]

Results

Descriptive Statistics

Table 1 presents the descriptive information about the sample. The sample consisted of 1,007 mothers who responded to questions about themselves and their children, ages 3 to 17. Children were divided into the following developmental age groups: (3- to 5-year-olds), making up 23.98% of the sample; middle childhood (6- to 12-year-olds), making up 48.95% of the sample; and adolescents (13- to 17-year-olds), making up 27.07% of the sample. About half of the children's sample consisted of females (50.05 %). In regards to the immigration status, 25.19% of the families were mixed status, meaning that the mother was undocumented and the child was U.S. born. In addition, 13.23% consisted of undocumented families, meaning that both

mother and child were undocumented, and the rest of the sample was either composed of documented families (42.69%) or U.S. born/native families (18.89%). Of the foreign-born sample, 79.12% of the participants had lived in the U.S. at least 10 years and 71.61% to be interviewed in Spanish. Over 50% of the mothers in the sample were married (66.70%) and their average age was about 35.31 years. Approximately 65.87% of the mothers had less than a high school education, and 45.57% of the families lived at 200% or below of the federal poverty level.

[insert Table 1 about here]

Path Analysis Results

Table 3 shows the goodness of fit statistics for the internalizing behavioral problems model and Table 5 shows the statistics for the externalizing behavioral problems model. The statistics show that the models have a better fit for children in middle childhood and adolescence compared to children in early childhood.

Internalizing problems. A summary of the results is found in Table 2, which shows the direct and indirect effects and their associated 95% confidence intervals. As shown in Table 2, for children in the early childhood stage, immigration status did not have either a significant direct or indirect effect on internalizing behavioral problems.

Middle childhood. For children in middle childhood, the overall indirect effect of immigration status (mixed status and undocumented) on internalizing was not significant either. However, both mixed status (B = 3.09, *p* < .01) and undocumented status (B = 2.61, *p* < .001) had a significant direct effect on children internalizing problems during middle childhood.

Adolescents. The model for adolescent children shows immigration status has both a significant direct and indirect effect on adolescents' internalizing problems. The indirect effects

of mixed status (B = 1.47, *p* < .001) and undocumented immigration status (B = 1.35, *p* < .01) on children's internalizing problems were significant on adolescents' internalizing problems because of the mother's self-efficacy, maternal depression, and parenting stress. Specifically, mixed status (B = -.75 *p* < .001) and undocumented status (B = -.67 *p* < .01) had a negative association on the mother's self-efficacy. Self-efficacy had an influence on maternal depression (B = -.08, *p* < .01) and on parenting stress (B = -.43, *p* < .001. Finally, for adolescents, mixed status (B = 1.47, *p* < .001) and undocumented status (B = 1.35, *p* < .01) also had an indirect influence on internalizing behavioral problems. This means that for adolescents in the study, family immigration status has a both a direct and indirect link through the mother's self-efficacy, maternal depression, and parenting stress. For children in middle childhood, however, the associations were only direct. Mixed-status family had a direct association with internalizing problems (B = 3.09, *p* < .001), and undocumented status also had a direct association with internalizing problems (B = 2.61, *p* < .001). For children in early childhood, none of the associations were significant.

[insert Table 2 about here]

[insert Table 3 about here]

[insert Table 5 about here]

Externalizing problems. The results of the model of externalizing behavioral problems are found in Table 4. In the model of children in early childhood externalizing problems, immigration status and undocumented status had neither significant direct or indirect effects.

Middle childhood. In the model for middle childhood, the effects of immigration status were only indirect, in which both mixed status (B = .38, *p* < .05) undocumented family status (B = .33, *p* < .05) had a significant indirect effect on children's externalizing behaviors.

Specifically, mixed status (B = -.32, *p* < .01) and undocumented status (B = -.27, *p* < .05) had

strong significant effects on mother's self-efficacy. Then self-efficacy had a significant effect on

both maternal depression (B = -.07, *p* < .05) and parenting stress (B = -.14, *p* < .05). However,

only maternal depression (B = 4.14, *p* < .001) had a significant effect on children's externalizing

problems.

     Adolescents. In the model for adolescents, the effects of immigration status were also

only indirect, in which both mixed status (B = 2.29, *p* < .01) and undocumented family status (B

= 2.13, *p* < .01) had a significant direct effect on children externalizing behaviors through

mother's self-efficacy and parenting stress. Specifically, mixed status (B = -.75, *p* < .001) and

undocumented status (B = -.63, *p* < .001) had strong significant effects on mother's self-efficacy.

Self-efficacy had a significant effect on both maternal depression (B = -.07, *p* < .01) and

parenting stress (B = -.38, *p* < .001). However, only parenting stress (B = .99, *p* < .05) had a

significant effect on children's externalizing problems.

[insert Table 4 about here]

Discussion

     The results of the current study shed light on the complex relationship between

immigration status and behavioral outcomes. The findings from the current study are consistent

with bioecological model, which suggests that the experience an individual has with the various

ecological systems (e.g. immigration status and familial/maternal factors in the microsystem) has

different implications at each specific developmental period. In the current study, middle-

childhood children and adolescents from both mixed-status and undocumented families are

predicted to have worse internalizing problems. For adolescents, these relationships are both

direct and mediated by the mother's self-efficacy, maternal depression, and parenting stress. These findings are consistent with research that shows that the unauthorized status of the youth becomes increasingly intolerable as they reach adolescence and engage in common coming-of-age rituals such obtaining a driver's license and a first job (Yoshikawa & Kalil, 2011). During early childhood, the immediate family and its social networks shape the development of the child. During this stage, the family's unauthorized status may be hidden from the child, since the child is not capable of understanding its implications. Research shows that undocumented children are more likely to understand the reality and limitations of being undocumented when they get older (Gonzalez, 2016). An ethnographic study showed that undocumented children eventually realize the implications of their immigration status, and that even if they work to their full potential, they will be excluded not just from many opportunities but also from everyday life tasks such as driving and working (Gonzalez, 2016). Children who are U.S. citizens but whose parents are undocumented have the developmental capacity as they get older to understand their parents' immigration status and its implications, such as the possibility that their parents may face deportation (Menjívar, 2006).

The study also highlights that immigration status negatively influences children's externalizing behaviors directly for any of the age groups. For children in middle childhood and adolescence, mother's self-efficacy, maternal depression, and parenting stress mediated the relationship between mixed status or undocumented status and externalizing behaviors. In particular for children in mixed-status and undocumented families, the findings reveal that the mother's undocumented status affects her self-efficacy beliefs. When the mother's self-efficacy beliefs are low, she is at risk of developing maternal depression and increasing parenting stress. In turn, when mothers have symptoms of maternal depression and/or parenting stress is high,

children are likely to develop externalizing behavioral problems. Previous scholarly findings have revealed that stressful circumstances are associated with perceptions of powerlessness and low self-efficacy, which in turn are associated with internalizing problems such as anxiety and depression (Ross & Mirowsky, 2009). The findings of this study are also consistent with findings that indicate that undocumented individuals are likely to have low self-efficacy beliefs due to stressful experiences they encounter as a result of their immigration status (Arbona et al., 2010).

The findings regarding the mediator role of maternal self-efficacy, depression, and parenting stress on externalizing problems in children are also consistent with ecological systems theory, which indicates that factors from different systems interact to influence the development and well-being of children and the interaction between parents and children in the microsystem are particularly important for the development of children (Bronfenbrenner, 2006). In the current study, immigration status influenced the well-being of the mother (via self-efficacy, maternal depression, and parenting stress), which in turn influenced children's externalizing behavioral problems. This process is also consistent with family systems theory, which also conceptualizes family as an organized group and highlights that the functioning of a family and behavior of a family member can be strongly influenced by the functioning of other family members (Cho, Kim, Lim, Lee, & Shin, 2015; Yeh, Huang, & Liu, 2016). In this study in particular, maternal self-efficacy was associated with positive outcomes for child well-being and can serve as a protective factor. A study found that parents' mental health factors and the quality of parent-child relationships serve as mediators between stressful life events and child anxiety and behavioral problems (Platt, Williams, & Ginsburg, 2016). What this means for this study is that contextual factors such as immigration status and the implications of being undocumented may influence the behavioral functioning of the children indirectly by first influencing the well-being

of the mother including her self-efficacy beliefs, depression and parenting stress. Then, these maternal factors influence the behavioral functioning of the children such as externalizing behaviors. As such, the family system is an important point of intervention for undocumented and mixed-status families.

Limitations of the Study

This study had a number of limitations. First, it only utilized cross-sectional data from Wave 1, since a large number of undocumented participants dropped out of the study in Wave 2, so claims of causality are limited. Second, this study was conducted in one of the counties with the largest number of ethnic minorities in the country. This means that the population in the sample may not reflect a national representative sample. Future research should examine the mental health of children in undocumented and mixed-status families who live in nontraditional destination counties. Another limitation of this study is that the data were collected in early 2000s and the reality for undocumented and mixed-status families has changed in light of new anti-immigrant policies and stricter immigration enforcement at the state and federal levels.

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Implications and Conclusion

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This study has important implications for social work practice. First, children in mixed-status or undocumented families are more likely to show internalizing behaviors. Other research shows that internalizing and externalizing behavioral problems have negative implications for children's life opportunities later in life (e.g., through poor school performance, mental health problems, poor job and economic prospects, etc.) (McLeod & Kaiser, 2004). Thus, when working with immigrant families, social workers must be aware of the pressures on children and parents as a result of their immigration status.

This finding highlights the importance of social workers addressing the self-efficacy beliefs of undocumented mothers as a point of intervention in order to prevent depression and high parenting stress, which can lead to children externalizing or internalizing problems. This intervention is important, as research has shown that self-efficacy provides a sense of control, giving individuals the ability to cope better with negative life events and serving as a positive mediator against depression (Maciejewski et al., 2000).

Another important implication of this study is that social workers must keep in mind the developmental stage and cognitive abilities of children to understand the implications that family immigration status may have on their well-being (Suárez-Orozco et al., 2011). For example, youth in middle childhood may begin to become conscious of their family's legal vulnerabilities. They may become more aware of the culture of fear, which is often portrayed in Spanish-language television through stories of deportations and family conversations. For adolescents, identity formation is a key developmental task that is often achieved in the U.S. by obtaining a driver's license, getting a first job, or going off to college. For adolescents who live in undocumented or mixed-status households, this developmental period may be a time when ambiguity develops, disrupting their fragile worlds. As such, it is crucial for social workers to take into consideration children's developmental stage to assess how family immigration status may be influencing the developmental outcomes and well-being of children of immigrants.

Future research should examine how factors not explored in this study, such as parenting factors and family processes, mediate the relationship between family immigration status and children's internalizing and externalizing behaviors. Future research should also examine the specific reasons why there is a direct link between immigration status and internalizing problems, but for externalizing problems the link is only indirect and mediated through maternal

factors. Finally, it is important for future research to examine the impact of exosystemic factors, such as parents' poor working conditions, low wages, and limited access to government programs due their immigration status, on children's well-being. Given the current, difficult political and cultural landscapes in the U.S., further research is needed to examine the well-being of undocumented and immigrant families and identify further means of leveraging their strengths and providing them with needed support.

References

Abidin, R. R. (1990). *Parenting stress index-short form manual*. Los Angeles, CA: Western

Psychological Services.

Abidin, R. R. (1995). Parenting stress index professional manual (3rd ed.). Odessa, FL:

Psychological Assessment Resources.

American Immigration Council. (2017). *U.S. citizen children impacted by immigration

enforcement*. Retrieved from https://www.americanimmigrationcouncil.org/research/us-

citizen-children-impacted-immigration-enforcement

Anthony, L. G., Anthony, B. J., Glanville, D. N., Naiman, D. Q., Waanders, C., & Shaffer, S.

(2005). The relationship between parenting stress, parenting behavior and preschoolers'

social competence and behavior problems in the classroom. *Infant and Child

Development, 14,* 133–154. doi:10.1002/icd.385

Appleyard, K., Egeland, B., van Dulmen, M. H. M., & Sroufe, L. A. (2005). When more is not

better: The role of cumulative risk in child behavior outcomes. *Journal of Child

Psychology and Psychiatry, 46*, 235–245. doi:10.1111/j.1469-7610.2004.00351.x

Arbona, C., Olvera, N., Rodriguez, N., Hagan, J., Linares, A., & Weisner, 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

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(1), 206–228.

Bachmeier, J. D., Van Hook, J., & Bean, F. D. (2014). Can we measure immigrants' legal

status?: Lessons from two surveys. *International Migration Review. 48*, 538–566. doi:10.1111/imre.12059

Becerra, D. (2016). Anti-immigration policies and fear of deportation: A human rights issue. *Journal of Human Rights and Social Work, 1*, 109–119. doi:10.1007/s41134-016-0018-8

Becerra, D., Quijano, L. M., Wagaman, M. A., Cimino, A. M., & Blanchard, K. N. (2015). How immigration enforcement affects the lives of older Latinos in the U.S. *Journal of Poverty, 19*(4), 357–376. doi:10.1080/10875549.2014.999969

Becerra, D., Wagaman, M. A., Androff, D., Messing, J., & Castillo. (2017). Policing immigrants: Fear of deportations and perceptions of law enforcement and criminal justice. *Journal of Social Work, 17*(6), 715-731. doi: 10.1177/1468017316651995

Bernhardt, A., Milkman, R., Theodore, N., Heckathorn, D., Auer, M., DeFilippis, J., … Spiller, M. (2009). *Broken laws, unprotected workers: Violations of employment and labor laws in America's cities.* New York, NY: National Employment Law Project.

Bowen, M. (1978). Family therapy in clinical practice. New York: Aronson.

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In R. M. Lerner & W. Damon (Eds.), *Handbook of child psychology: Theoretical models of human development* (6th ed., Vol. 1, pp. 793–828). Hoboken, NJ: Wiley.

Burke, L. (2003). The impact of maternal depression on familial relationships. *International Review of Psychiatry*, 15, 243–255. doi: 10.1080/0954026031000136866

Cho, S-M, Kim, E. J., Lim, K-Y., Lee, J. W., & Shin, Y-M. (2015). The effects of maternal depression on child mental health problems based on gender of the child. *Community Mental Health Journal, 51*, 354–358. doi:10.1007/s10597-014-9824-6

Cole, D. A., & Maxwell, S. E. (2003). Testing mediational models with longitudinal data:

Question and tips in the use of structural equation modeling. *Journal of Abnormal Psychology, 112*(4), 558–577. doi:10.1037/0021-843X.112.4.558

Durand, J., Massey, D. S., & Parrado, E. A. (1999). The New Era of Mexican Migration to the United States. *The Journal of American History, 86*(2), 518-536. doi: 10.2307/2567043

Gardner, F., Shaw, D.S., Dishion, T. J., Burton, J., & Suplee, L. (2007). Randomized prevention trial for early conduct problems: Effects on proactive parenting and links to toddler disruptive behavior. *Journal of Family Psychology, 21*(3), 398-406.

Gonzales, R. G. (2016). *Lives in limbo: Undocumented and coming of age in America.* Oakland, CA: University of California Press.

Haskett, M. E., Ahern, L. S., Ward, C. S., & Allaire, J. C. (2006). Factor structure and validity of the parenting stress index-short form. *Journal of Clinical Child and Adolescent Psychology, 35*, 302–312. doi:10.1207/s15374424jccp3502_14

Haskett, M. E., Scott, S., & Ward, C. (2004). Subgroups of physically abusive parents based on cluster analysis of parenting behavior and affect. *American Journal of Orthopsychiatry, 74*, 436–447. doi:10.1037/0002-9432.74.4.436

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), 3–35. doi:10.1177/0739986312460370

Ivanova, M. Y., Dobrean, A., Dopfner, M., Eron, N., Fombonne, E., Fonseca, A. C., … Chen, W. J. (2007). Testing the 8-syndrome structure of the child behavior checklist in 30 societies. *Journal of Clinical Child & Adolescent Psychology, 36*(3), 405–417. doi:10.1080/15374410701444363

Jones-Correa, M., & de Graauw, E. (2013). The illegality trap: The politics of immigration and the lens of illegality. *Daedalus, 142*(3), 185–198. doi:10.1162/DAED_a_00227

Kessler, R. C., Andrews, G., Mroczek, D., Ustun, B., & Wittchen, H-U. (1998). The world health organization composite international diagnostic interview short-form (CIDI-SF). *International Journal of Methods in Psychiatric Research, 7*(4), 171–185. doi:10.1002/mpr.47

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

Luoma, I., Taminen, T., Kaukonen, P., Laippala, P., Puura, K., & Salmelin, R. (2001). Longitudinal study of maternal depressive symptoms and child well-being. *Journal of the American Academy of Child and Adolescent Psychiatry, 40*(12), 1367–1374. doi:10.1097/00004583-200112000-00006

Maciejewski, P. K., Prigerson, H. G., & Mazure, C. M. (2000). Self-efficacy as a mediator between stressful life events and depressive symptoms: Differences based on history of prior depression. *British Journal of Psychiatry, 176*, 373–378. doi:10.1192/bjp.176.4.373

Marcia, J. E. (1966). Development and validation of ego-identity status. *Journal of Personality and Social Psychology, 3*(5), 551–558. doi:10.1037/h0023281

Marks, A. K., Ejesi, K., & Garcia Coli, C. (2014). Understanding the U.S. immigrant paradox in childhood and adolescence. *Child Development Perspectives, 8*(2), 59–64. doi:10.1111/cdep.12071

McLeod, J. D., & Kaiser, K. (2004). Childhood emotional and behavioral problems and educational attainment. *American Sociological Review, 69*(5), 636–658. doi:10.1177/000312240406900502

McPherson, A. V., Lewis, K. M., Lynn, A. E., Haskett, M. E., & Behrend, T. S. (2009).

Predictors of parenting stress for abusive and nonabusive mothers. *Journal of Children and Family Studies, 18*, 61–69. doi:10.1007/s10826-008-9207-0

Menjívar, C. (2006). Liminal legality: Salvadoran and Guatemalan immigrants' lives in the

United States. *American Journal of Sociology, 111*, 999–1037. doi:10.1086/499509

Migration Policy Institute. (2015). *Profile of unauthorized population: United States*. Retrieved

from https://www.migrationpolicy.org/data/unauthorized-immigrant-population/state/US

Minuchin, P. (1985). Families and individual development: Provocations from the field of

family therapy. *Child Development, 56*, 289–302. doi:10.2307/1129720

Mortensen, J. A., & Barnett, M. A. (2015). Risk and protective factors, parenting stress, and

harsh parenting in Mexican origin mothers with toddlers. *Marriage & Family Review, 51*(1), 1–21. doi:10.1080/01494929.2014.955937

Motomura, H. (2008). Immigration outside the law. *Columbia Law Review, 108*(8). (UCLA

School of Law Research Paper No. 09-01). Retrieved from http://ssrn.com/ abstract=1323914

Passel, J. S., & Taylor, P. (2010). *Unauthorized immigrants and their U.S.-born children.*

Retrieved from Pew Research Center website: http://pewhispanic.org/reports/report.php?ReportID=125

Pearlin, L. I., Lieberman, M. A., Menaghan, E. G., & Mullan, J. T. (1981). The stress

process. *Journal of Health and Social Behavior, 22*, 337–356.

Peterson, C. E., Sastry, N., Pebley, A. R., Ghosh-Dastidar, B., Williamson, S., & Lara-Cinisomo,

S. (2004). *The Los Angeles family and neighborhood survey: Codebook* (Dru- 2400/2-1- LAFANS). Santa Monica, CA: RAND.

Peterson, J. L., & Zill, N. (1986). Marital disruption, parent-child relationships, and behavior

  problems in children. *Journal of Marriage and Family, 48*(2), 295–307.

  doi:10.2307/352397

Platt, R., Williams, S. R., & Ginsburg, G. S. (2016). Stressful life events and child anxiety:

  Examining parent and child mediators. *Child Psychiatry and Human Development, 47*(1),

  23–34. doi:10.1007/s10578-015-0540-4

Roelofs, J., Meesters, C., ter Huurne, M., Bamelis, L, & Muris, P. (2006). On the links between

  attachment style, parental rearing behaviors, and internalizing and externalizing problem in

  non-clinical children. *Journal of Child and Family Studies, 15*, 331–344.

  doi.org/10.1007/s10826-006-9025-1

Rootes, K. M., Jankowski, P. J., & Sandage, S. J. (2010). Bowen family systems theory and

  spirituality: Exploring the relationship between triangulation and religious questing.

  Contemporary Family Therapy, 32, 89–101. doi:10.1007/s10591-009-9101-y

Ross, C. E., & Mirowsky, J. (2009). Neighborhood disorder, subjective alienation, and distress.

  Journal of Health and Social Behavior, 50(1), 49–64. doi:10.1177/002214650905000104

Salas-Wright, C. P., Vaughn, M. G., Schwartz, S. J., & Cordova, D. (2016). An "immigrant

  paradox" for adolescent externalizing behavior?: Evidence from a national sample. *Social

  Psychiatry and Psychiatric Epidemiology*, *51*(1), 27–37. doi:10.1007/s00127-015-1115-1

Sang Jung, L., Gopalan, G., & Harrington, D. (2016). Validation of the parenting stress index-

  short form with minority caregivers. *Research on Social Work Practice*, *26*(4), 429–440.

Sastry, N., Ghosh-Dastidar, B., Adams, J. & Pebley, A. (2006). The design of a multilevel

  survey of children, families and communities: The Los Angeles family and neighborhood

  survey. *Social Science Research, 35*(4), 803-1134.

Schumacker, R. E., & Lomax, R. G. (2010). *A beginner's guide to structural equation modeling.* New York, NY: Routledge.

Suárez-Orozco, C. (2001). Identities under siege: Immigration stress and social mirroring among the children of immigrants. In A. Robben & M. Suárez-Orozco (Eds.), *Cultures under siege: Social violence and trauma* (pp. 194–206). Cambridge, England: Cambridge University Press.

Suárez-Orozco, C., Yoshikawa, H., Teranishi, R. T., & Suárez-Orozco, M. M. (2011). Growing up in the shadows: The developmental implications of unauthorized status. *Harvard Educational Review, 81*(3), 438–472. doi:10.17763/haer.81.3.g23x203763783m75

Sullivan, M. M., & Rehm, R. (2005). Mental health of undocumented Mexican immigrants: A review of the literature. *Advances in Nursing Science, 28*(3), 240–251. doi:10.1097/00012272-200507000-00006

Valentino, N. A., Brader, T., & Jardina, A. E. (2013). Immigration opposition among U.S. whites: General ethnocentrism or media priming of attitudes about Latinos? *Political Psychology, 34*(2), 149–166. doi:10.1111/j.1467-9221.2012.00928.x

Vargas Bustamante, A., Fang, H., Garza, J., Carter-Pokras, O., Wallace, S. P., Rizzo, J. A., & Ortega, A. N. (2012). Variations in healthcare access and utilizations among Mexican immigrants: The role of documentation status. *Journal of Immigrant and Minority Health, 14*(1), 146–155. doi:10.1007/s10903-010-9406-9

Wang, J., & Patten, S. B., (2002). Prospective study of frequent heavy alcohol use and the risk of major depression in the Canadian general population. *Depression and Anxiety*, *15*(1), 42-50. doi: 10.1002/da.1084

White, R. M., Roosa, M. W., Weaver, S. R., & Nair, R. L. (2009). Cultural and contextual influences on parenting in Mexican American families. *Journal of Marriage and Family, 71*(1), 61–79. doi:10.1111/j.1741-3737.2008.00580.x

Yeh, Z. T., Huang, Y., & Liu, S. I. (2016). Maternal depression and adolescent emotions: The role of family functioning. *Journal of Child and Family Studies, 25*(7), 2189–2200. doi:10.1007/s10826-016-0399-4

Yoshikawa, H. (2011). *Immigrants raising citizens: Undocumented parents and their young children.* New York, NY: Russell Sage.

Yoshikawa, H., & Kalil, A. (2011). The effects of parental undocumented status on the developmental contexts of young children in immigrant families. *Child Development Perspectives, 5*(4), 291–297. doi: 0.1111/j.1750-8606.2011.00204.x

Yoshikawa, H., Weisner, T. S., & Lowe, E. (Eds.). (2006). *Making it work: Low-wage employment, family life and child development.* New York, NY: Russell Sage Foundation.

Figure 1. Proposed Path Analysis Model – Internalizing & Externalizing Behavior Problems
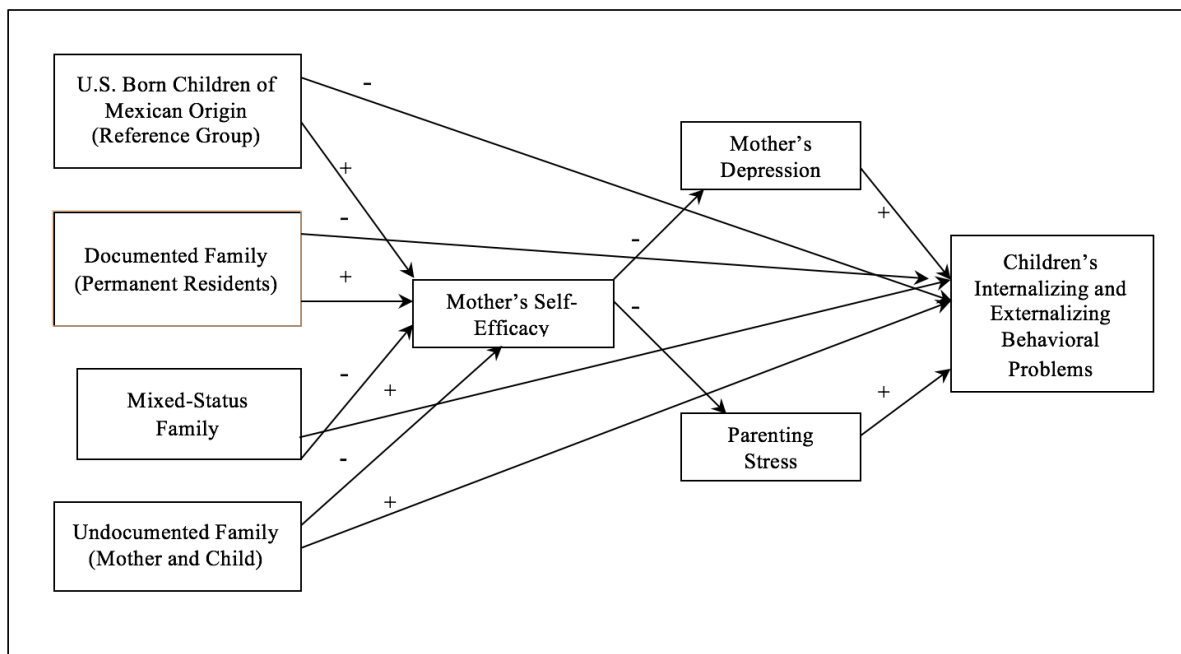
Table 1. Descriptive Statistics for Mothers/Household and Children's Variables ($n = 1,007$)

Variable	%
Mothers/Household Demographic Characteristics	
Family immigration status	
U.S. born	18.89%
Documented family	42.69%
Mixed-status family	25.19%
Undocumented family	13.23%
Lived in the U.S.	
Less than 5 years	6.38%
5–9 years	14.49%
10–19 years	42.95%
20 years or more	36.17%
Language	
English	28.39%
Spanish	71.61%
Marital status	
Married	66.70%
Single	33.30%
Educational attainment	
Less than high school	65.87%
High school	16.85%
College or more	17.28%
Family poverty level	
100% FPL or below (Reference)	30.42%
101–200% FPL	15.15%
201–400% FPL	7.36%
401% FPL and above	46.07%
Children's characteristics	
Age	
Early childhood (3–5 years old)	23.98%
Middle childhood (6–12 years old)	48.95%
Adolescence (13–17 years old)	27.07%
Sex	
Female	50.05%

Notes: Mother's Age ($M = 35.31$, $SD = 7.71$)

Table 2. Direct and indirect effects and 95% confidence intervals (CIs) for internalizing behavioral problems

Model pathways	Early Childhood (*n* = 256)		Middle Childhood (*n* = 490)		Adolescence (*n* = 261)	
	B	95% CI	B	95% CI	B	95% CI
Direct effects						
U.S.-born family → Mother's self-efficacy (reference group)	-	-	-	-	-	-
Documented family → Mother's self-efficacy	.06	-.20-.31	-.15	-.32-.01	-.47	-.75-.19
Mixed-status family → Mother's self-efficacy	-.51***	-.77-(-.25)	-.32**	-.54-(-.10)	-.75***	-1.17-(-.34)
Undocumented family → Mother's self-efficacy	-.30**	-.58-(-.003)	-.31**	-.55-(.12)	-.67**	-.41-(-.28)
Self-efficacy → Maternal depression	-.06*	-.13-.008	-.05*	-.10-(-.01)	-.08**	-.12-(-.02)
Self-efficacy → Parenting stress	-.35**	-.61-(-.10)	-.13*	-.27-.003	-.43***	-58-(-.27)
Maternal depression → Children internalizing problems	1.93**	.58-3.27	2.10**	.69-3.52	2.33*	.40-4.27
Parenting stress → Children internalizing problems	.38	-.25-3.27	.87**	.36-1.37	.01	-.55-.57
Documented family → Children internalizing problems	.22	-1.07-1.51	1.33	.40-2.37	1.34	.30-1.38
Mixed-status family → Children internalizing problems	1.02	-.29-2.34	3.09***	1.91-4.26	1.67*	.24-3.10
Undocumented family → Children internalizing problems	3.15	-.35-3.23	2.61***	1.44-3.79	1.96**	.81-3.12
Indirect effects						
U.S.-born family → Children's internalizing problems (reference group)	-	-	-	-	-	-
Documented family → Children internalizing problems	-.03	-.17-.11	.12	-.04-.29	.91	.32-1.35
Mixed-status family → Children internalizing problems	.25	-.12-.61	.25	-.01-.52	1.47***	.64-2.30
Undocumented family → Children internalizing problems	.14	-.10-.39	.24	-.11-.60	1.35**	.73-2.27

*p < .05 **p < .01 ***p < .001

Table 3. Model fit statistics for internalizing behavioral problems for different developmental age groups

	X^2	df	RMSEA	TLI	CFI
Early childhood (n=256)	28.45*	7	.119	.311	.732
Middle childhood (n=490)	15.09	7	.051	.835	.936
Adolescence (n=261)	10.43	7	.045	.920	.969

df = degrees of freedom; RMSEA = root mean square error of approximation; TLI = Tucker–Lewis index; CFI = comparative fit index; *$p < .05$

Table 4. Direct and indirect effects and 95% confidence intervals (CIs) for externalizing behavioral problems

Model pathways	Early Childhood (n = 256)		Middle Childhood (n = 490)		Adolescence (n = 261)	
	B	95% CI	B	95% CI	B	95% CI
Direct effects						
U.S.-born family → Mother's self-efficacy (reference group)	-	-	-	-	-	-
Documented family → Mother's self-efficacy	.05	-.21-.31	-.18	-.68-.12	-.47	-.45-.29
Mixed-status family → Mother's self-efficacy	-.50***	-.76-(-.25)	-.32**	-.54-(-.10)	-.75***	-1.17-(-.33)
Undocumented family → Mother's self-efficacy	-.30*	-.58-(-.02)	-.27*	-.35-(-.01)	-.63***	-.75-(-.18)
Self-efficacy → Maternal depression	-.06	-.13-(.01)	-.07*	-.11-(-.01)	-.07**	-.13-(-.02)
Self-efficacy → Parenting stress	-.36**	-.61-(-.10)	-.14*	-.28-(-.08)	-.38***	-.52-(-.23)
Maternal depression → Children externalizing problems	2.87*	.60-5.14	4.14***	1.63-6.64	2.38	-.93-5.67
Parenting stress → Children externalizing problems	.23	-1.20-1.67	.75	-.17-1.67	0.99*	-.02-2.00
Documented family → Children externalizing problems	-2.91	-4.97-(-.85)	.18-.87	-1.51-1.87	1.20	-1.02-3.40
Mixed-status family → Children externalizing problems	-1.19	-3.85-1.46	1.88	-.26-4.03	.20	-2.09-3.40
Undocumented family → Children externalizing problems	-.65	-3.45-2.16	3.85	-.32-5.84	1.72	-.39-3.82
Indirect effects						
U.S.-born family → Children's internalizing problems (reference group)	-	-	-	-	-	-
Documented family → Children externalizing problems	-.04	-.27-.19	.22	-.07-.50	.25	-86-1.36
Mixed-status family → Children externalizing problems	.43	-.27-.19	.38*	-.05-.81	2.29**	.68-3.89
Undocumented family → Children externalizing problems	.26	-.28-1.15	.33*	-.03-.91	2.13**	.47-2.41
Self-efficacy → Children externalizing problems	-.24	-.83-.33	-.38*	-.72-(-.03)	-.55*	-1.11-(-.01)

*p < .05 **p < .01 ***p < .001

Table 5. Fit Statistics for externalizing behavioral problems mode for different developmental age groups

	X^2	df	RMSEA	TLI	CFI
Early childhood (n=256)	30.81*	7	.124	.241	.705
Middle childhood (n=490)	13.83	7	.047	.792	.919
Adolescence (n=261)	6.43	7	.002	.982	.989

df = degrees of freedom; RMSEA = root mean square error of approximation; TLI = Tucker–Lewis index; CFI = comparative fit index; *p < .05*

CHAPTER V: DISSERTATION CONCLUSION

While research is emerging to understand the experience of the growing number of undocumented or mixed-status families and their children, there is still a lack of quantitative studies in the area of documentation status and maternal and child well-being. Furthermore, in previous studies, it has been consistently found that Mexican immigrants have better health and mental health, compared to their native counterparts (Alegría, et al., 2009; Crosnoe, 2012; National Academies of Science; 2015). However, this phenomenon, known as the immigrant health paradox, has been greatly understudied among undocumented populations. The studies in this sought to fill this gap in the literature by understanding the influence of immigration status on the mental health of mothers and behavioral functioning of their children.

The main purpose of this dissertation was to better understand the relationship between immigration status (i.e., U.S. born, documented, undocumented, mixed-status) and maternal and child mental health. The first paper of this dissertation shed light on the link between mother's immigration status, collective efficacy, and maternal depression, specifically how self-efficacy serves as a mediator between immigration status and maternal depression. The second paper focused on the relationship between the family's immigration status and externalizing and internalizing behavioral problems among Mexican-origin children; and examined how age, gender, maternal mental health, and family environment either buffered or exacerbated that relationship. The third paper in this dissertation studied the link between immigration status and behavioral problems, but focused on how maternal self-efficacy, depression, and parenting stress served as mediators in that relationship. In the conclusion, major findings from the studies, including limitations, and implications for policy, practice, and future research are discussed.

Summary of Major Findings

The three studies in this dissertation examined in different ways how the immigration status of mothers and children influenced their respective well-being. The immigrant health paradox was evident in the results of the three different studies of this dissertation in terms of nativity differences in maternal depression and children behavioral functioning. Specifically, depression was less common among undocumented mothers compared to documented and native-born mothers in the sample. This means that undocumented mothers show traits that are consistent with a strong retention of protective aspects of the home cultures. However, these positive traits do not seem to protect their children associated with living with one undocumented parent since they tend to be at higher risk of having behavioral problems compared to their documented and U.S. born peers.

The first paper utilized path analysis to examine the link between immigration status, collective efficacy, and major depression and how mother's self-efficacy beliefs mediated the relationship. In the first study, it was found that the mother's undocumented status had a significant relationship with major depression, but in the opposite direction than initially hypothesized: undocumented mothers had fewer symptoms of depression compared to U.S. born and documented mothers. However, it was also found that mothers' undocumented status decreased their self-efficacy beliefs, which in turn increased their symptoms of major depression. Finally, it was found that collective efficacy increased self-efficacy beliefs, which in turn decreased major depression symptoms.

These findings were in some ways consistent with the stages of migration framework (Pine & Drachman, 2005), which states that multiple cumulative stresses surround the different stages of migration (pre-migration, transit, and resettlement stages, and in some cases, return to

home country). This study had proposed that undocumented mothers would have more symptoms of major depression since previous qualitative studies have shown that undocumented immigrants experience additional stressors during the different stages of migration (Pine & Drachman, 2005; Sullivan & Rehm, 2005). The findings of the first hypothesis was consistent with the immigrant health paradox which indicates that immigrants have better health and mental health compared to U.S. born counterparts, despite the acculturation stress immigrants encounter (Alegría et al. 2009). The second hypothesis that undocumented immigrants' status led to low self-efficacy, which in turn would lead to higher symptoms of depression was supported by stages of migration framework, which indicate that undocumented immigrants face additional cumulative stress during the different stages of migration which lead to low self-efficacy.

The second paper utilized hierarchical regression analysis to study the relationship between family immigration status (i.e., undocumented, mixed-status, documented, and U.S. born) and externalizing and internalizing behavioral problems among Mexican-origin children. This paper also explored the moderating effects of age, gender, maternal mental health, and family environment. This study found that children in a mixed-status or undocumented families experienced greater internalizing problems, compared to documented or U.S. born families. When age was taken into consideration as a moderator between immigration status and internalizing behavioral problems, the results showed that the negative effects of being a child in an undocumented and mixed-status family was more severe for children in middle childhood and/or adolescence compared to children in early childhood. The findings also showed that undocumented female children, whose parents experienced marital conflict, were more likely to show internalizing behavioral problems. In addition, mother's self-efficacy ameliorated internalizing behavioral problems for females in undocumented or mixed-status families.

Consistent with the bioecological model of development (Bronfenbrenner, & Morris, 2006) the findings of the second study show that factors from different systems interact with one another, shaping the mental health outcomes of undocumented mothers and their children. Specifically, taking into consideration individual characteristics, this study investigated how the influence of immigration status on children behavioral problems varied by age. Children in middle childhood and adolescents were at higher risks of having internalizing and externalizing behavior problems compared to children in early childhood. Using family systems theory (Bowen, 1978), the second paper of this dissertation also took into consideration how the family environment could either mitigate or exacerbate the harmful effect of undocumented or mixed-status on children behavioral outcomes. The findings found that family systems factors, such as mother's mental health (e.g. depression and self-efficacy beliefs) and marital conflict, can either mitigate or exacerbate the effects of immigration status on the behavioral problem of children. In general, familial environment has been identified as a salient factor in determining how children will cope with different stressors. The negative effects of stressful events can be more severe for children in negative family environments than for children in more supportive family environments (Ge, Natsuaki, Neiderhiser, & Reiss, 2009).

The third paper was also guided by family systems theory, which conceptualizes family as an organized group in which a member of the family can influence the functioning and behavior of other family members (Rootes, Jankowski, & Sandage, 2010). This paper utilized path analysis to test the link between family's immigration status and children's behavioral outcomes through mother's self-efficacy, maternal depression, and parenting stress. The results of the study showed that there is an association between immigration status and internalizing problems for children in undocumented and mixed-status families. However, a direct relationship

between immigration status and externalizing problems was not significant; the relationship was mediated through mother's self-efficacy beliefs, maternal depression, and parenting stress for adolescents.

Consistent with family systems theory (Bowen, 1978), the results of the third study showed that immigration status influenced mother's self-efficacy, which in turn increased the probabilities of depression and parenting stress, which led to children's externalizing behavioral problems. This showed that externalizing problems were not directly associated to immigration status, but rather they were associated with immigration status through the mother's mental health (i.e., major depression and self-efficacy) and parenting stress.

Implications

Implications for Policy

Results from this dissertation are particularly relevant in light of current immigration policy changes surrounding immigrant families. Over the course of the election and since taking office, President Donald Trump has intensified national debate about immigration including increasing immigration raids, restricting family-based immigration, penalizing sanctuary cities, changing the definition of public charge, jeopardizing thousands of Dreamers, terminating protected status, forcibly separating children from families, and more (Migration Policy Institute, 2017). As the literature review of this dissertation outlines, unauthorized legal status is associated with a variety of contextual and psychological risk mechanisms for parents and children alike. While undocumented immigrants have showed extraordinary resilience against the odds, the overall picture for undocumented immigrants is one of exclusion in various contexts including schools, universities, workplaces, community organizations, and public

program services (The Center for Law and Social Policy, 2018). In addition, psychological mechanisms like fear of deportation of self or others, stigma, and perceived hardship due to being undocumented, negatively affect the well-being and developmental outcomes of children and their families (Cavazos-Regh, Zayas, & Spitznagel, 2007). While this dissertation does not examine the everyday stressors associated with being undocumented, the findings suggest that mother's and children's documentation status affects their family systems which has negative effects on the citizen children of those families.

Therefore, specific policy actions may be beneficial for the well-being for parents and their children or youth who have an unauthorized status or for children who have a parent with this status. At the state levels, some state policies allow undocumented immigrants to access health insurance, obtain a driver's license, allow undocumented students to compete for financial aid, and protect undocumented workers from employer retaliation (Yoshikawa, Suarez-Orozco, & Gonzalez, 2016). However, in the long-term, comprehensive immigration reform is needed that would provide a pathway to citizenship. Immigration reform would likely provide long-term security to individuals with undocumented status and their family members. Through this fundamental policy change, the harm brought about by unauthorized status including fear of deportation, associated stigma, and blocked opportunities could potentially be decreased. As this dissertation shows, those who are U.S. born or have a documented status have an advantage over those who are documented or mixed-status; thus, comprehensive reform is likely to positively influence the well-being of undocumented mothers and their children.

The research from this dissertation also suggests a challenge that is relevant to public policy. Children of undocumented mothers have higher chances of experiencing behavior problems which will have implications for their life opportunities. Not only are these children

less likely to have resources available, but undocumented mothers may lack awareness of resources available or may be afraid of seeking assistance form government-funded programs because they fear being identified as undocumented and deported (Yoshikawa, 2011; Yoshikawa, & Kalil, 2011). Thus, social workers and others in the position to help should be made aware and receive training on the challenges undocumented and mixed-status families face and how they can help them meet the needs of this vulnerable population.

Implications for Practice

The findings of this dissertation provide new insights about Mexican immigrant mothers and their children regarding how their immigration status influences their well-being. These findings could also inform programming of social workers and other providers who work with undocumented Mexican immigrant mothers and children. Practitioners working with undocumented or mixed-status families should be aware of how the experience of being undocumented influences their mental health and behavioral functioning of the children.

Specifically, the first paper provided implications as to how social workers and other practitioners working with undocumented mothers should increase their self-efficacy and help prevent depression. *Promotora programs* or lay helper programs have been shown to be effective in helping undocumented immigrants manage their anxieties associated with being undocumented such as the fear of being detained and deported and mistreatment at the work place (Gonzalez-Arizmendi & Ortiz, 2004; Hilfinger Messias, Sharpe, Castillo-Gonzalez, Trevino, & Parra-Medina, 2016). These programs, which are led by peers, have empowered immigrants by informing them about their rights and raising awareness of available resources. The first paper also provided implications in regards to increasing collective efficacy by engaging immigrant women in political advocacy. In a study on undocumented Mexican women,

it was found that participating in an advocacy project increased their confidence in their ability to change situations affecting their family and community related to their undocumented status (Gates, 2017).

The findings of the second and third paper showed that children in undocumented or mixed-status families had greater internalizing behavioral problems compared to children with documented or U.S. born families. In addition, the outcomes were more severe for children who were in middle childhood and adolescence compared to early childhood. Therefore, social workers and other practitioners should acknowledge that the undocumented status of the mother has a negative influence on the behavioral functioning of both undocumented and U.S. citizen child. One of implication is that social workers should assess the pressures children and parents experience as a result of their undocumented or mixed-status. This will help identify sources of stress related to their unauthorized status and how social workers can help deal with those stresses. Furthermore, practitioners working with children who are undocumented or have a parent who is undocumented should also recognize that documentation status can influence the behavioral functioning of children differently depending on their developmental stage. Depending on their cognitive and emotional levels, children may vary in their abilities to be aware of and understand the implications of legal status.

A unique contribution of second paper was that marital conflict exacerbated behavioral outcomes for girls and the mother's self-efficacy ameliorated the negative effects or undocumented or mixed legal status. This finding highlights the importance of considering mothers' mental health and the family system as a point of intervention since mother's self-efficacy, and marital conflict, can each moderate the negative influence of undocumented/mixed-status. Finally, a unique contribution of the third paper was that it identified the process of how

mother's mental health (self-efficacy beliefs and depression) and high parenting stress, mediate the relationship between immigration status and externalizing problems among the youth in the sample. A possible intervention is the Strengthening Families Program, a nationally and internally recognized parenting and family strengthening program that has been found to improve family relationships, improve parenting skills, and reduce problems behaviors (Orte, Ballester, March, & Amer, 2013). This program was founded on the premises that sometimes parents experience adversities; as a result, they may develop mental health problems such as depression, anxiety, and other clinical disorders that may comprise their parenting abilities. Therefore, since maternal mental health and stress exacerbates child functioning problems, parenting program focused on reducing stress, conflict, and promoting prosocial skills development of children can be critical.

Limitations and Future Research

Although this dissertation makes important contributions to the literature since there are few studies of families who are undocumented, it does have some limitations. First, this dissertation utilized cross-sectional data from the first wave of the L.A. FANS dataset since the sample of undocumented mothers and children was large enough in the first wave of the study, but not in the second wave because of the considerable attrition rates from the first to second wave. A disadvantage of using cross-sectional data is that the results of the three studies were correlational because causality could not be established between the independent and dependent variables. Another limitation is that the sample of the data used for this dissertation is only representative of the population of Los Angeles County between 2001-2002. Los Angeles County is one of the counties in the U.S. with largest ethnic minority populations and it is also known as a traditional destination for Mexican immigrants. Therefore, the results are not

generalizable to populations in other regions of the United States, particularly new immigrant destinations found in rural regions of the United States that are not heavily populated by ethnic minority populations. Future studies should include a national representative sample or further research should be conducted of populations in new gateway communities.

Further, in the studies conducted for this dissertation, mothers who identified themselves or their children as naturalized U.S. citizens were lumped together with permanent residents to create a category called "documented immigrants". This strategy was pursued to maximize statistical power, but the downside of this grouping is that distinct experiences may be lost. Future research should seek to recruit samples with adequate representation of participants across each immigration status to further explore nuances and different experiences.

While this dissertation is one of the few quantitative studies using a representative dataset that examines the relationship between immigration status, mother's mental health, family processes, and children's behavioral functioning, another limitation is that it does not capture the everyday experiences of undocumented immigrants. Therefore, this study does not allow one to understand how the everyday lived experiences of being undocumented may help elucidate dynamics related to maternal mental health, family processes, and behavioral functioning. Future research should be conducted using qualitative methods to better understand how different experiences associated with being undocumented or having a parent who is undocumented influences the well-being of immigrant parents and their children.

A further limitation of this study is that it was conducted between 2001 and 2004 and the sociopolitical reality for immigrants at the state and federal levels has changed since then. For example, the California "Sanctuary State" bill (SB 54) was enacted in 2017, prohibiting state and local law enforcement from investigating individuals' immigration status or reporting it to

federal authorities (ACLU, 2017). SB 54 was the complete opposite from Proposition 187, which was passed in the 1990s and raised an anti-immigrant sentiment. At the federal level, the current sociopolitical context has also changed dramatically. Therefore, it is crucial to conduct new studies to examine how the new sociopolitical context influences the experience of undocumented and mixed-status families.

Conclusion

This dissertation has presented findings from three separate studies that have all focused on how immigration status influences the well-being of Mexican origin mothers and their children. While research has shown that Mexican immigrants have better health and mental health than their U.S. born counterparts, very few or no studies have been conducted to examine how the immigration status of Mexican immigrant families may influence their mental health. Most notably, our finding that parental and child immigration status as well as the mother's mental and family system factor matters for the mental health for both undocumented mothers and youth with undocumented parents makes an important contribution to the literature. Furthermore, the fact that no easy explanation was found for the behavior problems among Mexican youth with undocumented mothers suggests that additional research is needed to better understand how immigration status influences mother's and children's everyday lives and their perceptions.

By having clearer knowledge about issues affecting undocumented immigrants, social workers and other practitioners can begin understanding the skills needed to learn and serve their clients appropriately and supportively in way that improves their experiences. Doing so would continue our commitment to enhancing well-being of vulnerable and oppressed populations. If we as a profession fail to adapt to these societal changes, we may very well perpetuate the

invisibility of the already vulnerable and oppressed group of undocumented and mixed-status

families, which would go against our profession's mission.

References

ACLU. (2017). ACLU applauds Governor Brown for signing California Values Act (SB 54). Retrieved from https://www.aclusocal.org/en/press-releases/aclu-applauds-governor-brown-signing-california-values-act-sb-54

Alegría, M., Canino, G., Shrout, P. E., Woo, M., Duan, N., Vila, D., … Meng, X. (2009). Prevalence of mental illness in immigrant and non-immigrant U.S. Latino groups. *American Journal of Psychiatry, 165*(3), 359–369. doi: 0.1176/appi.ajp.2007.07040704

Bronfenbrenner, U., & Morris, P. A. (2006). The bioecological model of human development. In W. Damon & R. Lerner (Eds.), *Handbook of child psychology* (pp. 793–828). New York, NY: Wiley.

Bowen, M. (1978). Family therapy in clinical practice. New York: Aronson.

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 the National Medical Association, 99*, 1126–1131.

The Center for Law and Social Policy (CLASP). (2018). Our children's fear: Immigration policy's effects on young children. Retrieved from https://www.clasp.org/sites/default/files/publications/2018/03/2018_ourchildrensfears.pdf

Crosnoe, R. (2012). Studying the immigrant paradox in the Mexican-origin population. In C. Garcia Coll & A. K. Marks (Eds.), *The immigrant paradox in children and adolescents: Is becoming American a developmental risk?* (pp. 61–76). Washington, DC: American Psychological Association.

Gates, A. B. (2017). No one will speak for us: Empowering undocumented immigrant women through policy advocacy. *Journal of Community Practice, 21*(1), 5-28. doi:

10.1080/10705422.2016.1270244

Ge, X., Natsuaki, M. N., Neiderhiser, J. M., & Reiss, D. (2009). The longitudinal effects of stressful life events on adolescent depression are buffered by parent-child closeness. *Development and Psychopathology, 21*, 621–635. doi:10.1017/S0954579409000339

Hilfinger Messias, D. K., Sharpe, P. A., Castillo-Gonzalez, L., Trevino, L., & Parra-Medina, D. (2016). Living in Limbo: Latina's assessment of Lower Rio Grande Valley *colonias* communities. *Public Health Nursing, 34*(3), 267-275. doi: 10.1111/phn.12307

Migration Policy Institute. (2017). Immigration under Trump: A review of policy shifts in the year since the election. Retrieved from

https://www.migrationpolicy.org/research/immigration-under-trump-review-policy-shifts

National Academies of Sciences, Engineering, and M. (2015). *The Integration of Immigrants into American Society*. http://doi.org/10.17226/21746

Orte, C., Ballester, L., March, M. X., & Amer, J. (2013). The Spanish adaptation of the strengthening families program. *Procedia – Social and Behavioral Sciences*, 84, 269-273.

Pine, B. A., & Drachman, D. (2005). Effective child welfare practice with immigrant and refugee children and their families. *Child Welfare, 84*, 537–562.

Rootes, K. M., Jankowski, P. J., & Sandage, S. J. (2010). Bowen family systems theory and spirituality: Exploring the relationship between triangulation and religious questing. *Contemporary Family Therapy, 32*, 89–101. doi:10.1007/s10591-009-9101-y

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

Yoshikawa, H., & Kalil, A. (2011). The effects of parental undocumented status on the

developmental contexts of young children in immigrant families. *Child Development Perspectives, 5*(4), 291–297. doi:0.1111/j.1750-8606.2011.00204.x

Yoshikawa, H., Suárez-Orozco, C., & Gonzales, R. (2016). Unauthorized status and youth

development in the United States: Consensus statement of the society for research on

adolescence. *Journal of Research on Adolescence, 27*(1), 1–16.