Deportation experiences and depression among U.S. citizen-children with undocumented Mexican parents

Article *in* Child Care Health and Development · December 2015

DOI: 10.1111/cch.12307

CITATIONS
108

READS
2,578

6 authors, including:

Lauren E Gulbas
University of Texas at Austin
51 PUBLICATIONS **882** CITATIONS
SEE PROFILE

Hyunwoo Yoon
Portland State University
54 PUBLICATIONS **991** CITATIONS
SEE PROFILE

Hannah Szlyk
Washington University in St. Louis
45 PUBLICATIONS **373** CITATIONS
SEE PROFILE

Sergio Aguilar-Gaxiola
University of California, Davis
203 PUBLICATIONS **35,102** CITATIONS
SEE PROFILE

Child: care, health and development
Original Article
doi:10.1111/cch.12307

Deportation experiences and depression among U.S. citizen-children with undocumented Mexican parents

L. E. Gulbas,* L. H. Zayas,* H. Yoon,* H. Szlyk,* S. Aguilar-Gaxiola† and G. Natera‡

*School of Social Work, The University of Texas, Austin, TX, USA
†Center for Reduction in Health Disparities, University of California, Davis, USA, and
‡Instituto Nacional de Psiquiatría, Distrito Federal, Mexico

Accepted for publication 21 October 2015

Abstract

Background There is a critical need to document the mental health effects of immigration policies and practices on children vulnerable to parental deportation. Few studies capture the differential experiences produced by U.S. citizen-children's encounters with immigration enforcement, much less in ways that analyse mental health outcomes alongside the psychosocial contexts within which those outcomes arise.

Methods We explore the psychosocial dimensions of depression in U.S. citizen-children with undocumented Mexican parents to examine differences between citizen-children affected and not affected by parental deportation. An exploratory mixed-method design was used to integrate a quantitative measure of depression symptoms (CDI-2) within qualitative data collected with 48 citizen-children aged 8 to 15 with and without experiences of parental deportation.

Results Stressors elicited by citizen-children in the qualitative interview included an inability to communicate with friends, negative perceptions of Mexico, financial struggles, loss of supportive school networks, stressed relation with parent(s) and violence. Fifty percent of citizen-children with probable depression – regardless of experiences with parental deportation – cited 'stressed relation with parents,' compared to 9% without depression. In contrast, themes of 'loss of supportive school network' and 'violence' were mentioned almost exclusively by citizen-children with probable depression and affected by parental deportation.

Conclusions While citizen-children who suffer parental deportation experience the most severe consequences associated with immigration enforcement, our findings also suggest that the burden of mental health issues extends to those children concomitantly affected by immigration enforcement policies that target their undocumented parents.

Keywords
children, deportation, depression, immigration, undocumented

Correspondence:
Lauren E. Gulbas, School of Social Work, The University of Texas, 1925 San Jacinto Blvd D3500, Austin, TX 78712-0358, USA
E-mail: laurengulbas@austin.utexas.edu

Recent political debate has intensified regarding the estimated 11.1 million undocumented immigrants living in the U.S. – the majority of whom come from Mexico – and their citizen-children, who number an estimated 4.5 million (Pew Hispanic Research Center 2013). Of particular concern is the growing number of citizen-children who experience parental deportation (De Genova 2010). Studies have documented the immediate consequences accompanying the loss of a parent through deportation, including changes in family income, difficulties with childcare and barriers to public health resources and social services (Brabeck and Xu 2010; Chaudry *et al.* 2010; Dreby 2010; Dreby 2012). However, it is only

recently that researchers have considered the mental health needs of this vulnerable population (Suárez-Orozco *et al.* 2010). Research indicates that U.S. citizen-children subjected to parental deportation suffer from a greater burden of anxiety and depression, attention problems, social withdrawal and rule-breaking behaviors (Suárez-Orozco *et al.* 2010; Suárez-Orozco *et al.* 2011; Allen *et al.* 2013; Dreby 2014). Preliminary research demonstrates that experiences of parental deportation are linked to future emotional and behavioral problems, including substance abuse, unemployment and interpersonal difficulties with family members (Zuñiga and Hamann 2006; Brabeck *et al.* 2014).

Following an unprecedented escalation of immigration enforcement within the past decade (De Genova 2010), there is a critical need to document the mental health effects of immigration policies and practices on children vulnerable to parental deportation. Despite the increased burden of mental health problems among citizen-children experiencing parental deportation, some studies suggest that the daily stressors associated with having an undocumented parent shape mental health prior to direct encounters with immigration enforcement (Sullivan and Rehm 2005; Perreira and Ornelas 2011; Yoshikawa and Kalil 2011; Delva *et al.* 2013). Citizen-children's health has been shown to be intimately tied to the myriad risks associated with having undocumented parents, including economic hardship and poverty (Perreira and Ornelas 2011), hunger and food insecurity (Kersey *et al.* 2007), and lack of access to healthcare, safe housing and education (Chavez *et al.* 1997; Guendelman *et al.* 2006). Moreover, children with undocumented parents express fears of separation, mixed sentiments about their heritage and citizenship and an acute awareness of their families' legal predicament (Chaudry *et al.* 2010; Suárez-Orozco *et al.* 2010; Suárez-Orozco *et al.* 2011; Dreby 2014).

Few studies capture the differential experiences produced by U.S. citizen-children's encounters with immigration enforcement, much less in ways that analyse mental health outcomes alongside the psychosocial contexts within which those outcomes arise. In this article, we present results from such a study. Through a binational research collaboration between U.S. and Mexican institutions, our analysis integrates a quantitative assessment of depression with a qualitative exploration of the social factors that shape mental health. Our study, which explores the psychosocial dimensions of depression in U.S. citizen-children, is motivated by research that identifies depression as a significant mental health concern within this population (Zayas *et al.* 2015). Although the extant scholarship is limited, some research suggests that between 10% and 15% of children living in immigrant families exhibit symptoms for depression (Perreira and Ornelas 2011). Alleviating the burden of depression within this vulnerable group requires not just evaluating depression clinically, but also attending closely to the voices of U.S. citizen-children in ways that contribute to an understanding of their meanings and perceived causes of emotional suffering. Doing so improves our awareness of the proximal psychosocial stressors that give rise to depression – a critical first-step toward the reduction of mental health disparities. Accordingly, our analysis is framed within the following research question: What psychosocial factors distinguish citizen-children with elevated scores of depression from those with lower scores?

Methods

We draw from a sub-sample of data from a federally funded, mixed-method study conducted between 2012 and 2014. The purpose of the larger study was to examine the psychosocial experiences and clinical profiles of U.S. citizen-children living with at least one undocumented parent. Purposive sampling strategies were utilized to select children aged 8 to 15 in families that were (1) directly experiencing parental deportation because a parent had been detained or deported ($n = 49$), or (2) not undergoing active detainment or deportation proceedings ($n = 34$). The former group included children who stayed in the U.S. under the care of another parent or guardian after one or both parents had been deported to Mexico ($n = 18$) or accompanied their deported parent to Mexico ($n = 31$). A total of 83 participants participated.

Recruitment proceeded through a binational collaboration between sites in the U.S. (Austin, Texas; Sacramento, California) and Mexico (Distrito Federal, Hidalgo, Michoacán, Oaxaca and Sinaloa). Local community agencies serving Mexican-origin individuals were engaged as community partners and received training from the research team in participant recruitment procedures. After identifying families who met purposive sampling criteria for participation, agency staff discussed the study with parents. Parents who expressed interest were referred to the research team. Parents provided consent for their children's participation, and all children assented to participate. IRB approval was granted at all respective institutions and sites where research activities were undertaken.

Research design

In this paper, we use an exploratory, mixed-method design to integrate a quantitative measure of depressive symptoms within

qualitative descriptions of emotional suffering (see Fig. 1; Mathison 1998; Teddlie and Tashakkori 2006). All methods of data collection (quantitative measures, qualitative interview) were conducted in either Spanish or English depending on the preference of the participant.

Participants first completed a series of standard measures to evaluate their mental health. To index depressive symptoms, children completed the full-length Children's Depression Inventory 2nd Edition (CDI-2; Kovacs and Staff 2003). The CDI-2 is the most widespread scale used to screen depressive symptoms among children (Twenge and Nolen-Hoeksema 2002), and it is designed to provide a comprehensive assessment of affective and functional problems of depression in children and adolescents aged 7 to 17 years (Kovacs and Staff 2003). The reliability and validity of the CDI-2 have been well documented (Saylor *et al.* 1984; Liberman *et al.* 2012) and tested and validated with Hispanic children (Liberman *et al.* 2012). The measure consists of 28 items that yield a total score (computed as raw total or as standardized T-score), two scale scores (emotional problems and functional problems) and four subscale scores (negative mood/physical symptoms, negative self-esteem, ineffectiveness and interpersonal problems).

Children were asked to indicate the level of symptomatology with a 3-point scale: 0 (absence of symptom), 1 (mild or probable symptom) or 2 (definite symptom). All items on the CDI-2 were summed into total scores that ranged from 0 (no depressive symptoms) to 56 (severe depressive symptoms), with higher scores indicating greater symptomatology. The total raw scores were then converted to standardized T-scores. Cronbach's alpha in this study was initially very low ($\alpha = 0.13$). Upon closer evaluation of the items, we found that no child endorsed the answer, 'I want to kill myself' on the sole question about suicidal ideation. After removing this item for analysis, Cronbach's alpha increased to .92.

After completing the quantitative measures, all children participated in a qualitative interview designed to elicit their narratives about living with undocumented parents, and when applicable, to draw out detailed accounts of experiences with immigration enforcement and parental deportation. Interviews were conducted by fully bilingual Hispanic women who were trained in conducting qualitative interviews with children to facilitate rapport and contribute to a sense of empowerment in the interview process (Hill *et al.* 1996; Mauthner 1997). To help reduce interviewer bias across multiple research sites, a semi-structured interview guide was carefully constructed to provide a series of probes to facilitate deeper exploration of topics. Interviews began with an exploration of children's perceptions about home and family life, descriptions of family activities and relationships, household roles and responsibilities, and life outside the home. These questions set the stage for a conversation about legal status aimed at eliciting what the child remembered as salient (Mauthner 1997). Emphasis was placed on having children describe their perceptions, thoughts, emotions, feelings, reflections and interpretations to ascertain the psychosocial impact of parental removal or having an undocumented parent. Interviews were digitally recorded, transcribed and analysed in the language of the interview to enhance validity (Guest and MacQueen 2008). To monitor and enhance data quality, systematic reviews of interview transcripts and routine debriefing meetings with interviewers were conducted.

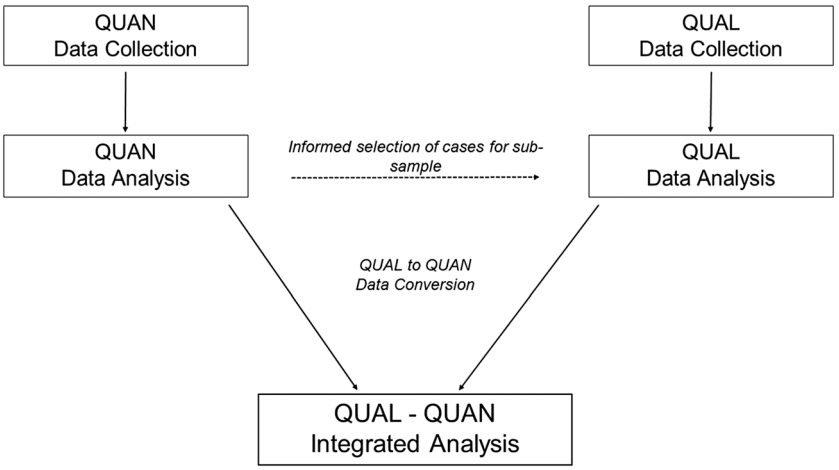

Figure 1. Framework for an exploratory integrative mixed-method analytical design.

Study sample

For this article, a criterion sampling strategy was used to select a sub-sample of citizen-children with the highest and lowest T-scores on the CDI-2, stratified by experiences with parental deportation (Sandelowski 2000). In qualitative research, thematic saturation has been shown to occur within the first 6 to 12 interviews (Guest *et al.* 2006). Using this recommendation, we selected 12 participants to represent each sub-group (highest T-scores/affected by deportation; highest T-scores/not affected by deportation; lowest T-scores/affected by deportation; lowest T-scores/not affected by deportation). This led to a sub-sample of 48 participants. To determine which participants with the highest scores had probable clinical depression, we used the established cutoff of T-scores of 60 or above. This resulted in two comparison groups used for the present analysis: probable depression ($n = 16$); no depression ($n = 32$).

Table 1 describes the characteristics of children in this sub-sample. All children had at least one parent of Mexican origin. Children's ages ranged from 8 to 15 years, with an average of 11.3. More than half were girls (58.3%), and almost all (97.9%) were enrolled in school when interviewed. Participants lived with both parents (70.8%), with one parent (25.0%) or with neither parent (4.2%). More than half (52.1%) were directly affected by parents' deportation or detention. The T-scores of depressive symptoms averaged 54.2. Approximately one-third scored in the range indicative of probable depression.

Data analysis

Qualitative interviews from this sub-sample were analysed for themes related to the personal and social factors that participants identified and described as being salient to their experiences of emotional suffering. To develop the coding framework, two coders read two interviews independently and recorded initial interpretations of the text. Emergent themes were discussed in a team meeting, and a codebook was developed from this discussion. We repeated this process until themes were well established, and the codebook was finalized. To test the coding framework, we uploaded four interviews to NVivo9, independently coded them and calculated percent agreement using the coding comparison module. Any text that fell below a 90% threshold was discussed during a team meeting. The codebook was revised as necessary. Interviews were subsequently coded using NVivo9. To facilitate the transparency of the coders' interpretations of the data, all coded text was reviewed and monitored, and all coding discrepancies were discussed during team meetings.

After interviews were coded, scores from the CDI-2 and data from the qualitative interviews were integrated within a matrix to compare the frequency of themes across groups of participants (probable depression/no depression; affected by deportation/not affected by deportation). We then returned to the qualitative interviews to contextualize our results within participants' narratives.

Results

Table 2 describes, defines and illustrates through participants' quotes the themes that emerged with greatest frequency during the qualitative interview. Each of these themes, which we call 'psychosocial stressors,' was discussed by children as contributing to feelings they described as 'sad,' 'depressed' or 'painful.' Stressors elicited by citizen-children included: (1) an inability to communicate with friends, (2) negative perceptions of Mexico, (3) financial struggles, (4) loss of supportive school networks, (5) stressed relation with parent(s) and (6) violence.

Table 1. Demographic characteristics of participants in sub-sample

	Participants with probable depression (N = 16)		*Participants with no depression (N = 32)*		*Total participants (N = 48)*	
	M ± SD	*n* (%)	*M ± SD*	*n* (%)	*M ± SD*	*n* (%)
Age	11.3 ± 2.06		11.3 ± 1.93		11.3 ± 1.95	
Gender (female)		13 (46.9)		13 (81.3)		28 (58.3)
School enrollment (yes)		15 (83.8)		32 (100.0)		47 (97.9)
Living arrangement						
Both parents		12 (75.0)		22 (68.8)		34 (70.8)
One parent		3 (18.8)		9 (28.1)		12 (25.0)
No parents		1 (6.3)		1 (3.1)		2 (4.2)
Deportation experience						
Directly affected		12 (75.0)		16 (50.0)		28 (58.3)
Not directly affected		4 (25.0)		16 (50.0)		20 (41.7)
CDI-2	70.6 ± 8.65		45.9 ± 4.54		54.2 ± 13.3	

Table 2. Qualitative themes described with greatest frequency in interviews with U.S. citizen-children ($n = 48$)

Theme	*Definition*	*Example of theme in interview*
Inability to communicate with friends	An explicit reference to the ways in which youth feel inhibited in their conversations with friends (i.e. children they identify as friends) and/or the reasons why	'I haven't really told them about my situation. They always ask me, though. They're like, "What's wrong."' 'They don't know. I've never told them. I don't talk to them about this or to anyone really. Because my mom tells me not to tell anyone she doesn't have papers because I can get her in trouble if I do.'
Negative perceptions of Mexico	Reference to feelings of fear, lack of safety, worry, stress, sadness, etc., that stem from having a negative perception of Mexico; perceptions can be the result of things learned through media, conversations with friends/family or direct experience	'Here, there are only gang members, drug addicts and drunks. Because of this, I don't like to leave the house.' 'I don't like it 'cause my mom tells me that they rob a lot over there. And one time I heard my dad say that a friend called him that his sister died 'cause they lived in Mexico. 'Cause his sister, they robbed her, and then they found her with her head cut off, and her heart out. Well, I heard that. Since that day, I didn't want to move to Mexico.'
Financial struggles	Socioeconomic strain as referenced through a description of parent's (un)employment status, inability to meet subsistence needs, or ways in which family members find ways to supplement household income	'My dad told me once that he would like to have another job but he can't because he doesn't have any papers. But I know he wants another job because he wants to earn more money. He was thinking of taking a job for more hours, but then at the end, he decided not to because he would have to be there all the time, and we wouldn't be able to see him. So he didn't take that job at the end. It's like, it makes me kind of sad because he can't get a regular job with regular hours that would pay him more money.' 'It was more than ten people living at my aunt's house, and she didn't have enough money for us so she got most of the teachers . . . They donated food and clothes for my little brother and all the stuff that a baby needs. And I remember coming home from school with a lot of bags full of like food and diapers and other stuff.'
Loss of supportive school networks	Descriptions of a halt in supportive school relationships or services, including school administration, counselors, teachers, but also classmates	'I've talked to my teachers. Because they noticed I've been going down, and they didn't know what it was. They noticed my behaviour was also weird and grew worse. And I talked to them about it. They were really supportive. But I don't have anyone. Now that school's over, I really don't.' 'Here [in Mexico], they don't help you. They might say they are going to help you, but they never help you.'
Violence	Description of experiences of physical or sexual abuse, or witnessing domestic violence	'One day, my dad got really mad, really, really, really mad. He grabbed my mom and began to choke her.' 'We had problems with the mother of my aunt. Because she hurt us a lot.'

To facilitate the comparison of themes across sub-groups (probable depression/no depression; affected/not affected by deportation), thematic frequencies are presented in Table 3. As evident in Table 3, certain themes manifested across sub-groups, such as an inability to communicate with friends, negative perceptions of Mexico and financial struggles. However, citizen-children with probable depression reported stressors with greater frequency than citizen-children without depression. This pattern was notable among citizen-children experiencing both probable depression and parental deportation. Differences across sub-groups were especially pronounced in the frequency with which citizen-children described 'loss of supportive school networks,' 'stressed relation with parents' and 'violence.' Fifty percent of citizen-children with probable depression – regardless of their experience with parental deportation – cited 'stressed relation with parents,' compared to 9% of citizen-children without depression. In contrast, themes of 'loss of supportive school network' and 'violence' were mentioned almost exclusively by citizen-children with probable depression and affected by parental deportation.

To attend to the voices, meanings and experiences of citizen-children included in our analysis, we chose three cases to illustrate and contextualize the ways in which these themes

Table 3. The frequency of qualitative themes across participant sub-groups

	Probable depression (*n* = 16)			*No depression* (*n* = 32)			
	Affected by deportation (*n* = 12)	*Not affected by deportation* (*n* = 4)	*Sub-total* (*n* = 16)	*Affected by deportation* (*n* = 15)	*Not affected by deportation* (*n* = 17)	*Sub-total* (*n* = 32)	*Total* (*N* = 48)
	n (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)	*n* (%)
Inability to communicate with friends	7 (58)	3 (75)	10 (62)	8 (53)	11 (65)	19 (59)	29 (60)
Negative perceptions of Mexico	6 (50)	2 (50)	8 (50)	5 (33)	6 (35)	11 (34)	19 (40)
Financial struggles	5 (42)	0 (0)	5 (31)	5 (31)	5 (29)	10 (31)	15 (31)
Loss of supportive school network	7 (58)	0 (0)	7 (44)	3 (20)	2 (12)	5 (16)	12 (25)
Stressed relations with parent(s)	6 (50)	2 (50)	8 (50)	1 (7)	2 (12)	3 (9)	11 (23)
Violence	6 (50)	0 (0)	6 (38)	0 (0)	0 (0)	0 (0)	6 (12)

Notes: The percent total represented in the last column represents the sub-total sums for a given theme divided by the total number of participants (*n* = 48). It should be noted that this table does not represent an exhaustive list of themes. It includes only those themes discussed by five or more participants. Additional themes mentioned by participants with less frequency included experiences of discrimination; parental divorce or separation unrelated to immigration enforcement procedures; death of a nuclear or extended kin member; illness within the family; and conflict with friends, peers or boyfriends.

manifested. Additionally, we draw on quotations from other citizen-children in our sample to exemplify how themes operated dynamically and in conjunction with one another. All names used below are pseudonyms.

Case A

Erika's case illustrated the ways in which multiple themes converged as a result of parental deportation. She identified her negative perception of Mexico, loss of supportive school network, stressed relation with parents and household financial struggles as sources of her distress. Erika's parents, both undocumented, had migrated to the U.S. in 1992. Erika did not remember when she learned about her parents' status, but she recalled being in a constant state of fear that her parents would be detained, particularly when she was not in their direct presence. Her worst fears were realized just months prior to her 14th birthday when her father was arrested, detained and immediately deported. Erika refused to talk about the time following her father's deportation. She noted, instead, that she learned on her birthday that the family would reunite with her father in Mexico. 'I was scared,' she remembered. 'Where were we going to live? To work?' Despite the fear, she remembered packing quickly and feeling 'happy' that she would see her father soon.

When she arrived in Mexico, she realized quickly that 'everything is so different here.' Her parents had never spoken to her about Mexico, and she had learned what little she knew about the country from television. She noted that she was scared to be outside of her house alone because Mexico was 'violent.' Her fears of Mexico invoked memories of the life she left behind, resulting in feelings of sadness. Similarly, Erika's transition to school had also been difficult. The students in her class often teased her about her Spanish pronunciation, and their behaviour only highlighted for Erika the loss of the supportive school network that she had in the U.S.

Erika also described a radical shift in family dynamics that accompanied reunification. Her mother, at the time of the interview, had been unable to secure employment, and the family was struggling to live from the meager salary her father earned. As she explained,

> 'When I see the problems that we have, I get sad. Sometimes, we don't have anything to eat. My mom doesn't have work, and my father starts telling her things. I don't feel that it's fair that he says these things to her because it isn't her fault.'

The way in which her father treated her mother made Erika feel angry, sad and powerless. She blamed her father for the

family's worsening circumstances. 'It's his fault,' she explained. 'It's his fault that we came here.' Erika exclaimed that she felt powerless about the situation and noted, 'I can't do anything. I feel bad.' These feelings were intensified by her separation from her older siblings, who remained in the U.S. The family in Mexico relied heavily on the remittances sent by her older brother. Without the extra money, 'we wouldn't have anything to eat.'

Erika's case illustrates the multiple stressors that citizen-children faced when they reunited with a deported parent in Mexico. Like Erika, many citizen-children described a difficult transition to their new cultural setting. Fears of violence in Mexico – being killed, robbed or kidnapped – loomed large in the minds of participants, particularly among those with probable depression. For example, one 11-year-old participant noted, 'I'm scared they'll kidnap me.' Apprehension about their surrounding community led citizen-children to stay close to home. As a result, few citizen-children reported playing outside, in contrast to their former daily lives in the U.S.

Perhaps one of the most difficult transitions to life in Mexico was school, especially for citizen-children with probable depression. Participants described teachers as being too authoritative or unwilling to help. In the words of a 9-year-old participant, 'Here, they don't help you at all. Some say that they are going to help you, but they never do.' Other participants commented on the disruptive behaviour of their classmates, particularly when teachers left the classroom. As one child, 10 years old, remarked, '[The students] begin to jump all over the place.' Perceived differences in the school environment between Mexico and the U.S. highlighted the cultural practices, institutional expectations and systems of support that children were forced to leave behind when they left. As one 15-year-old participant described, 'It is really horrible to leave them. They are people that have been with you your whole life.'

Although citizen-children often anticipated that living in Mexico would be difficult, few were prepared for the possibility that family dynamics might worsen following reunification. Overwhelmingly, participants who described a stressed family dynamic following family reunification also screened within the range of probable depression. Some children with probable depression noted that economic hardships destabilized family bonds in multiple ways. Parents worked longer hours, or families stopped engaging in certain family activities altogether, such as eating out at restaurants or going to the movies. Even in the absence of financial hardship or fears of Mexico, family relationships could disintegrate. One 15-year-old participant noted, 'Before we came to Mexico, we were a beautiful family. It isn't like it was before. There isn't the same communication, like 'How's it going? How are you feeling?' Here, everyone is in their own world.'

Case B

Like Erika, Adriana's narrative had multiple themes; and violence, stressed relation with parents and loss of supportive school networks figured prominently. Unlike Erika, these themes did not manifest as a result of parental deportation, but rather set the stage for that experience. Adriana described that she 'always knew my parents were from Mexico. I probably figured it out when I was very young.' The circumstances that led to her father's detainment and eventual deportation were related to a domestic violence dispute that occurred when Adriana was three. She continued to have nightmares about the incident. As she described, 'I don't remember the actual domestic abuse. I was very little. It kind of became a repetitive dream. I just remember hiding, and I remember being scared, and not knowing exactly what was happening.' Adriana explained that the domestic abuse had led to a warrant for her father's arrest, noting that 'one day my dad got stopped [by the police]. They saw that he had a warrant out, and that he was illegal. So, that's when all the trouble to make him stay kind of started.'

Following her father's detainment, a lengthy legal battle ensued. Adriana visited her father occasionally in jail and expressed that the experience was 'horrible. It was just a really horrible thing to be able to see your dad, but not like being able to touch him.' The family fought the courts for nearly two years. During this time, Adriana attempted suicide.

> 'I knew my dad's case was coming closer and closer. I had so much to deal with. Because everything with the legal issues. So then I felt like nobody really cared about me. So it was like the last straw when I attempted suicide . . . And the people in the immigration didn't care that I tried committing suicide. They didn't care.'

After Adriana was released from the hospital following her suicide attempt, she learned that the courts had ruled to deport her father. She was never sure how much time she had left with him because 'they always postponed it.' One day she came home from school, and her father was gone. 'I came back, and he was not here. It really hit me. And then, I spent the next day crying.' Adriana expressed that after her father's deportation, she developed a desire to engage in high-risk behaviours: 'I

wanna do more things like outside of being safe and stuff since my dad left. I just wanna forget about everything.'

After Adriana's father was deported, the family was able to visit him in Mexico, a journey that was made possible, in part, by her mother's status as a U.S. citizen. Yet, for Adriana, these visits did little to assuage her overall depressed state. As she noted, 'It's not that normalness. That normal feeling of waking up in the morning and seeing your dad. It's not that feeling anymore.'

Adriana's case reveals the ways in which parental deportation destabilized relationships between parents and their children. In other cases, parental detainment or deportation intensified family stressors that might otherwise be insignificant. For example, one participant with probable depression described the ways in which tensions with her mother escalated after she learned that her father was going to be deported. The participant, 12 years old, explained that her father had always been the person to whom she turned for help and support her with her schoolwork. As she explained, 'When I have, like, projects to turn in, he helps me a lot. And my mom, like, she like wants it perfectly. But my dad's like, "Do the best you can."' With her father's impending detention weighing on her mind, she stopped doing homework and described that she no longer had a desire to participate in everyday activities. Without her father's supportive parenting style, which she perceived as mitigating her mother's demand for perfection, the participant expressed concern that she would no longer have her 'freedom' once her father was deported.

In addition to stressed relations with parents, children who stayed in the U.S. following parental deportation reported a loss of a supportive school networks, but in ways that were different from their peers who reunited with their parents in Mexico. In the U.S., school transitions, such as changing from elementary school to middle school or transitioning from the school year to the summer, reduced the availability of school support and were perceived by participants as contributing to experiences of psychosocial distress. For example, one 14-year-old participant with probable depression had credited his teachers with his ability to remain strong during his father's deportation case. As he explained, 'I talk to all my teachers because they noticed I've been going down, and they noticed my behaviour was also weird and grew worse. And I talked to them about it, and they were really supportive.' Yet at the time of the interview, school had ended for summer vacation: 'I don't have anyone now that school's over. I really don't.'

Case C

Cecilia, an atypical case, was one of the few participants not affected by parental deportation, but who screened within the range of having probable depression. Moreover, Cecilia did not mention any of the stressors often cited by other participants even though her mother, father and older sister were all undocumented. For example, Cecilia described her relationship with both parents as 'close,' referencing the fun activities they did together, like going to the movies or church. Cecilia explained that her parents were very open about their status as undocumented, and the family often attended immigrant rights and advocacy meetings together. Cecilia even described talking with her 'two best friends' about her parents' status. As she explained, 'They are my best friends that I really, really love. So I talked to them about it.'

Yet, Cecilia's knowledge about her parents' status intensified her worry and fear that her family might one day be deported. As she reported, 'I feel frightened that they are gonna come and deport them.' In attempt to silence her fears and worries, Cecilia often refused to think about her family's undocumented status:

> 'I try not to make it come out of my mouth. I try to keep it shut in there. I try my best not to think about that, or go near jails because there is this jail close to my school, and I try not to look at it. Because I think that there might be deported people there, and I'm like, "I hope that's not where my parents go." I'm like, "oh no, don't think about that." Because then that would really affect me. And make me more sad or depressed.'

In contrast to many participants in the sample who experienced probable depression, Cecilia described a supportive dynamic with her family and open, communicative relationships with her friends about her parents' status. Moreover, she had visited Mexico and reflected on those experiences positively, noting, 'I liked it there!' Ultimately, as Cecilia described it, her depressed affect was linked to the status of her parents and sister as undocumented and the potential threat that she could one day be separated from them.

Discussion

In this article, we incorporate a quantitative evaluation of depression symptoms alongside qualitative narratives that prioritize the voices of citizen-children to identify psychosocial factors that distinguish U.S. citizen-children with probable

depression from those with no depression. Previous studies have demonstrated that the accumulation of psychosocial stressors can produce formidable effects on mental health status, particularly among children experiencing parental deportation (Allen *et al.* 2013; Brabeck *et al.* 2014; Zuñiga and Hamann 2006). Our results build on these studies by demonstrating the potential for psychosocial stressors, such as stressed relationships with parents, the loss of supportive school networks and experiences of violence, to compromise the mental health strengths of citizen-children with parents who are undocumented. For example, supportive school networks were vulnerable to disruption through family reunification in Mexico following parental deportation. For those participants in the U.S., summer vacation or transitions from elementary to middle school could similarly dislocate children from the support they received from school administrators, counselors and classmates. Experiences of probable depression also reflected the ways in which having a parent who was undocumented exacerbated tensions that might otherwise be minimal in families not threatened by or experiencing parental deportation. Probable depression was also shaped by experiences of family violence that occurred prior to immigration enforcement, and participants often cited such experiences as contributing to legal processes that resulted in parental detainment.

In our sample, citizen-children affected by parental deportation reported a greater burden of stressors in their lives, a finding that has been supported in previous research (Allen *et al.* 2013; Dreby 2014; Suárez-Orozco *et al.* 2010; Suárez-Orozco *et al.* 2011). However, straightforward associations between depressive symptoms and being 'affected' or 'not affected' by parental deportation sometimes break down, as revealed by the contrasting experiences between Erika and Adriana (affected by deportation) and Cecilia (not affected by deportation). To be clear, children in our sample who experienced parental deportation reported it as a major life trauma, which often generated or exacerbated the stressors mentioned above. Our research also shows that psychological hardship could be induced by the perceived threat of parental deportation (Brabeck and Xu 2010; Chaudry *et al.* 2010; Delva *et al.* 2013; Dreby 2010; Dreby 2012; Perreira and Ornelas 2011; Sullivan and Rehm 2005). Thus, while citizen-children who suffer parental deportation experience the most severe consequences associated with immigration enforcement, our findings also suggest that the burden of mental health issues extends to those children who are concomitantly affected by immigration enforcement policies that target their undocumented parents (Chaudry *et al.* 2010; Dreby 2010; Dreby 2012; Dreby 2014; Sánchez-Huesca *et al.* 2008; Suárez-Orozco *et al.* 2010).

Strengths and limitations

Our study demonstrates the strengths of documenting mental health issues experienced by citizen-children through an integrative, mixed-method research design. Such a design facilitates an objective assessment of mental health status in ways that attend to the meanings, experiences and perceived causes of poor mental health. Despite the strengths of our research design, it is important to note the limitations of our study. Our analysis is based on data gathered with mixed-status Mexican families. This limits the ability to generalize our findings across immigrant groups or individuals living outside the study area. Given the cross-sectional nature of our data, we cannot make claims about the causality of mental health outcomes. Instead, our results provide a description of those factors that children deemed as salient. There is continued need for longitudinal research to try to ascertain modes of causality, although we acknowledge the difficulties associated with accessing this vulnerable and highly mobile population over time. These challenges could be met through long-term engagements and development of trust in communities most affected by immigration enforcement, in addition to the development of collaborative research relationships that bypass disciplinary and national boundaries.

Conclusions

Despite the limitations of this study, our findings offer several implications for future research. Recently, scholars have begun to consider immigration status as a social determinant of health (Casteñeda *et al.* 2015). To date, this research has focused primarily on physical health and access to healthcare. Our research extends this body of work to show the continued need to monitor the prevalence and severity of effects of immigration policies on mental health, and it is crucial that we identify how fears of or direct encounters with immigration enforcement contribute to poor mental health across the life span. Ultimately, the empirical documentation of mental health issues experienced by citizen-children in mixed-status families is vital to the development of informed health services and policy. The significance of this research is underscored by the potential to highlight broader health impacts associated with policies that support parental deportation, including attention to the more widespread and potentially long-term suffering incurred by living with an undocumented parent.

Key messages

- There is a critical need to document the mental health effects of immigration policies and practices on children vulnerable to parental deportation.
- The empirical documentation of mental health issues experienced by citizen-children in mixed-status families is vital to the development of informed health services and policy.
- In our study, U.S. citizen-children affected by parental deportation reported a greater burden of stressors in their lives, although our research also shows that psychological hardship could be induced by the perceived threat of parental deportation.
- This study lends support to research that considers immigration status to be a social determinant of health.

Acknowledgements

Support for this research was provided by National Institute for Child Health and Human Development grant HD068874 to Luis H. Zayas. We express our gratitude to the families who participated in this study.

References

Allen, B., Cisneros, E. M. & Tellez, A. (2013) The children left behind: the impact of parental deportation on mental health. *Journal of Child and Family Studies*. DOI:10.1007/s10826-013-9848-5.

Brabeck, K., Lykes, M. B. & Hunter, C. (2014) The psychosocial impact of detention and deportation on U.S. migrant children and families. *American Journal of Orthopsychiatry*, **84**, 496–505. DOI:10.1037/ort0000011.

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

Casteñeda, H., Holmes, S. M., Madigal, D., Young, M. E., Beyeler, N. & Quesada, J. (2015) Immigration as social determinant of health. *Annual Review of Public Health*, **36**, 375–392.

Chaudry, A., Capps, R., Pedroza, J. M., Catañeda, R. M., Santos, R. & Scott, M. M. (2010) *Facing our Future: Children in the Aftermath of Immigration Enforcement*. The Urban Institute, Washington, DC. Retrieved from http://carnegie.org/fileadmin/Media/Publications/facing_our_future.pdf.

Chavez, L. R., Hubbell, F. A., Mishra, S. I. & Valdez, R. B. (1997) Undocumented Latina immigrants in Orange County, California: a comparative analysis. *International Migration Review*, **31**, 88–107.

De Genova, N. (2010) The deportation regime: sovereignty, space, and the freedom of movement. In: *The Deportation Regime: Sovereignty, Space, and the Freedom of Movement* (eds N. De Genova & N. Peutz), pp. 22–65. Duke University, Durham, NC.

Delva, J., Horner, P., Sanders, L., Martinez, R., 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 Posiivet Practices*, **13**, 23–35.

Dreby, J. (2010) *Divided by Borders: Mexican Migrants and Their Children*. University of California Press, Berkeley, CA.

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

Dreby, J. (2014) US immigration policy and family separation: the consequences for children's well-being. *Social Science and Medicine*, **132**, 245–241. DOI:10.1016/j.socscimed.2014.08.041.

Guendelman, S., Wier, M., Angulo, V. & Oman, D. (2006) The effects of child-only insurance coverage and family coverage on health care access and use: recent findings among low-income children in California. *Health Services Research*, **41**, 125–147. DOI:10.1111/j.1475-6773.2005.00460.x.

Guest, G., Bunce, A. & Johnson, L. (2006) How many interviews are enough? An experiment with data saturation and variability. *Field Methods*, **18**, 59–82. DOI:10.1177/1525822X05279903.

Guest, G. & MacQueen, K. M. (2008) Reevaluating guidelines in qualitative research. In: *Handbook for Team-Based Qualitative Research* (eds G. Guest & K. M. MacQueen), pp. 205–226. Altamira, New York, NY.

Hill, M., Laybourn, A. & Borland, M. (1996) Engaging with primary-aged children about their emotions and well-being: methodological considerations. *Children and Society*, **1**, 129–144. DOI:10.1111/j.1099-0860.1996.tb00463.x.

Kersey, M., Geppert, J. & Cutts, D. B. (2007) Hunger in young children of Mexican immigrant families. *Public Health and Nutrition*, **10**, 390–395. DOI:10.1017/S1368980007334071.

Kovacs, M. & Staff, M. (2003) *Children's Depression Inventory (CDI): Technical Manual Update*. Multi-Health Systems, Inc., North Tonawanda, NY.

Liberman, L., Altuzarra, M., Ost, L. & Ollendick, T. (2012) How I feel about things: psychometric data from a sample of Spanish-speaking children. *International Journal of Clinical and Health Psychology*, **12**, 419–433.

Mathison, S. (1988) Why triangulate? *Educational Researcher*, **17**, 13–17. DOI:10.3102/0013189X017002013.

Mauthner, M. (1997) Methodological aspects of collecting data from children: lessons from three research projects. *Children and Society*, **11**, 16–28. DOI:10.1111/j.1099-0860.1997.tb00003.x.

Perreira, K. M. & Ornelas, I. J. (2011) The physical and psychological well-being of immigrant children. *Future of Child*, **21**, 195–218.

Pew Hispanic Research Center (2013) *A Nation of Immigrants: A Portrait of the 40 Million, Including 11 Million Unauthorized*.

Retrieved from: http://www.pewhispanic.org/files/2013/01/statistical_portrait_final_jan_29.pdf.

Sánchez-Huesca, R., Arellanez, J. L., Bogar, D. & Rámon, M. E. (2008) *Consumo de Drogas en Adolescentes Migrantes a la Frontera Norte y Estados Unidos Captados en la Frontera Noroccidental*. Centros de Integración Juvenil, Mexico.

Sandelowski, M. (2000) Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing and Health*, **23**, 246–255.

Saylor, C. F., Finch, A. J., Spirito, A. & Bennett, B. (1984) The children's depression inventory: a systematic evaluation of psychometric properties. *Journal of Consulting and Clinical Psychology*, **52**, 955–967. DOI:10.1037/0022-006X.52.6.955.

Suárez-Orozco, C., Hee Jin, B. & Ha, Y. K. (2010) I felt like my heart was staying behind: psychological implications of family separations and reunifications for immigrant youth. *Journal of Adolescent Research*, **26**, 222–257. DOI:10.1177/0743558410376830.

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**, 438–473.

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

Teddlie, C. & Tashakkori, A. (2006) A general typology of research designs featuring mixed-methods. *Research in the Schools*, **13**, 12–28.

Twenge, J. M. & Nolen-Hoeksema, S. (2002) Age, gender, race, socioeconomic status, and birth cohort difference on the children's depression inventory: a meta-analysis. *Journal of Abnormal Psychology*, **111**, 578–588. DOI:10.1037/0021-843X.111.4.578.

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**, 291–297. DOI:10.1111/j.1750-8606.2011.00204.x.

Zayas, L. H., Aguilar-Gaxiola, S., Yoon, H. & Rey, G. N. (2015) The distress of citizen-children with detained and deported Parents. *Journal of Child and Family Studies*, **24**, 3213–3223. DOI:10.1007/s10826-015-0124-8.

Zuñiga, V. & Hamann, E. T. (2006) Going home? Schooling in Mexico of transitional children. *CONfines (Mexico)*, **4**, 41–57.