



Crossing Clinical Borders: Anxiety and Depression in U.S. Citizen Children after Parental Deportation or Coercive Relocation

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Abstract

Parental deportation and coerced voluntary relocation of Mexican-origin families from the USA to Mexico have been increasing since the second half of the last decade, yet little is known about the mental health and well-being of United States Citizen Children (USCC) relocated to Mexico after experiencing parental deportation or a coerced voluntary relocation. This mixed-methods study was performed to understand more about the adaptation process and well-being of USCC relocated to Mexico and to explore whether experiencing parental deportation was associated with clinical symptoms of depression and anxiety. Study participants were 36 USCC relocated to Mexico (50% experienced parental deportation, 50% females, Age \bar{x} = 11.31, SD = 1.80 months in Mexico \bar{x} = 9.91, SD = 5.69). Close to half of the participants presented clinical symptoms of either depression or anxiety. Bayesian ANCOVAs identified higher overall anxiety, generalized anxiety disorder, and school avoidance symptoms in USCC who experienced parental deportation. Bayesian logistic regressions identified how experiencing parental deportation meaningfully increased the log odds of presenting clinical symptoms of depression and anxiety for USCC. The five salient themes discussed were grief over loss, parental prohibition from entering the USA, adaptation process, emotional response to adaptation, and worry. Clinical implications and future directions for research are discussed.

Keywords Deportation · Children · Citizen children · Mexico · Anxiety · Depression

Mexican-origin mixed-status families in the USA have faced an increase in deportations since the Obama administration, and have been subject to considerable levels of racial profiling and other forms of discrimination since the second half of the last decade (Hagan et al., 2019; Lopez et al., 2018; Pew Research Center, 2020; Zayas et al., 2023).

An increasing number of families have found themselves coerced to leave the USA “voluntarily” after the incarceration and forceful removal of a family member, or due to the increasing threat of raids, arrest, and deportations, as well as limited opportunities to work and thrive in the USA (Cruz, 2018; Fuentes-Balderrama et al., 2023; Gulbas et al., 2016; Silver, 2018; Silver et al., 2021). Although a growing body of literature attends to family and youth implications of experiencing detention and deportation for immigrant families in the USA (Flores, 2017; Gulbas & Zayas, 2017; Lovato & Abrams, 2021; Rojas-Flores et al., 2017), sparse efforts have been focused on understanding the well-being and adjustment of U.S. Citizen Children (USCC) who have been relocated to Mexico due to these circumstances (Zayas et al., 2024).

Prior to deportation, approximately less than a quarter of Mexican-origin immigrant families choose to relocate their family due to perceptions of a lower quality of life, cartel violence, and lower wages in Mexico (Allen et al., 2015; Schultheis & Ruiz-Soto, 2017; Silver et al., 2021). Despite being an unpopular choice, estimates place more

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than a million relocated or returned immigrants in Mexico of which approximately half are USCC. These relocated or returned families face a plethora of integration difficulties upon their return to Mexico. Parents encounter unemployment and lower wages, face social isolation, immigrant criminalization, and a lack of Mexican “papeles” (i.e., legal documents, which are difficult to replace) which also hinders their rights as citizens in their country of origin (Anderson, 2015; Horyniak et al., 2017; Medina & Menjívar, 2015; Pinillos Quintero & Velasco Ortiz, 2021; Rivera-Heredia et al., 2022; Silver, 2018).

On the other hand, USCC deals with the burdens of immigration, and grief over the abrupt loss of friends, school, as well as a way of life. Even without experiencing parental detention and deportation, relocated USCC have shown to experience emotional distress, PTSD, alienation as well as depressive and anxiety symptoms (Anderson, 2016; Gulbas et al., 2016; Zayas et al., 2015). Although most relocated USCCs have a right to Mexican citizenship, they face tremendous challenges to claim those rights and adjust to Mexican society as foreign citizens during their nationalization. Obstacles such as the limited English proficiency in the Mexican society and school system, discrimination and criminalization of immigrants expressed through bullying and exclusion in school settings, the limited knowledge of educational syllabi such as Mexican history and geography, as well as the lack of official documentation to access public health services, strains the adaptation process which makes USCC feel excluded and unwelcome. Being accustomed to different scholastic customs and having received all their education in a different language, USCC more often than not needs academic leveling or tutoring, that most public education institutions in Mexico are not able to provide (Anderson, 2016; Bybee et al., 2020; Gonzales & Chavez, 2012; Jacobo-Suárez, 2017; Medina & Menjívar, 2015; Zúñiga & Hamann, 2021).

Further, USCC in forcefully relocated families also needs to resolve the initial psychological impact and trauma stemming from parental deportation. For USCC in the USA, parental deportation has been shown to favor youth externalizing and internalizing problem behaviors, and is associated with an increased propensity to develop depressive, anxious, and PTSD symptoms (Allen et al., 2015; Barros-Nock, 2019; Bernal, 2019; Brabeck & Sibley, 2016; Capps et al., 2020; Dreby, 2015; Gulbas & Zayas, 2017; Rivera-Heredia et al., 2024). Thus, we argue that by combining the psychological burden of abrupt relocation with that of parental deportation, relocated USCC have an increased risk of developing mental health disorders by not being able to adequately process these potentially traumatic experiences (Cruz, 2018; Gallo & Hornberger, 2017; Gulbas et al., 2016; Rojas-Flores et al., 2017; Zayas et al., 2015; Zúñiga & Hamann, 2021).

As there is a growing need to visualize and understand the consequences of family relocation due to parental deportation and social adjustment in the lives of USCC in Mexico, this pilot study intends to inform counselors and social workers about the well-being and service needs of these children (Allen et al., 2015; Cruz, 2018; Hagan et al., 2019; Schultheis & Ruiz-Soto, 2017). This mixed-methods pilot study intends to contribute to the growing body of empirical research regarding the consequences of experiencing parental removal from the USA on the well-being of Mexican-origin USCC and to determine whether the experience meaningfully contributes to the development of clinical symptoms of depression or anxiety.

The objectives of this study were threefold: (1) Compare levels of specific and global depressive and anxious symptoms in relocated USCC with deported parents, to the levels of depressive and anxious symptoms in USCC that relocated due to a coerced return to Mexico and; (2) Assess the impact parental deportation has on the development of clinical symptoms of specific and global depression and anxiety in relocated USCC children, and (3) Understand how the adaptation process to Mexico is experienced by USCC based on their return circumstances. The hypotheses guiding the quantitative section of the study were (a) Depressive and anxiety symptoms will be higher in USCC with deported parents and (b) Parental deportation will be associated with higher propensities in USCC to present clinical symptoms of depression and anxiety.

Methods

Participants

Eligible participants were (1) United States Citizen Children (USCC) between 8 and 15 years of age who were born in the USA and relocated to Mexico up to 2 years before their participation. The age range was selected as Latino children during late childhood and early adolescence are effectively closer to their parents, and parenting can more effectively manage their well-being when compared to late adolescents (Suldo & Fefer, 2013; Zayde et al., 2023). Cases were excluded if (1) USCC had not completed at least four school years in the USA, (2) Parents or guardians refused to give consent, or (3) parents had been deported because of a felony rather than their immigration status.

Recruitment was carried out through community contacts, at schools and other institutions, using snowball sampling. Once a plausible participant had been identified, the research team interviewed the parents or guardians to provide information on the study, ensure compliance with the inclusion criteria, and request parental consent as well as USCC assent to administer the test battery and then carry

out the semi-structured interview individually. The entire process lasted approximately two hours, test batteries were answered mostly in the participants' homes, occasionally in schools or libraries and the semi-structured interviews followed in the same places. Interviews were carried out by fully bilingual Mexican nationals who had been trained by the research team. The research protocol was approved by the ethics committee of the Ramón de la Fuente Muñiz National Institute of Psychiatry in Mexico City and the IRB at The University of Texas at Austin.

Of the 36 participating USCC, most lived in the state of Hidalgo in central Mexico ($n=27$, 75%), lived in a two-parent household ($n=22$, 61.1%), and had two siblings ($n=16$, 44.4%). Seven participants (19.44%) had siblings without US citizenship, and in 27 cases (75%), both parents were undocumented while living in the U.S. Parents ranged from 28 to 58 years of age, all fathers were born in Mexico, and only 5 mothers (13.9%) were born in the USA. Half of the sample had been relocated to Mexico due to parental deportation ($n=18$). Sample characteristics can be found in Table 1.

Instruments

Child Depression Inventory 2nd Edition (CDI-2) (Kovacs, 2015)

The CDI-2 is a 28-item-long self-report (i.e., "I feel like crying every day") used to evaluate depression symptoms. It is answered using a three-point Likert-type scale ranging from 0 = "never" to 2 = "always". The CDI-2 is subdivided into six subscales (i.e., emotional problems, negative mood, negative self-esteem, functional problems, ineffectiveness, and interpersonal problems). The inventory has shown evidence of psychometric reliability as items present an internal consistency over $\alpha=0.80$, as well as predictive validity of affective and functional problems related to depression in

children and adolescents aged 7 to 17, including Latino and Spanish-speaking children (Lieberman et al., 2012; Masip et al., 2010). For this study, a t score of 60 points or higher was used as a cut-off point indicating children displaying clinical symptoms (Bae, 2012).

Screen for Child Anxiety Related Emotional Disorders (SCARED) (Birmaher et al., 1997)

The SCARED is a 41-item self-report (i.e., "I worry about things in the past") which is answered using a three-point Likert-type scale ranging from 0 = "never" to 2 = "frequently" that assesses the presence of an anxiety disorder according to the DSM-IV classification, where 25 points or higher indicate the presence of clinical anxiety symptoms (Bowers et al., 2020; Skinner & Chu, 2014). The SCARED is subdivided into five subscales (i.e., panic disorder or somatic symptoms, generalized anxiety disorder, separation anxiety disorder, social anxiety disorder, and school avoidance). The scale demonstrates high internal consistency ($\alpha=0.86$) and construct validity for both Latino and Spanish-speaking children (Skinner & Chu, 2014).

Analysis

To test our first hypothesis of comparing depressive and anxious symptoms between types of family relocation we used mean comparisons. To determine whether the effect of parental deportation on USCC depression and anxiety symptoms was robust to covariates and given the small sample size as well as departures from normality and homoskedasticity, we computed a series of Bayesian-estimated one-way ANCOVA models using sex, whether USCC lived with one parent as well as mean-centered age and months in Mexico as covariates. Bayesian estimation was selected over parametric, as a priori power analyses indicated a minimum sample of 155 participants to detect medium-sized effects in

Table 1 Sample characteristics

	Total ($n=36$)		USCC of voluntary return ($n=18$)		USCC of deported parents ($n=18$)	
	n	%	n	%	n	%
Girls	18	50%	7	38.89%	11	61.11%
Boys	18	50%	11	61.11%	7	38.89%
Parents in the USA	10	27.78%	8	44.44%	2	11.11%
Detained mother	3	8.33%	1	5.56%	2	11.11%
Detained father	15	41.67%	1	5.56%	14	77.78%
	M	S.D	M	S.D	M	S.D
Age	11.31	1.80	11.00	1.57	11.61	2.00
Months in Mexico	9.91	5.69	11.05	6.14	8.77	5.14
Years in the USA (mother)	12.97	6.59	12.78	1.44	13.18	9.49
Years in the USA (father)	14.81	3.69	14.78	3.10	14.86	4.42

an ANCOVA model with two groups and a single covariate (i.e., assuming an $\alpha=0.05$, and $1-\beta=0.8$). Prior distributions for mean comparisons were Student t distributions with six degrees of freedom to counteract absences from univariate normality, and were specified to indicate small differences between both groups of USCC as previous findings had suggested (Gulbas et al., 2016; Zayas et al., 2015). Subscale comparisons used a $t\sim(6, -1, 5)$ prior, whereas total scale comparisons used a $t\sim(6, -3, 8)$ prior distribution.

To test our second hypothesis, we performed a series of Bayesian-estimated binary logistic regression models, using dummy-coded indicators of clinical symptoms of depression or anxiety as outcomes (i.e., CDI-2 t score ≥ 60 and SCARED score > 25). Bayesian estimation was selected as a priori power analyses indicate at least 53 participants are necessary to detect a medium-sized odds ratio of 3 (i.e., assuming an $\alpha=0.05$, and $1-\beta=0.8$). All models used mean-centered years of age and months in Mexico since the relocation, USCC sex, whether USCC lived with one parent as covariates, as well as dummy-coded indicator variables of parental deportation. The model was estimated using three different sets of beta weight weakly informative prior distributions of the deportation dummy variable assuming small, medium, and big effects on the outcome variable (i.e. *norm* (0.25, 1), *norm* (0.5, 2), and *norm* (0.75, 3) respectively). The Leave-One-Out cross-validation information criteria (LOOic) was compared to identify the best fitting model for each outcome variable.

Models were computed using four chains with 2000 iterations each, where half of them were discarded as burn-in samples. Model convergence was reached when traceplots exhibited overlap, the Rhat statistic for each parameter estimate was below 1.01, the effective sample size (ESS) was above 2000, late chain-lag autocorrelations were below 0.02 and no divergent transitions were reported. Mean comparisons were deemed meaningful if the Credible Intervals corresponding to the difference in marginal group distributions did not encompass zero, whereas odds ratios were considered meaningful if credible intervals did not contain one. 90% Credible Intervals were used to counter potential stability issues in the posterior distributions when using small samples and iteration-effective sample sizes below 10,000 (Kruschke, 2014; Makowski et al. 2019). Data analysis was done with Rstudio v.1.4.17 using the brms, broom.mixed, ROCR, and multcomp packages.

As to our third objective, interview transcriptions were conducted by members of the research team. The analysis sought to identify thematic content in the interviews to begin developing a codebook. Members of the research team independently read the interviews and recorded their initial interpretations and codes which were then discussed and incorporated into a codebook draft. Through an open coding process, we identified key data in the narratives concerning

USCC experiences during the adaptation process to Mexico and their emotional well-being. Once salient categories were identified, regular meetings were conducted as the research team reviewed the transcripts once more until no new elements were identified, thematic saturation was reached, and inter-rater agreement of the codes and corresponding vignettes was satisfactory. Interview coding was done with NVivo 10. More details about the qualitative analysis, the trustworthiness of the analytical process, and other measures to decrease personal bias are described elsewhere (Zayas et al., 2023).

Results

Despite encountering few significant Shapiro–Wilk tests, scales and subscales followed approximately normal univariate distributions as shape parameters were well below the cut-points that would indicate a need for data transformation (Skewness < 11.571 , Kurtosis < 12.831) (Kim, 2013). Upon controlling for possible confounder variables, meaningful differences between groups were only found for types of anxiety symptoms, as all CDI-2 scale contrasts contained zero within the 90% credible interval of the difference between marginal distributions. Total anxiety, generalized anxiety disorder symptoms, and school avoidance scores were higher for USCC with parents who had been deported when compared to USCC with parents who had not been deported prior to their relocation to Mexico (see Table 2).

Analyzing cut-point scores for the scales, four participating USCC (11.1%) met the criteria for clinical symptoms of depression, whereas ten participants displayed clinical symptoms of anxiety (27.78%). When using the cut-point values for the SCARED subscales, more than half of the participants ($n=21$, 58.3%) presented clinical symptoms of separation anxiety. As for our second hypothesis, the best fitting logistic model for depression used a prior distribution suggesting a large effect from parental deportation on USCC clinical symptoms of depression and found males in our sample are more than 86% less propensity to express clinical symptoms of depression when compared to females in the sample. On the other hand, USCC who experienced parental deportation presented up to a 66-fold increase in the log odds of belonging to the group displaying clinical symptoms of depression. The depression model presents an 88.89% correct classification rate, an area under the curve (AUC) of 89.06% as well as moderate explained variance ($R^2=0.28$ [0.06–0.48]) (see Table 3).

Regarding anxiety symptoms, the best-performing model used the prior suggesting a large effect from paternal deportation to clinical symptoms of anxiety. The model indicates that age contributes to the propensity of developing anxious symptoms, where each year increases from the mean

Table 2 Scale and subscale descriptive statistics with 90% credible intervals and Bayesian ANCOVA results

Variable	USCC of voluntary return					USCC of deported parents					Difference		
	M	S.D	LL	UL	ESS	M	S.D	LL	UL	ESS	LL	UL	MC
CDI-2 depression scale													
Total scale	11.92	4.01	5.24	18.41	4124	10.78	3.81	-2.20	23.59	3956	-7.82	4.75	No
Emotional problems	6.03	2.17	2.45	9.52	3914	5.07	2.08	-1.85	11.99	3662	-4.16	2.59	No
Negative mood	3.78	1.67	1.02	6.44	4005	3.12	1.62	-2.32	8.43	3848	-3.30	2.00	No
Negative self-esteem	2.33	1.03	0.71	4.04	3891	1.96	1.02	-1.32	5.31	3435	-2.03	1.27	No
Functional problems	5.55	2.54	1.34	9.67	3309	5.60	2.41	-2.57	13.69	3336	-4.06	3.84	No
Ineffectiveness	4.64	1.81	1.68	7.62	3694	3.90	1.81	-1.94	9.88	3490	-3.66	2.22	No
Interpersonal problems	0.81	1.15	-1.07	2.69	3660	1.74	1.13	-1.98	5.49	3453	-0.89	2.80	No
SCARED anxiety scale													
Total scale	20.09	4.03	13.59	26.74	3744	26.38	3.66	13.93	39.03	3892	0.09	11.90	Yes
Panic disorder or somatic symptoms	2.26	1.39	-0.05	4.51	3722	4.03	1.28	-0.38	8.39	4205	-0.18	4.01	No
Generalized anxiety disorder	4.03	1.21	2.07	5.95	3570	6.17	1.09	2.39	9.86	3983	0.27	3.82	Yes
Separation anxiety disorder	5.38	1.26	3.31	7.45	3301	6.80	1.12	2.85	10.72	3697	-0.29	3.38	No
Social anxiety disorder	6.89	1.31	4.75	9.06	3621	8.15	1.17	4.05	12.21	3900	-0.57	3.26	No
School avoidance	0.54	0.64	-0.51	1.59	3461	1.54	0.59	-0.49	3.56	4070	0.02	1.97	Yes

LL lower limit, UL upper limit, ESS estimated sample size, MC meaningful contrast

Table 3 Logistic regression models for clinical levels of depression and anxiety

Variable	B	S.D	OR	90% C.I	Rhat	ESS
Clinical levels of depression						
Intercept	-3.38	1.58	0.03	[0.004-0.25]	1.001	3854
Age	0.13	0.67	1.14	[0.05-2.66]	1.0003	4155
Time in Mexico	-0.18	0.92	0.45	[0.01-1.34]	0.999	3878
Sex (male)	-7.83	7.37	0.0003	[0.0001-0.14]	1.006	1007
Parent in the USA	-0.48	1.77	0.61	[0.06-5.43]	0.999	4421
Parental deportation	2.26	1.47	9.57	[1.47-66.09]	1.001	3604
Clinical levels of anxiety						
Intercept	-1.49	1.14	0.09	[0.02-0.40]	1.001	2800
Age	1.29	0.84	2.68	[1.37-5.50]	1.0005	2076
Time in Mexico	-0.59	0.64	0.59	[0.31-1.10]	1.001	3449
Sex (male)	-0.73	1.24	1.43	[0.42-5.01]	0.999	3055
Parent in the USA	-0.02	1.81	3.13	[0.61-18.16]	1.001	2319
Parental deportation	1.09	0.83	6.26	[1.80-22.07]	1.0001	2951

OR odds ratio, 90% credible interval, ESS effective sample size

age increases the log odds of expressing clinical symptoms of anxiety. Parental deportation also presents a meaningful effect, as the removal is associated with up to a 22-fold increase in the log odds of belonging to the group displaying clinical symptoms of anxiety. The anxiety model also presented a high correct classification rate (77.77%), high AUC 80.09% and moderate explained variance ($R^2=0.25$ [0.10-0.38]).

The qualitative analysis identified five salient themes: (1) grief over loss, (2) parental prohibition to enter the USA, (3) Adaptation process, (4) Emotional response to relocation, and (5) worry (see Table 4). Although all interviewed USCC

expressed missing their friends and previous lifestyle in the USA, those who experienced parental deportation expressed higher emotional distress and grief when they think about their previous life in the USA.

“...In school many times they had to send me home because I couldn’t be without my mom, I was scared, I don’t know why... [I was thinking] ... well [that] something bad happens to us.” (Jimena, 15 years old)

“... Well, very sad, very angry, very I don’t know, I don’t feel like doing anything, I’m without strength, without anything. I feel [like] that in everything, if

Table 4 Salient themes and sample vignettes between groups

Theme	Voluntary	Deported
Grief over loss	...When I said goodbye to my friends, it was kind of sad because I said well I'm going to get there and I'm not going to meet anyone and here I already know [people] yes, like sometimes I was sad (Jaime, 11 years old)	...Bad, because I, I miss my mom, a lot, and I miss my school, I miss everything there (José, 13 years old)
Parental prohibition to enter the US	Well, a little sad because, I mean, I imagined that when we came, if I wanted to go back, my parents couldn't go with me and I felt sad that they didn't have papers (Octavio, 9 years old)	I feel happy because I came to see my dad but I miss my grandmother, but when I was in the United States I did miss my dad because he can't go to the United States because he has a problem with his papers (Sofia, 12 years old)
Adaptation process	Sadness I miss, I miss my friends from there a lot and I'm confused between Spanish and English (Osvaldo, 9 years old)	Since we arrived a year ago, on January 26. From there to now, I feel that nothing has changed, that everything is the same or that it has gotten worse (Ernesto, 9 years old)
Emotional response to relocation	I was mad at my mom [I told her] That I didn't want to come here... I did not speak to her... No, [for] like a week, the first [one] here (Andrea, 9 years old)	Well, very sad, very angry, I really don't know, without encouragement, without strength, without anything. I feel that everything is going well and if not, well, too. I don't care about anything anymore, my spirits are gone now, that [I had] before, before (Liz, 9 years old)
Worry	—	...I was very afraid that they would take him away again, I was always awake, I was going to check if my father was still there because I felt that in a moment, even if he was already asleep, they would go for him again (Jimena, 15 years old)

it goes well [great], and if not, then too. I don't care about anything anymore, I lost the spirit that I had before, before" (Andrea, 9 years old)

:... Sadness because I miss [The US], I miss my friends from there a lot, and I am confused between Spanish and English" (Raúl, 10 years old)

Both groups communicated sad feelings when talking about their parents' immigration status. Participants knew their parents were without "papeles" when living in the USA, but now it seems like an impediment to their fulfilling the dream of ever going back to living their old lives.

"My life here is... I don't know, it's strange, I feel happy because I came to see my dad but I miss my grandmother, but when I was in the United States I did miss my dad because he can't go to the United States because he has a problem with his papeles (...) I feel sad because I am leaving my grandmother there alone and I feel at the same time happy because I am coming with my father, but I wish my father were there in the United States so that we could be together" (José, 13 years old)

"...I don't know, I'm not sure, I just feel sad because since I'm used to being there and ..um... and I'm not used to living here... well, I feel very unhappy because like, um... they [parents] can't be there and I do want to be there" (Jaime, 11 years old)

The adaptation process for both groups has not been entirely successful due to the feeling of loss and the lingering dream of returning to the USA. In this theme, USCC that experienced a parental deportation usually report less adaptive experiences and harsher emotional responses to relocation.

"We were a very united and very happy family, but like, well, everything changed out of nowhere. In other words, right now there is no longer any peace or tranquility in the house" (Jimena, 15 years old)

"I don't know, I'm not sure I just feel sad because I'm used to being there and ... and I'm not used to living here" (Octavio, 9 years old)

"...Before I didn't cry for anything, I was very strong, I didn't show my feelings and right now for anything they say to me or something like that I start to cry, even if the teacher tells me off" (Ernesto, 9 years old)

The final category "worry" was exclusive to the parental deportation group. This suggests the experience has lingering emotional consequences on the emotional well-being of these children.

"They told me that I should not cry anymore because if not, they would take me to other people and I wouldn't

see my mother again. And I was trying to stop crying and I even spent a week without going to school because I thought that if I returned I wasn't going to see my mom anymore, and one time they brought me to a meeting at school with my mom, and we went and they told me that I shouldn't be absent anymore, that I shouldn't cry and that I should fulfill with school, and that now I must behave like a normal girl" (Karla, 12 years old)

"I was afraid that something was going to happen to my mom." (José, 13 years old)

Discussion

This pilot study sought to add to the growing body of empirical research regarding the impacts parental deportation and coerced voluntary return have on the mental health of United States Citizen Children (USCC) relocated to Mexico. Total scale scores indicate close to half of the study participants exhibit clinical symptoms of depression or anxiety, which points out the emotional burden carried by USCC in this complex adaptation process and denotes the urgent need to develop attention programs for this vulnerable group as previous research had pointed out (Allen et al., 2015; Hagan et al., 2019).

Additionally, quantitative analysis of the SCARED anxiety scale, indicates more than half of the study participants presented clinical symptoms of separation anxiety, which implies USCC might present a need for parental structure, stability, and support regardless of the reasons behind family relocation. Most participants in this study were less than 11 years old, and this need for a parental structure might become troublesome during adolescent psychological development, which could deprive them of a protective factor in the future. This also suggests adolescent USCC might be in an even more vulnerable condition to overcome their distress and adapt to Mexican society if they cannot find external agents to support them during adolescence, as the anxiety logistic model suggests. More work should be developed to understand how to counteract the pervasive effects of parental deportation across the development span of relocated USCC, as well as its long-term mental health impacts and implications.

Partially favoring our first hypothesis and in line with previous research, mean comparisons illustrate how USCC with deported parents displayed higher levels of anxiety symptoms when compared to USCC who relocated due to a voluntary return (Allen et al., 2015; Barros-Nock, 2019; Bernal, 2019; Brabeck & Sibley, 2016; Capps et al., 2020; Dreby, 2015; Gulbas & Zayas, 2017; Zayas et al., 2024). These higher *means* of generalized anxiety might be a lingering consequence brought by the abrupt disruption

endured by families that experienced deportation, which results in a constant alert status to any plausible threats to family unity and USCC well-being. Qualitative findings also support these findings as interviews suggest families have not adequately adapted to living in Mexico and those USCC that experienced a parental deportation are usually worried about their parents and family well-being.

Higher means of school avoidance for USCC with deported parents, on the other hand, might be related to an adaptation process to Mexico. By experiencing linguistic and educational barriers stemming from not receiving a bilingual education, being new to the contents of the educational syllabi, experiencing peer discrimination or poor educational experiences with a primarily monolingual system, USCC may feel reluctant to engage in school activities and adapt to a country they were forcefully taken to (Bybee et al., 2020; Cruz, 2018; Gallo & Hornberger, 2017; Medina & Menjívar, 2015; Zúñiga & Hamann, 2021). As USCC spend most of their time outside of the home in school, differences in school avoidance means might be an indicator of ongoing grief related to losing their friends, school community, and even family. This adaptation juncture could displace negative feelings towards deported parents, which might ostracize the effectiveness of classic parenting resources against youth problem behaviors and other problems, yet more research should be done to explore the effects of deportation on parental efficacy.

As for our second hypothesis, this study provides evidence that experiencing parental deportation makes USCC more vulnerable to exhibiting clinical symptoms of depression and anxiety which supports previous claims (Bybee et al., 2020; Dreby, 2015; Gulbas et al., 2016; Zayas et al., 2015, 2023, 2024). Despite being in a country where these families no longer have to carry the weight of being detained and deported, USCC still has to resolve the trauma of experiencing the fear of parental deportation coming true (Gonzales & Chavez, 2012; Gulbas & Zayas, 2017; Rojas-Flores et al., 2017; Zayas et al., 2015). Even if USCC adjusts to Mexican society, the emotional consequences and aftermath of having experienced parental deportation, detention, or even a coerced relocation will continue to unfold during their development (Anderson, 2016).

Regardless of the heterogeneity in our groups, our results support the claim that experiencing parental detention and deportation increases the propensity to develop clinical symptoms of depression and anxiety in USCC living in Mexico, which calls for specialized culturally adapted interventions to manage them and underscores the need for specialized attention to prevent undesirable outcomes later in adolescence. Future research should also focus on the impact family relocation has on gender roles, socialization, and cultural values in relocated USCC, as these might aid or

hinder family and individual clinical interventions (Fuentes-Balderrama et al., 2020, 2022).

The qualitative findings of this study paint a picture regarding the aspirations to return to the US while living in a country where regardless of their time since relocation, still seems foreign and strange to them. USCC reports mourning three losses: Their friends, their family, and their life in the USA. Those participants who experienced a parental deportation report feeling stuck in time with that grief and mourning as well as an elevated level of concern for the parental well-being considering the consequences in which they had to leave the USA, which would explain the increased odds of presenting clinical symptoms of depression and anxiety for this group in the quantitative analysis.

Although both groups of USCC report a maladaptive emotional response to the relocation, those in Mexico due to a coerced voluntary return were generally focused on how to overcome present obstacles and stigma about relocation to Mexico, whereas the other groups were focused on metabolizing the violent relocations and traumatic experience of parental deportation (Zayas et al., 2023).

Some limitations should be considered when evaluating our findings. The high specificity of the sample's characteristics limited us to intentional sampling as finding eligible participants was tremendously challenging, and consequently, our sample size restricted us from testing hypotheses through parametric models. From a planning perspective, our inclusion criteria were too stringent which resulted in a limitation to find participants and to generalize the findings more easily.

Similarly, the heterogeneity between both groups such as sex imbalance, age, parents in the USA at the time of data collection, and detainment history were important conditions that should be further examined or accounted for, yet it is beyond the scope of this study. Despite overcoming restricted statistical power through Bayesian estimation, the generalization of our findings should be limited and done with caution. The sample size did not allow for a more in-depth exploration to examine further risk and protective factors for relocated USCC's mental health. It is necessary to follow up on these children, their parents, and family dynamics, as longitudinal studies will aid in determining how children integrate into their new lifestyle, whether mental health problems persist over time, how they affect their daily life, and whether could identify protective factors.

Policy Implications

USCC are a tremendously vulnerable, understudied, and underserved population, which is marginalized by the absence of social and government attention in both Mexico

and the United States. Across both sides of the border, USCC have limited access to evidence-based mental health services, which highlights the importance of studying and developing easily accessible and sustainable parenting and family intervention programs to address USCC psychopathology and well-being in both Mexico and the USA.

Being a binational population, both governments have a shared responsibility in the well-being of USCC and their families. In Mexico, the government could help by facilitating programs aimed at re-documenting or updating official "papeles" for parents, helping them exploit their English proficiency or find jobs better matched to skills learned in the USA. On the other hand, USCC would benefit from accessing public health services and more efficient services while claiming their Mexican nationality. Educational programs in the USA aimed at strengthening Spanish literacy and knowledge of Mexican history or other elements of educational syllabi would benefit USCC in its transition and adaptation to Mexico. Further, a constant communication strategy and active participation from the U.S. embassy could aid in addressing plausible deficiencies for USCC.

Finally, given USCC's lack of documentation, information about applying for nationalization or the Population Registry Unique Code (CURP), as well as information about virtual networking with other returned or relocated families to share their experiences would be valuable.

Clinical Implications

Regardless of the circumstances of their relocation to Mexico, USCC would profoundly benefit from family support and warmth during their adaptation process to counter separation anxiety symptoms. Favoring parental communication and involvement in USCC adaptation efforts to Mexico and specifically their school might help USCC feel supported and motivated to socialize and be confident enough to ask for help and communicate their feelings and concerns. Further, including USCC in parental adaptation efforts with extended family and community contacts could model adaptation interactions, and ease their process.

Counselors and social workers could also facilitate handling and reframing the perceptions USCC have of the deportation process, their parents, and Mexico. Clinical efforts could also be enhanced by aiding adolescent USCC in developing a safety net to counteract anxiety propensity, and by encouraging girls to socialize as they present a higher propensity to develop clinical symptoms of depression.

What we learn from the narratives in this study is how essentially necessary it is for those USCC that relocated due to deportation, to untangle their well-being and their present

capabilities from the traumatic displacement. These participants communicated feeling alienated from Mexico and estranged from the USA, they felt like they were living in no man's land, and given their ambivalent feelings towards their parents, they were seemingly hopeless. More efforts should be made to understand the complex barriers that prevent these children from feeling successfully adapted to Mexico and to understand if pre-existing family strengths such as parent training interventions could help foster and manage their well-being.

Conclusions

Despite an increase in relocated and returned families in Mexico, risk and protective factors for this vulnerable population have scarcely been studied. USCC of deported parents reported higher levels of generalized anxiety, school avoidance, and overall anxiety. Further, experiencing parental deportation meaningfully increased the propensity of presenting clinical symptoms of depression and anxiety for participants in our study. Similarly, USCC that relocated due to parental deportation reported less adaptive adaptations and harsher emotional responses to that adaptation. In contrast with the coerced voluntary return group, the narrative of these USCC still contains worry about their parents regardless of being in Mexico. Our results demonstrate it is necessary to promote further research on USCC adaptation to Mexico, and how these processes might impact their mental health during their development. Additional empirical knowledge is needed to better design and implement intervention programs and health policies that will protect USCC in Mexico, especially those who relocated following parental deportation.

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Data Availability Data is available upon reasonable request.

Declarations

Conflict of Interest The authors declare that they have no conflict of interest.

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