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Safe-zone schools and the academic performance of children in mixed-status households: Evidence from the 'between the lines' study

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Abstract

In response to the intensification of immigration enforcement in the interior of the USA, some school districts have implemented 'safe-zone' policies to protect students' academic progression and well-being. Using primary data from a sample of US-born children of unauthorized migrants, we document the detrimental effect of stricter immigration enforcement on children's educational outcomes and the benefits of safe-zone policies. Our analyses show that restricting immigration authorities' access to schools and providing counseling on immigration-related issues are crucial policy components in strengthening children's focus, effort, expectations, parental involvement, and relationships. These findings highlight the damaging impact of immigration enforcement on US-citizen children in mixed-status households and advance our understanding of the role of local policies in mitigating these effects.

Keywords: children, education, immigration enforcement, mixed-status households, safe-zone schools, sanctuary policies

My school counselor was a really big help. She helped me figure out where my missing assignments were. And she was like 'Hey, if you get through college, if you get a good education, you can help your dad over there. You can get him a better house, you can get him a better job, you can send him money.' (...) I don't know what happened. How [school counselor] found out [about parental deportation]. But I'm actually

really glad that they did because if they didn't, I don't know where I would be at right now.

-Between the Lines survey respondent

1. Introduction

Interior immigration enforcement has significantly risen in the USA over the past decades. Over 3.6 million migrants were deported during 2008 through 2018 decade (ICE 2015, 2018). An estimated 231,000 deported migrants reported being separated and leaving behind at least one US-born child between 2014 and 2018 alone (Preston 2020). In addition, intensified immigration enforcement has placed an additional 4 million US-citizen children with undocumented migrant parents at risk for family separation (Capps, Fix and Zong 2016).

Existing research finds that parental deportation has detrimental impacts on children's well-being, exposing them to economic hardship, food insecurity, and housing instability (Brabeck and Xu 2010; Chaudry et al. 2010; Wessler 2011; Dreby 2012). These risk factors likely explain the negative effect of immigration enforcement on the educational outcomes of children with migrant parents (Amuedo-Dorantes and Lopez 2015, 2017; Bucheli, Rubalcaba and Vargas 2021). To mitigate these effects and protect students' academic progression and overall well-being, school districts across the USA have implemented 'safe-zone' policies. While diverse, these policies often forbid immigration authorities' access to school campuses, the sharing of students' information, and/or provide resources for student support.

This study examines the impact of safe-zone policies on the educational outcomes of US-born adolescents in mixed-status households. To that end, we use data from *Between the Lines* (BTL), a binational pilot study conducted from 2019 to 2020, that collected detailed information on children from mixed-status households who had recently experienced or were at risk for parental deportation. The overall aim of the BTL study was to develop and pilot test methods to inform the design of a future study aimed at examining the detrimental impacts of parental deportation on the health and well-being of US-citizen children in immigrant families. The pilot BTL study included Mexican immigrant parents deported from the USA and citizen children and caregivers from mixed-status immigrant households in the USA. The sample included 100 US-based citizen children aged 13–17 years from families with a deported Mexican parent or with a Mexican parent who was not a US citizen or a legal permanent resident. All study participants (i.e. deported parents, caregivers, and citizen children) completed baseline and 6-month follow-up phone interviews on the child's health, education, household situation, and overall well-being at the time of parental deportation or upon enrollment for comparison families. This study combines BTL baseline survey data on children's academic performance, school engagement and behavior, expectations, and interpersonal relations, with publicly available school district data on safe-zone policies and county-level data on immigration enforcement.

Using a quasi-natural experimental approach, we exploit the geographic variation in safe-zone policies over the period for which the collected information is referred to in order to gauge the protective role of safe zones on the academic performance of children, particularly

in light of the intensity of interior immigration enforcement in the county where they reside. We find evidence of safe-zone policies improving children's propensity to earn mostly A's at school while curtailing their likelihood of reporting having problems with teachers, peers, or ever repeating a grade. Then, we consider the temporal variation in the activation of safe-zone policies to examine potential endogeneity driven by their selective adoption by school districts with worse or better academic outcomes, or by families' school choices. We fail to find evidence of such endogeneity patterns. Subsequently, we use information on the residential history of the children to gauge heterogeneous impacts of the policies according to the child's age at their first exposure to the policy and duration of policy exposure. We find suggestive evidence of beneficial policy impacts regardless of the child's age at first exposure, with the effects strengthening with the duration of policy exposure. To conclude, we investigate the policy mechanisms, finding evidence of safe zones improving children's ability to focus and work hard, their academic expectations, parental involvement in their schooling, and friendships from other races and ethnicities. In addition, these impacts seem to be primarily driven by two policy components: the decision to bar Immigration and Customs Enforcement (ICE) from the schools and to offer student counseling on immigration-related issues, helping inform future policy adoption.

Our analysis builds on prior mixed-method research using survey data gathered on immigrant households and their children. That literature has documented how Hispanic youth are affected by immigration enforcement and parental vulnerability, resulting in increased psychological distress (Zayas et al. 2015; Cardoso et al. 2021) and lower academic performance on standardized tests (Brabeck et al. 2016). The pervasiveness of these effects has even been found to lead children to question their sense of belonging (Zayas and Gulbas 2017). Yet, our understanding of policies that could help alleviate some of these adverse effects is surprisingly limited. Learning about the effectiveness of safe-zone policies in supporting students from mixed-status households is critical given the negative impacts of immigration enforcement on children's educational attainment, and its potential long-term effect on their development and well-being.

2. Background and literature

2.1 Parental deportation and child educational outcomes

The literature on the relationship between immigration enforcement and children's schooling has consistently found adverse effects of enforcement policies on educational outcomes, including those of US-born children living in mixed-status households.

One of the outcomes frequently examined is school attendance. Researchers have documented a decline in enrollment rates in areas that adopt immigration enforcement measures, especially among Hispanic students. Using a national county–year panel dataset over the 2000–11 period, Dee and Murphy (2020) find that counties whose police departments entered into 287(g) agreements with ICE experienced a 10 per cent reduction in Hispanic student enrollments within 2 years of the agreements' activation. These effects appear to be driven by the displacement of approximately 300,000 Hispanic students, including US citizens with undocumented parents. Similarly, Pivovarova and Vagi (2020)

show that the enactment of the Legal Arizona Workers Act in 2007 and SB 1070 in 2010 increased Hispanic students' school attrition rates, especially among low-performing pupils.

Other studies have considered the simultaneous impact of various immigration enforcement policies on schooling outcomes. Using a composite index that captures the activation of several enforcement policies, Amuedo-Dorantes and Lopez (2017) estimate that even relatively low levels of immigration enforcement can increase the likelihood of dropping out of school of Hispanic adolescents in mixed-status households by 12 per cent or more. These findings are similar to those in Kirksey et al. (2020), who show that an increase in deportations is associated with a surge in absenteeism and a wider math achievement gap between White and Hispanic students.

Adverse educational effects from immigration enforcement policies have also been documented in the analysis of standardized tests. Bellows (2019) uses variation in the activation of Secure Communities during 2008–13 to estimate its impact on Hispanic students' performance. The analysis finds evidence of a drop in the average achievement in English language arts, with the strongest impact documented in counties with high levels of cooperation between local law enforcement agencies and ICE.

Aside from detrimental impacts on academic outcomes, researchers have documented harmful effects of immigration enforcement on children's mental health. Child–parent separations, food and housing insecurity, and other related risks are some of the major sources of psychological and emotional trauma.[1] An example of the traumatic impacts of intensified immigration enforcement on children can be found in the study by Rojas-Flores et al. (2017). Focusing on US- citizen children in mixed-status households, the authors find evidence of post-traumatic stress disorder symptoms—including anxiety, depression, anger/aggression, intrusion, avoidance, arousal, or disassociation, in children of deported parents relative to children of legal permanent residents or children of undocumented parents who have not had prior encounters with immigration officers.

Allen, Cisneros and Tellez (2015) provide further evidence of the aforementioned negative mental health effects, documenting how US-citizen and foreign-born children separated from their deported parents exhibit higher levels of internalizing (e.g. anxiety and depression) and externalizing problems (e.g. aggression). Unfortunately, these problems persist even when children join their deported parents after their removal, pointing at the general instability generated by intensified immigration enforcement (Zayas et al. 2015). In fact, even a heightened perceived risk of deportation can have adverse impacts. Using information from a survey on 132 Latino immigrants, Brabeck and Xu (2010) find that increased parental legal vulnerability to deportation negatively impacts the quality of the parent–child relationship, the prevalence of children's negative emotions, and a lower ability of parents to support their children financially.

Overall, the negative impacts on immigrant-origin children's mental health and stability suggest that exposure to higher levels of immigration enforcement may negatively impact their educational outcomes by affecting their ability to concentrate, relate to others, and learn. This evidence highlights the importance of local immigration policies. Yet, limited attention has been paid to policies or programs that may alleviate the negative effects of immigration enforcement. An exception is Corral (2021), who explores the association between sanctuary policies and high school completion and college enrollment of

Hispanic undocumented youth using data on 29 out of the 128 counties with such policies over the 2005–17 period. The author finds no association between the policies and either outcome. While related, the institutional actors in sanctuary policies and safe zones differ, that is law enforcement agencies versus school districts. For that reason, learning about the role of safe zones in taming the negative impacts of intensified immigration enforcement on the educational outcomes of US-born students from mixed-status families threatened by or enduring parental deportation is crucial.

2.2 Safe-zone schools

In 1982, the US Supreme Court determined that public schools cannot constitutionally deny children access to education regardless of their immigration status.[2] Following the increase in anti-immigrant rhetoric after the 2016 presidential elections, many school districts across the country used the Supreme Court's ruling to justify the adoption of 'safe-zone' or 'sanctuary' policies aimed at protecting their students' right to education. For instance, in response to President Donald Trump's support for the mass deportation of unauthorized immigrants and the termination of the Deferred Action for Childhood Arrivals (DACA) program,[3] the Los Angeles Unified School District—the second largest in the country—adopted a resolution declaring its campuses as 'safe zones and resource centers for students and families threatened by immigration enforcement'.[4] Since then, other districts followed suit.

While there is no standard safe-zone policy, these policies usually prohibit cooperation with immigration authorities and their presence on school campuses. In other occasions, they allocate resources to support immigrant students and their families, or to train their staff and teachers. Still, some school districts have adopted relatively vague safe-zone resolutions to avoid being targeted by the Trump administration's effort to defund sanctuary jurisdictions.[5]

The lack of a national database for school districts' safe-zone resolutions makes keeping track of them difficult. However, in what is perhaps the only official state-level record of these policies, the California Department of Education has reported 119 safe-zone school districts in the state as of 2021.[6] Overall, safe-zone policies offer protection to a significant 4 million children of unauthorized immigrants attending school throughout the country (Passel and Cohn 2016).

Safe-zone initiatives can impact children's educational outcomes through various channels. First, they prohibit discrimination from academic, extracurricular, and other school opportunities based on immigration status or race. This prohibition supports an inclusive and welcoming environment, even if it is only through a symbolic signaling effect. Second, these initiatives transform schools into safe spaces for immigrant-origin children and their families; places where they are less likely to encounter immigration authorities. The lower risk of psycho-emotional trauma from such experiences may facilitate students' learning and social interactions. Third, safe-zone declarations often call for the creation or expansion of information sites providing students with financial, legal, and academic resources, or with a rapid response network to assist when parents are detained by immigration authorities. Lastly, safe zones may allocate funds to school staff training. For instance, the San Francisco Unified School District directed resources to work 'with immigrant and undocumented students and their families on issues such as rights to college access, financial assistance for college, employment and career opportunities'.[7] In an environment of heightened immigration enforcement,

policies that create a safer and more welcoming environment at school have the potential to support students' academic progression, even among children who are not directly targeted by the enforcement efforts.

3. Data

We combine three data sets to analyze the impact of safe-zone policies on children's educational outcomes. The primary data set comes from the BTL pilot study—a binational longitudinal feasibility study completed in 2019–20 that collected qualitative and quantitative information on US-citizen children of Mexican immigrants. BTL involved primary data collection to pilot test a new methodology to examine the impact of parental deportation. Because of its pilot nature, the BTL study focused only on children ages 13–17 years. The sample size was not based on statistical power calculations, but on budgetary and practical considerations. The goal was to obtain data on recruitment, retention, data collection, and other process indicators to inform the design of a future, larger study. The analysis of safe-zone policies' impacts is a secondary data analysis of the BTL data. Data from BTL baseline surveys were merged with both county-level interior immigration enforcement policies and school district safe-zone policies to which children in the BTL sample were exposed. In what follows, we describe the three data sources.

3.1 *BTL* survey

The BTL study was a 2-year pilot, ambidirectional cohort study funded by the National Institutes of Health. The project was a collaboration between researchers at Drexel University and the Mexico Section of the USA–Mexico Border Health Commission. The survey gathered information on Mexican immigrant families that had either been exposed to or were 'at risk' of deportation. To be eligible, families needed to be based in the USA and include either a Mexican immigrant parent recently deported from the USA (i.e. families exposed to parental deportation) or a Mexican immigrant parent who was not a US citizen nor a legal permanent resident (i.e. families with at risk for deportation). For both sets of families, eligibility criteria also required families must include one or more children who were US citizens, ages 13–17 years, and living in the USA at the time of recruitment. Only one child per family was included in the study. If more than one child qualified, the child with the most recent birthday was invited to participate. The goal was to recruit 50 families exposed to and 50 families at risk for parental deportation. From each family, the BTL study sought to recruit the deported immigrant parent (for exposed families only), an eligible child, and a primary adult caregiver of that child (see Supplementary Appendix A for details on the BTL study design, eligibility criteria, recruitment, data collection, and study measures). Recruitment of exposed families started with recruitment of deported Mexican parents at three deportation stations located on the Mexican border towns of Tijuana, Nogales, and Matamoros. These individuals served as 'recruitment brokers' for one of their US-citizen children and a primary adult caregiver based in the USA.

Recruitment of BTL study families took place in 2019–20. Approximately 999 deported migrants were screened for eligibility at three deportation stations. Among them,

17 per cent were found to be heads of households who met the criteria for inclusion in the study (see Supplementary Appendix A). Among these, 69 per cent agreed to participate. BTL staff followed up with their families in the USA to confirm eligibility (see Supplementary Appendix A) and interest in participating. Overall, 37 per cent of the families that met the eligibility criteria during the initial screening were successfully contacted, deemed eligible, and enrolled in the study ($N = 61$). The total sample for the BTL sample exposed to parental deportation included 168 participants, counting triads and pairs of index parents, their US-based children, and their adult caregivers.

To recruit families with similar characteristics as those separated from deported parents, BTL researchers partnered with Latino-serving community-based organizations and Latina *promotoras* (i.e. well-trusted community members to whom others turn for advice or help, often engaged in formal or informal health promotion activities). Organizations and *promotoras* were given information sheets and asked to refer potentially eligible and interested families to the study. Of 93 referred families, 67 per cent were screened and found to be eligible (see Supplementary Appendix A), and 85 per cent were enrolled in the study, yielding a sample of 102 individuals (i.e. 51 children and their respective caregivers). The overall sample combining the BTL arm exposed to parental deportation and the control group included 100 children (i.e. 49 exposed to parental deportation and 51 at risk for parental deportation) distributed in 16 states with high rates of Hispanic migration.

BTL offered small incentives for study participants and *promotoras* who assisted with family referrals. Deported parents received a cell phone upon enrollment and 900 Mexican pesos (about $50 USD) in phone credit or as an ATM code texted to their phones for each baseline and follow-up survey. Families in the USA were emailed $50 e-gift cards upon completion of the baseline surveys and the follow-up surveys. *Promotoras* received $100 for each successful referral.

BTL surveys were administered in person (i.e. deported parents) or by phone (i.e. families in the USA) by trained staff using a Qualtrics® Survey application. All deported parents completed the surveys in Spanish. For caregivers, 91 per cent chose to complete them in Spanish, while 83 per cent of children did so in English. Caregivers and children's surveys contained questions pertaining to children's health, well-being, health behavior, household, academics, and socio-ecological health determinants at the time of the survey and, retrospectively, a year earlier. Questions in the children's survey were based on the Add Health Study, the Adverse Childhood Experiences (ACE) Study, the Children of Immigrant Longitudinal Study, the Youth Risk Behavior Survey,[8] the 2016 CPS Food Security Supplement,[9] and the Self-Description Questionnaire's Relationships Subscales (Marsh 1994). A copy of the BTL questionnaires can be obtained upon request from the authors. All BTL adult participants provided informed consent prior to study enrollment. Minors provided informed assent to be part of the study. The BTL study procedures and materials were reviewed and approved by the Drexel University Institutional Review Board.

3.2 Data on safe-zone school policies

We also collected information on school districts' implementation of safe-zone policies by identifying where children in the BTL sample attended school during the most recent

academic year. Next, we browsed through each school district's board of education resolutions or contacted them directly to create a database that identified the school districts that instituted safe zones and the characteristics of their policies. We classify a school district as having a safe zone if its governing board of education has approved resolutions that prohibit ICE activities in school facilities or requires prior authorization from the superintendent, ban the collection and sharing of information with immigration authorities, and/or allocate resources to staff training initiatives and counseling services.

3.3 Data on immigration enforcement

When examining the role of safe-zone policies on children's schooling performance, it is essential to consider the immigration enforcement environment in their schools' localities. Since 9/11, the USA has witnessed a dramatic increase in interior immigration enforcement. Individual agencies, states, and local jurisdictions have enacted various policies aimed at curtailing undocumented immigration. To capture the immigration enforcement climate to which children are likely exposed to, we gather data on the following initiatives: 287(g) agreements between counties/states with the Department of Homeland Security, Secure Communities, employment verification (E-Verify) mandates, and omnibus immigration laws. Data on jurisdictions with active 287(g) agreements between ICE and local law enforcement agencies come from ICE's website.[10] Data on the activation of Secure Communities come from a memorandum issued by Secretary of Homeland Security John Kelly ordering the restoration of Secure Communities countrywide.[11] Finally, data on state-level omnibus immigration laws and employment verification mandates are gathered from the National Conference of State Legislatures website.[12]

To proxy for the level of interior immigration enforcement to which children are likely exposed, we construct a county-level index that ranges between 0 (when there are no policies in place) and 4 (when all initiatives are in place).[13] The index enables us to gauge the impact of the overall harsher immigration enforcement climate, addressing the highly correlated and interconnected measures. Subsequently, we merge the index to each respondent's record using information on the county where the school is located. In what follows, we describe our data and provide some descriptive statistics for our sample.

3.4 Descriptive statistics

Table 1 provides descriptive statistics for the entire sample and by school districts' safe-zone status. At the top of the table, we present the schooling outcomes being examined, which are constructed as dichotomous variables. Nine per cent of the children in the sample indicate ever repeating or being held back a grade,[14] and 19 per cent report earning mostly A's in school. In addition to these two measures of academic performance, we consider interpersonal relationships in the classroom. About a quarter of the sample reports having problems with teachers or other students. If we compare children attending school in safe zone to those attending school in non-safe-zone districts, we find that the shares of children ever repeating a grade, having problems with teachers, or having trouble with other students are smaller for children exposed to a safe zone.

Table 1. Descriptive statistics of children in sample ($N = 100$)

Variable		School in safe-zone district	
	Pooled sample $(N = 100)$	No $(n = 63)$	Yes $(n = 37)$
Outcomes (1 = yes)			
Ever repeated or held back a grade	0.090	0.095	0.081
	(0.288)	(0.296)	(0.277)
Mostly A's in school	0.190	0.175	0.216
	(0.394)	(0.383)	(0.417)
Problems with teachers	0.263	0.317	0.171
	(0.443)	(0.469)	(0.382)
Problems with students	0.278	0.339	0.171
	(0.451)	(0.477)	(0.382)
Key regressors			
School district with a safe-zone policy	0.370	0.000	1.000
	(0.485)	(0.000)	(0.000)
Years of exposure to a safe-zone policy	1.050	0.000	2.838
	(1.480)	(0.000)	(0.898)
Immigration enforcement score	1.290	1.429	1.054
	(0.686)	(0.797)	(0.329)
Controls			
Age	14.910	15.016	14.730
	(1.505)	(1.465)	(1.575)
Female	0.540	0.667	0.324
	(0.501)	(0.475)	(0.475)
High school student	0.670	0.683	0.649
	(0.473)	(0.469)	(0.484)
Child has at least one older sibling	0.460	0.460	0.459
	(0.501)	(0.502)	(0.505)
Cities child has lived in since the age of 6 years	1.460	1.460	1.459
	(0.904)	(0.839)	(1.016)
Deported parent	0.490	0.508	0.459
	(0.502)	(0.504)	(0.505)
Caregiver finished high school	0.394	0.444	0.306
	(0.491)	(0.501)	(0.467)
Caregiver currently employed	0.616	0.635	0.583
	(0.489)	(0.485)	(0.500)

Sample means, standard deviations in parentheses.

Table 1 also displays basic descriptive statistics for our two key regressors—safe-zone policies and immigration enforcement. Over a third (37 per cent) of children in the sample attend school in a district with a safe zone in place. It is critical to account for the level of interior immigration enforcement to which children are exposed when gaging the effectiveness of safe zones in supporting children's educational progression. In the study sample, and perhaps not surprisingly, safe zones appear to be primarily located in counties with a lower level of interior immigration enforcement. Correspondingly, children attending schools in districts with a safe zone are exposed to a lower level of enforcement.

To conclude, Table 1 provides the descriptive statistics for various demographic controls (i.e. age, gender, whether the child has an older sibling), educational attainment (i.e. high versus middle school attendance), the number of cities where the child lived since age 6 years, and a dummy variable equal to 1 if the child had been separated from one of the parents due to deportation. It also informs about the primary caregiver's educational achievement (i.e. whether s/he finished high school) and employment. On average, children in our sample are roughly 15 years old. There are also some interesting differences between children based on whether they attend a school in a safe-zone district. A higher share of boys than girls attend schools with a safe-zone policy, and fewer children in schools with a safe-zone policy have endured parental separation due to deportation when compared to children in schools without a safe-zone policy. Finally, children attending schools with a safe-zone policy have less-educated caregivers. In the analysis that follows, we control for these differences.

4. Methodology

To learn about the impact of safe-zone policies on the schooling performance of our sample of US-citizen children in mixed-status families, we estimate the following benchmark model specification:

$$Y_{idm} = \alpha + \beta_1 SZ_{dm} + \beta_2 IE_{cm} + \gamma' X_{im} + \delta_s + \delta_m + \varepsilon_{idm} \tag{1}$$

where the dependent variable (Y_{idm}) captures various schooling performance indicators of child i attending school in district d when interviewed in month m School performance indicators inform about the child ever repeating a grade, getting mostly A's at school, or having problems with teachers or peers at school.

As noted earlier, safe zones might help tame the negative impact of a tougher immigration enforcement climate. Therefore, Equation (1) not only accounts for whether the child attends a school district with a safe zone in place (SZ_{dm}), but also for the level of interior immigration enforcement in the county where the child resides (IE_{cm}). In addition, we account for child traits included in vector X_{im}, such as age, gender, high school enrollment, presence of older siblings, number of cities the child has lived in since age 6 years to capture frequent moves that can impact academic achievement, and a dummy variable equal to 1 if the child was separated from a deported parent. We also include information on the child's caregiver shown to be correlated to children's educational attainment (e.g. Dubow, Boxer and Huesmann 2009; Rege, Telle and Votruba 2011; Schildberg-Hoerisch 2011)—namely, whether s/he completed

high school and if s/he is employed. To conclude, Equation (1) incorporates month fixed effects (δ_m) to address any variations in immigration policies during the months when the BTL baseline surveys were completed—all conducted in 2019—and geographic fixed effects to account for unobserved time-invariant locational traits. We cannot include school district or county fixed effects due to our small sample size; instead, we include state fixed effects (δ_s).

Equation (1) is estimated using ordinary least squares. We first experiment with a simple model specification that only includes information on whether there is a safe-zone policy in place, along with basic geographic and calendar month fixed effects. Subsequently, we repeat the estimation including information on the extent of interior immigration enforcement in place and the demographic and household traits in vector X. Because of the small sample size, standard errors are clustered at the state level to ensure multiple observations per cluster.

5. Do safe zones protect the academic advancement of children?

Our primary goal is to assess the protective impact of safe zones on the educational performance of children from mixed-status households. To that end, we estimate the model in Equation (1) using two model specifications that progressively add controls. In that manner, we assess any concerns regarding the impact of potentially endogenous regressors.[15] Table 2 displays our main findings for various school-related outcomes.

The estimates are relatively consistent across the two model specifications, with the impact of safe zones rising as we account for various child and household traits. For instance, based on the estimate in Column (1), children attending school districts with a safe zone in place are 69 per cent less likely to have ever repeated a grade than their counterparts attending school districts without a safe zone. The assessed impact of safe zones only rises when we consider the children's personal and household characteristics. Specifically, based on the estimate in Column (2), children in safe-zone school districts are 1.3 times less likely to repeat a grade than children in school districts lacking such a policy.

Safe-zone policies also display encouraging associations with children's performance at school. Based on the most complete model specifications in Columns (3) through (8) in Table 2, safe zones practically double children's propensity to earn mostly A's in school and reduce their likelihood of reporting problems with teachers or peers by 1.2 and 1.3 times, respectively. These impacts, while remarkably positive, are unable to eliminate the negative impact of interior immigration enforcement on some of those outcomes. For instance, the adoption of one additional interior immigration enforcement initiative (as captured by a one-unit increase in the interior immigration enforcement index) raises children's propensity to ever repeat a grade and lowers their likelihood of getting mostly A's by a factor close to 5 (or by 4.7 times). Therefore, for those two outcomes, the adoption of a safe-zone policy cuts back the negative impact of interior immigration enforcement by one-fifth.

Other findings in Table 2 are as expected. For instance, girls are roughly two times less likely to report ever repeating a grade than boys.[16] Additionally, each additional

Table 2. Safe-zone policies and children's schooling outcomes

Outcome:	Ever repeated a grade		Mostly *A*'s in school		Problems with teachers		Problems with students	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
School district safe-zone policy	−0.062**	−0.117**	0.118	0.187**	−0.239**	−0.323***	−0.377***	−0.353***
	(0.023)	(0.044)	(0.070)	(0.067)	(0.092)	(0.094)	(0.082)	(0.059)
Immigration enforcement	–	0.420***	–	−0.889***	–	0.149	–	0.193
		(0.102)		(0.200)		(0.256)		(0.173)
Age	–	0.027	–	0.018	–	−0.060	–	0.011
		(0.028)		(0.026)		(0.052)		(0.044)
Female	–	−0.169**	–	0.057	–	0.052	–	−0.138
		(0.063)		(0.084)		(0.125)		(0.083)
High school	–	−0.111	–	−0.016	–	−0.034	–	−0.169
		(0.159)		(0.119)		(0.086)		(0.120)
Older siblings	–	−0.033	–	0.026	–	−0.038	–	−0.092
		(0.051)		(0.052)		(0.122)		(0.132)
Cities lived in since the age of 6 years	–	0.093***	–	−0.043	–	−0.040	–	0.118
		(0.028)		(0.031)		(0.053)		(0.089)

Continued

Table 2. Continued

Outcome:	Ever repeated a grade		Mostly *A*'s in school		Problems with teachers		Problems with students	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Deported parent	–	−0.107	–	−0.024	–	−0.001	–	−0.041
		(0.072)		(0.124)		(0.262)		(0.090)
Caregiver completed high school	–	−0.177***	–	0.203***	–	−0.017	–	−0.135
		(0.058)		(0.039)		(0.121)		(0.092)
Caregiver employed	–	0.034	–	−0.081	–	−0.131	–	0.016
		(0.054)		(0.084)		(0.102)		(0.065)
Survey month FE	Y	Y	Y	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y	Y	Y	Y
Dependent variable means	0.09	0.09	0.19	0.19	0.26	0.26	0.28	0.28
Observations	100	99	100	99	95	94	97	96
R^2	0.201	0.403	0.309	0.439	0.275	0.332	0.324	0.426

All models include a constant term. Standard errors clustered at the state level in parentheses. We lose an observation in the most complete specification for each outcome because one caregiver did not provide information about their high school completion or employment status.
*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

household move (as captured by the number of cities where the child resided since turning 6 years old) doubles the child's propensity to ever repeat a grade. Interestingly, having a deported parent does not have a significant impact on academic performance. This could be due to the small sample size and limited statistical power. Alternatively, the effects of parental deportation on academic outcomes may not be evident in the short term—deported parents in our sample would have been deported for less than a month at the time these data were collected. Finally, it is also possible that some children may exhibit academic resilience when separation is used as a motivational tool (Capps et al. 2007) or when they benefit from some kind of institutional support (Macías and Collet 2016). Regarding parental education, children with caregivers with at least a high school education are two times less likely to report ever repeating a grade. Similarly, having a caregiver with a high school education doubles the children's propensity to report earning mostly A's at school.

While most evidence on the relationship between immigration policies and education has focused on the harmful effects of immigration enforcement, a few studies have examined the role of sanctuary policies adopted by local governments to limit their cooperation with immigration authorities. Notably, Corral (2021) finds no changes in high school graduation rates or college enrollment among noncitizen Hispanics following the adoption of county-level sanctuary policies. The apparent discrepancy with our results could be potentially driven by the nature of sanctuary policies, which are not adopted with the specific aim of protecting students. Their focus, instead, is on restricting the sharing of information on detainees between local enforcement agencies and immigration authorities. In contrast, safe-zone policies are school district policies aimed at protecting students through a variety of measures aimed at ensuring their academic progression and sense of safety while on campus.

In sum, the results in Table 2 are suggestive of the very significant impact that safe-zone policies can have on children's academic performance, even if they cannot fully reverse the damaging impact of interior immigration enforcement.

6. Identification checks

6.1 Endogenous policy adoption

A central concern in assessing the effectiveness of safe-zone policies in lifting children's academic performance refers to school districts' nonrandom adoption of these policies. While no policy is ever adopted randomly, econometrically, we are concerned about biases resulting from safe-zone endogeneity with regard to the outcomes object of study. For instance, we might expect school districts with low-performance rates in immigrant communities to be more willing to implement these policies. While the BTL survey does not enable us to look at children's performance prior to the adoption of safe-zone policies by their school districts, we gather data for the 2012–19 period from all public school districts in California. We focus on California for various reasons. First, half of our total sample (i.e. 50 children) lived in California. Out of these 50 children, 35 lived in safe-zone districts and 15 in districts without a safe-zone policy. Second, the state has the largest

concentration of safe-zone policies in the country, enabling us to gauge potential preexisting differences in schooling outcomes. Finally, California hosts the largest population of K-12 Hispanic and immigrant students in the nation. We pay attention to outcomes that capture student and school performance, including expenditures per pupil, Hispanic students' dropout rates, and the proportion of Hispanic students meeting or exceeding the math and English-language arts standards set in the California Assessment of Student Performance and Progress (CAASPP) system.

We conduct an event study using the school district level data and information on the population composition of various school districts gathered from the American Community Survey (ACS) for the 2012–19 academic years.[17] The main purpose of this exercise is to identify differences in educational outcomes between school districts without a safe-zone policy and those with one prior to the adoption of the policy. In this manner, we can assess if the estimated policy impacts are likely to have been driven by pre-existing differences in educational outcomes of youth in the two sets of school districts due to any confounders. In addition, the event study enables us to assess safe-zone policies' dynamics and whether their impacts appear to stall or grow over time. Our model is given by:

$$Y_{dt} = \alpha + \sum_{t=-4}^{-1} \tau_t \cdot 1(SZ = 1)_{dt} + \sum_{t=1}^{3} \rho_t \cdot 1(SZ = 1)_{dt} + X'_{dt}\, \gamma + \theta_d + \theta_t$$
$$+ \, \varepsilon_{dt},$$

$$(2)$$

where Y_{dt} is an educational outcome for school district d in academic year t, and $1(SZ = 1)_{dt}$ is an indicator function representing the tth academic year before or after a school district adopts a safe-zone policy. The coefficients τ_t capture anticipation effects and pre-existing differences, while those in the vector ρ_t measure the dynamics of safe-zone policy impacts. In vector X, we control for student and overall population characteristics at the school district level. Among the student traits, we include the shares of Hispanic and Black students and those eligible for free or reduced-price meals. We also incorporate controls capturing the composition of the district's population, such as its size, median age, median income, the share of women, Hispanics, foreign-born, individuals without a high school degree, individuals who speak a language other than English at home, and individuals aged 5–17 years. Finally, Equation (2) includes school district (θ_d) and academic year (θ_t) fixed effects to account for unobserved time-invariant characteristics and year-specific heterogeneity. Recent work by Sun and Abraham (2021) has shown how the results from event studies obtained with standard two-way fixed-effects regressions that exploit variation in treatment timing can break down in the presence of heterogeneous treatment effects. Therefore, we estimate the event studies using Callaway and Sant'Anna (2021) estimator, which is robust to heterogeneous and dynamic treatment effects.

Figures 1–4 present the event-study estimates along with their 95% confidence intervals for the four educational outcomes noted above—namely, expenditures per pupil, Hispanic students' dropout rates, and the shares of Hispanic students meeting or exceeding the math and English-language arts standards in the CAASPP system. All pre-treatment coefficients for the four outcomes are indistinguishable from zero, supporting the parallel trends assumption and suggesting that school districts do not appear to have adopted safe-zone policies in response
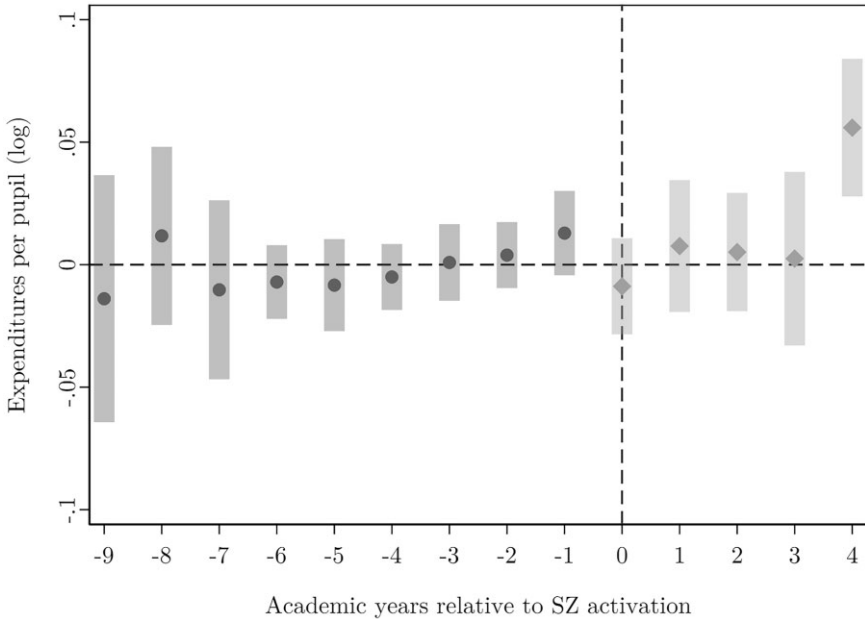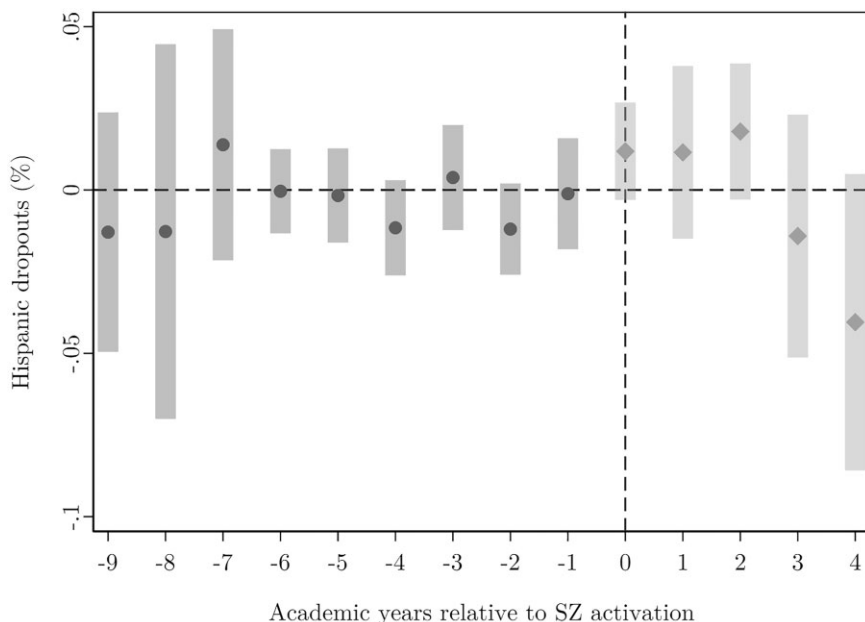
Figure 1. Expenditures per pupil (log) before and after implementation of safe-zone policy. The figure presents the coefficients and 95% confidence intervals obtained from the estimation of Equation (2) with the log expenditures per pupil as the dependent variable. The point estimates indicate the difference in percentage terms in expenditures per pupil between school districts that adopted a safe-zone policy and those that did not, before and after the policy implementation. Period $t = 0$ indicates the event-time when the policy was adopted in each school district.

to pre-existing academic achievement gaps. In addition, we observe a break in the trend for the four outcomes 3–4 years after the adoption of a safe-zone policy. Expenditures per pupil and the shares of Hispanic students meeting or exceeding math and English language arts (ELA) standards increase, while the Hispanic dropout rate decreases.

6.2 Student self-selection into safe-zone school districts

Another concern in the identification of a causal policy impact is the possibility that students self-select into school districts with active safe-zone policies, potentially attracted by a safer and more inclusive environment for immigrant students, their families, and other minorities. Using 2012–19 ACS data, along with the information on safe-zone policies adopted in the state of California, we examine this possibility, exploring if the adoption of a safe-zone policy changed the demographic composition of the state's school districts with regard to groups more likely to respond to these policies. We look at the composition of the student population in the school district and at changes in the composition of the overall district population, which should change if entire families are moving to safe-zone school districts. When focusing on districts' population traits, we examine the
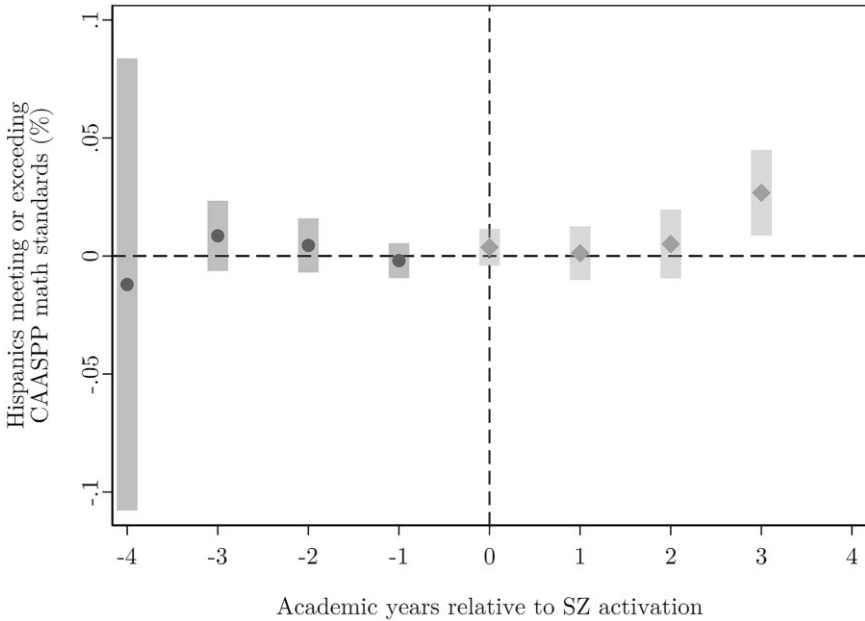
Figure 2. Hispanics' dropout rate before and after implementation of safe-zone policy. The figure presents the coefficients and 95% confidence intervals obtained from the estimation of Equation (2) with the dropout rate among Hispanic students as the dependent variable. The point estimates indicate the percentage point difference in the Hispanic dropout rate between school districts that adopted a safe-zone policy and those that did not, before and after the policy implementation. Period $t = 0$ indicates the event-time when the policy was adopted in each school district.

change in the share of Hispanics, foreign-born individuals in the 5–17 years age group. When looking at the student population within the school district, we focus on changes in the proportion of Hispanic students, the share of those classified as English-language learners, and on overall growth rates in student enrollments.

Table 3 displays the results from this exercise. As shown therein, we find no evidence of safe-zone policies altering the demographic composition of California's school districts regardless of whether we focus on the overall districts' populations or solely their student populations. These results fail to support the notion that students and families are self-selecting into safe-zone school districts. Rather, they support the interpretation of the safe-zone policy estimates as causal.

7. Heterogeneous effects: Age at first exposure and duration of policy exposure

It is only logical to wonder if the found policy impacts vary with children's age at first exposure or the duration of exposure—two highly relevant aspects from a policy
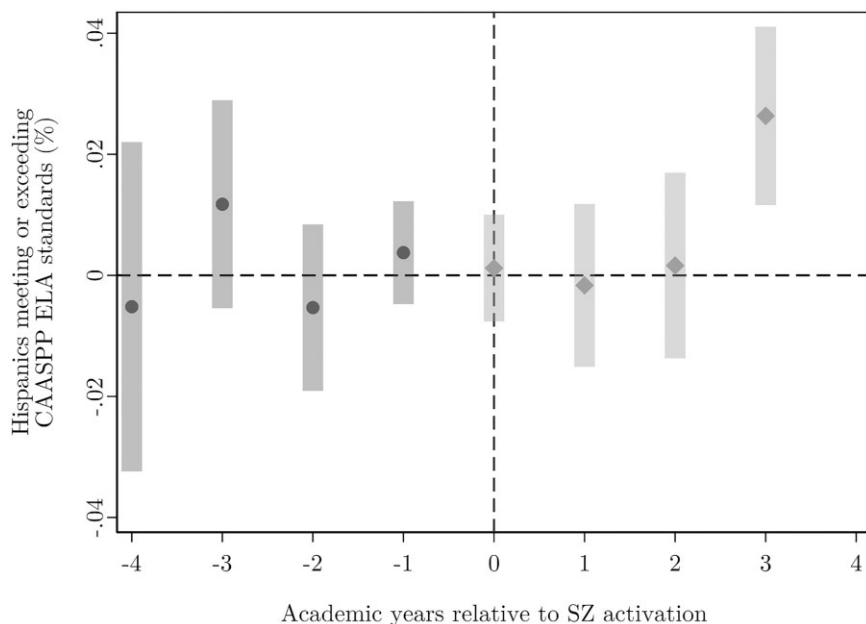
Figure 3. Share of Hispanic students meeting or exceeding CAASPP math standards before and after the implementation of safe-zone policy. The figure presents the coefficients and 95% confidence intervals obtained from the estimation of Equation (2) with the share of Hispanic students meeting or exceeding the CAASPP math standards as the dependent variable. The point estimates indicate the percentage point difference in the share of Hispanic students meeting or exceeding the math standards between school districts that adopted a safe-zone policy and those that did not, before and after the policy implementation. Period $t = 0$ indicates the event-time when the policy was adopted in each school district.

implementation perspective. Exposure to a safe-zone policy at an early age might help build resilience at school, possibly lowering the propensity to repeat a grade or to have problems with teachers and peers. Similarly, continued exposure over several years to a safe-zone policy might make a significant difference in building a rapport with educators and other children at the school. In what follows, we assess these heterogeneous impacts.

7.1 Assessing the relevance of age at first exposure to a safe-zone policy

To gain a better understanding of the implications of exposure to a safe-zone policy at different developmental stages, we start by distinguishing between children exposed to the policy in middle/high school (ages 12–16 years) versus elementary school (ages 10 and 11 years) when compared to those who are never exposed (reference category).

Panel A in Table 4 displays the results from this exercise. Exposure to a safe-zone policy at a young age (10 or 11 years) lowers the propensity to ever repeat a grade by a factor

Figure 4. Share of Hispanic students meeting or exceeding CAASPP ELA standards. The figure presents the coefficients and 95% confidence intervals obtained from the estimation of Equation (2) with the share of Hispanic students meeting or exceeding the CAASPP ELA standards as the dependent variable. The point estimates indicate the percentage point difference in the share of Hispanic students meeting or exceeding the ELA standards between school districts that adopted a safe-zone policy and those that did not, before and after the policy implementation. Period $t = 0$ indicates the event-time when the policy was adopted in each school district.

close to 2 (1.6 times). In contrast, exposure at the age of 12 through 16 years lowers that propensity by a factor closer to 1 (1.2 times). A similar picture emerges with other outcomes. For example, exposure before the age of 12 years reduces the propensity to report having problems with teachers and peers by a factor of 1.2 and 1.4, respectively. These impacts are similar to when exposure to a safe-zone policy occurs at 12 years of age or older, suggesting that the policy appears similarly effective in preventing grade repetition or problems with teachers and peers regardless of children's age at first exposure. Nevertheless, there is some evidence of safe zones being particularly beneficial among children exposed to the policy at an older age with regard to their propensity to earn mostly A's at school, albeit the impact is only marginally different from zero at the 10 per cent level.

Altogether, the results suggest that safe-zone policies are effective regardless of the child's age at first exposure, highlighting their desirability at both elementary and middle/ high school levels.

Table 3. Assessing selectivity concerns regarding safe-zone policies: Changes in school district population and student population after implementation of safe-zone policies.

	School district population			School district student population		
Outcome:	Change in Hispanic share	Change in foreign-born share	Change in pop. 5–17 share	Change in Hispanic share	Change in ELLs share	Enrollment growth rate
	(1)	(2)	(3)	(4)	(5)	(6)
Safe-zone policy	0.001	0.000	0.001	−0.001	−0.000	0.001
	(0.002)	(0.001)	(0.001)	(0.002)	(0.002)	(0.007)
Immigration enforcement	0.002	0.001	0.002*	−0.001	−0.001	−0.002
	(0.002)	(0.001)	(0.001)	(0.005)	(0.003)	(0.009)
District population traits						
Total district population (log)	−0.001	0.004	−0.001	−0.020*	−0.023*	0.020
	(0.010)	(0.006)	(0.006)	(0.011)	(0.013)	(0.058)
Population aged 5–17 years (%)	0.046	0.011	0.717***	−0.027	0.048	0.114
	(0.056)	(0.029)	(0.032)	(0.054)	(0.072)	(0.239)
Median age	0.000	0.000	0.000*	−0.000	−0.000	0.000
	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.002)
Female population (%)	−0.031	−0.003	−0.063**	0.031	−0.042	0.079
	(0.050)	(0.027)	(0.025)	(0.049)	(0.059)	(0.261)
Hispanic population (%)	0.661***	−0.017	0.016	−0.044	−0.092**	0.396**
	(0.035)	(0.023)	(0.022)	(0.038)	(0.043)	(0.186)
Foreign-born population (%)	0.005	0.705***	−0.047	0.042	0.094	0.072
	(0.069)	(0.035)	(0.035)	(0.056)	(0.071)	(0.215)

Continued

Table 3. Continued

Outcome:	School district population			School district student population		
	Change in Hispanic share	Change in foreign-born share	Change in pop. 5–17 share	Change in Hispanic share	Change in ELLs share	Enrollment growth rate
	(1)	(2)	(3)	(4)	(5)	(6)
Speak other language at home (%)	0.017	0.015	0.017	−0.013	−0.031	−0.218
	(0.046)	(0.026)	(0.025)	(0.044)	(0.048)	(0.186)
Population with no high school (%)	0.039	−0.004	−0.026	−0.000	0.012	0.002
	(0.041)	(0.023)	(0.025)	(0.045)	(0.071)	(0.207)
Median income (log)	−0.015	−0.012	0.008	−0.004	−0.017	0.044
	(0.010)	(0.008)	(0.009)	(0.012)	(0.012)	(0.056)
Year FE	Y	Y	Y	Y	Y	Y
School district FE	Y	Y	Y	Y	Y	Y
School district time trends	Y	Y	Y	Y	Y	Y
Observations	8,131	8,131	8,131	8,123	7,261	8,122
R^2	0.475	0.485	0.486	0.227	0.222	0.234

All models include a constant term. In Columns (1) and (4), the dependent variable is the annual change in the proportion of Hispanics in the overall and student populations, respectively. In Column (2), it is the annual change in the share of the foreign-born. In Column (3), it is the annual change in the share of individuals in the 5–17 years age group. In Column (5), it is the annual change in the proportion of English-language learners in the district. In Column (6), it is student enrollment growth rates. Standard errors clustered at school district level in parentheses.
$^{***}p < 0.01$, $^{**}p < 0.05$, $^{*}p < 0.1$.

Table 4. Safe-zone policies and children's schooling outcomes by age and length of policy exposure

Outcome:	Ever repeated a grade	Mostly A's in school	Problems with teachers	Problems with students
Panel A: By age at first exposure to the safe-zone policy				
Safe-zone exposure before the age of 12 years	−0.141*	−0.037	−0.309***	−0.393***
	(0.077)	(0.165)	(0.100)	(0.109)
Safe-zone exposure at the age of 12+ years	−0.104**	0.308*	−0.331**	−0.329***
	(0.040)	(0.155)	(0.136)	(0.056)
Individual-level controls	Y	Y	Y	Y
Survey month FE	Y	Y	Y	Y
State FE	Y	Y	Y	Y
Dependent variable means	0.09	0.19	0.26	0.28
Observations	99	99	94	96
R^2	0.403	0.471	0.332	0.427
Panel B: By length of exposure to the safe-zone policy				
Years exposed to safe-zone policy	−0.044*	0.020	−0.079*	−0.094***
	(0.021)	(0.030)	(0.044)	(0.026)
Individual-level controls	Y	Y	Y	Y
Survey month FE	Y	Y	Y	Y
State FE	Y	Y	Y	Y
Dependent variable means	0.09	0.19	0.26	0.28
Observations	99	99	94	96
R^2	0.406	0.424	0.313	0.409

All models include a constant term and the demographic and caregiver controls included in Table 2. Standard errors clustered at the state level in parentheses.
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

7.2 Does the duration of exposure to a safe-zone policy significantly matter?

To place the prior results in context and gain a better understanding of the extent to which duration of exposure—versus age at first exposure—might matter in shaping children's educational performance, we create a variable indicative of the years of exposure to such policy and include it in the estimation of Equation (1) in place of the safe-zone policy indicator. Panel B in Table 4 displays the results from this exercise. An additional year of exposure to a safe zone lowers the likelihood of reporting ever repeating a grade by 49 per cent, the propensity to report problems with teachers by 30 per cent, and the tendency to indicate having trouble with peers by 34 per cent.[18]

Overall, the results underscore non-negligible gains to children's schooling performance that are worth considering by policymakers and educators to incentivize their adoption to partially offset the damaging impacts of intensified immigration enforcement.

8. Mechanisms and critical policy components

8.1 How do safe-zone policies affect academic performance?

Thus far, the empirical evidence shows the important role that safe-zone policies play among American youth in mixed-status households threatened by deportation. Encouraging signs of the effectiveness of these policies at both elementary and middle/high school indicate that their implementation prevents grade repetition and problems with teachers and peers at school. In this section, we explore the channels through which these policies might be operating and critical policy components in achieving such changes. To that end, Panel A in Table 5 assesses the impact that safe-zone policies have on various aspects known to be critical in ensuring good academic outcomes and preventing problems with teachers and other students at school. Specifically, we pay attention to the student's reported ability to focus, motivation, academic achievement expectations, parental involvement, and the ability to relate to others, regardless of race and ethnicity.[19] Along with the coefficients on safe-zone policy, Panel A also displays estimates for interior immigration enforcement as another policy potentially affecting those channels.

Overall, we find evidence of significant and positive impacts of safe-zone policies across all channels. Children attending school districts with a safe-zone policy are 17 per cent less likely to report having trouble focusing when they are at school, 65 per cent more likely to report working hard, and 31 per cent more likely to think they will complete college and beyond. Furthermore, safe-zone policies raise the propensity for caregivers to attend parent–teacher meetings by 34 per cent and strengthen the child's reported ability to make friends across races and ethnic groups by 5 per cent.

These remarkable positive impacts are encouraging given the negative effect of intensified immigration enforcement on some of those outcomes. For instance, the adoption of one additional interior immigration enforcement initiative at the local level raises children's propensity to report having trouble focusing by 69 per cent. It also curtails their caregivers' attendance to parent–teacher meetings by 68 per cent and reduces the

Table 5. Potential mechanisms and policy components

Outcome:	Problems focusing	Works hard at school	Thinks will finish college and beyond	Caregiver attends parent–teacher conferences	Makes friends across racial and ethnic groups
Panel A: Assessing potential mechanisms at play					
School district safe-zone policy	−0.130*	0.235**	0.232**	0.282***	0.051***
	(0.072)	(0.084)	(0.103)	(0.036)	(0.012)
Immigration enforcement	0.535***	−0.208	−0.284	−0.558***	−0.122*
	(0.171)	(0.314)	(0.205)	(0.117)	(0.059)
Individual-level controls	Y	Y	Y	Y	Y
Survey month FE	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y
Dependent variable means	0.77	0.36	0.76	0.82	0.94
Observations	99	97	95	99	92
R^2	0.286	0.312	0.503	0.474	0.436
Panel B: Assessing the role of key safe-zone policy components					
ICE barred from school campuses	−0.215***	0.143	0.187*	0.305***	0.149***
	(0.063)	(0.083)	(0.089)	(0.041)	(0.019)
Counseling and info. on immigration issues	−0.059	0.270***	0.095	0.341***	−0.014
	(0.101)	(0.074)	(0.078)	(0.018)	(0.099)
Individual-level controls	Y	Y	Y	Y	Y
Survey month FE	Y	Y	Y	Y	Y
State FE	Y	Y	Y	Y	Y
Dependent variable means	0.77	0.36	0.76	0.82	0.94
Observations	97	95	94	97	90

Models include a constant term and the demographic and caregiver controls included in Table 2. Standard errors clustered at the state level in parentheses.
***$p < 0.01$, **$p < 0.05$, *$p < 0.1$.

children's propensity to relate to other students from different races or ethnicities by 13 per cent.

These estimated effects point to the relevance of safe-zone policies in facilitating children's ability to concentrate and pay attention, their motivation to work hard with a college degree in mind, their parental involvement with the school and their education, and their ability to relate to others, regardless of race and ethnicity—all channels crucial in ensuring children's successful academic performance.

8.2 Assessing critical policy components

Safe-zone policies come in all shapes and forms. From a policy perspective, it is particularly relevant to understand which aspects of the adopted policies prove most helpful in assisting youth to succeed amid intensified interior immigration enforcement. To address that question, we pay attention to the two most frequent policy components in our sample: (1) the lack of collaboration with ICE, barring the agency from school campuses and (2) providing counseling to students, mostly on immigration issues. The first trait is the single most salient component of safe-zone policies. The second trait is also common and, in addition, represents a more proactive and holistic approach to aiding children that goes beyond assisting them with academics. We create indicators for both policy components and use them in place of the safe-zone policy dummy in Equation (1).

Panel B in Table 5 displays the results from this exercise. As we show therein, barring ICE from school campuses seems particularly effective at increasing students' ability to focus, boosting their academic expectations, involving their parents in their schooling, and encouraging them to make friends across race and ethnic groups. Specifically, the lack of collaboration with ICE reduces these children's propensity to report attention problems by 28 per cent, boosts their college graduation expectations by 25 per cent, promotes their caregivers' attendance to parent–teacher meetings by 37 per cent, and boosts their likelihood of making friends of other races and ethnicities by 16 per cent. Providing students with counseling on immigration-related issues and concerns also seems extremely valuable, raising the children's propensity to work hard at school by 75 per cent and their caregivers' engagement by 42 per cent.

In sum, both the lack of collaboration with ICE and the schools' provision of student counseling on immigration-related issues and concerns prove particularly beneficial in helping children's focus and drive, improving their expectations about their academic achievements, enabling them to make friends, and involving their caregivers in their education. These are crucial channels in preventing classroom problems with teachers and peers, ensuring good grades, and averting grade repetition.

9. Summary and conclusions

For the past 20 years, the USA has witnessed an unprecedented increase in interior immigration enforcement, leading to dramatic growth in deportations and family separations that have been documented to interfere with children's well-being and learning.

The main goal of this study is to learn about the effectiveness of policies that may help to offset these detrimental effects. We focus on the potential protective effects of safe-zone policies, which were adopted by school districts with the aim of improving the schooling outcomes of children of disadvantaged backgrounds, such as those living in mixed-status households. To assess the efficacy of safe-zone policies, we first rely on detailed survey data collected from a national sample of 100 US-born children who reside in mixed-status households that have either endured or are at risk of experiencing parental deportation. To learn about the effectiveness of safe-zone policies on these children's academic performance, we gather and merge data on the adoption of safe-zone policies by their school districts, as well as data on the children's exposure to interior immigration policies based on the locality where they reside. Then, we examine the impact of safe zones on the schooling performance of youth in these socially vulnerable families.

We find that safe-zone policies play a significant role in improving the schooling performance of these children, even if they cannot fully offset the harmful impact of interior immigration enforcement. Using data from the ACS and California Department of Education for the 2012–19 academic years, we evaluate the potentially endogenous nature of the policy adoption and the self-selection of youth into specific school districts, failing to find evidence of such patterns. In addition, we explore the relevance of the timing of policy adoption and document how policy exposure appears to be highly beneficial regardless of whether it takes place during elementary or middle/high school, with the positive impacts rising with each year of exposure.

Next, we examine the channels through which the policy might be assisting children, particularly children in mixed-status immigrant households. We provide evidence of safe-zone policies positively affecting these children's ability to focus, their motivation to work hard, their academic expectations, their caregivers' involvement with their education, and their friendships across races and ethnicities. Furthermore, we find evidence of the effectiveness of two specific policy components in bolstering the above-mentioned channels that should be kept in mind for future policy implementation purposes—namely, keeping ICE away from school campuses and providing students with much-needed counseling.

In sum, safe-zone policies appear to be highly beneficial in light of the intensification of interior immigration enforcement during the past two decades throughout the USA. Our analysis is constrained by its cross-sectional nature, limited sample size, and generalizability. As with any survey data, there is potential for self-selection bias. The BTL study did not collect information on eligible families who did not consent to participate in the study. Despite these limitations, the findings add to our limited knowledge regarding effective policies to mitigate the detrimental effects of immigration enforcement on children of immigrant families. This analysis also underscores the importance of reaching out to, and collect data from, hard-to-reach populations, such as US-born children with unauthorized immigrant parents, to understand the effects of various policies on their health, well-being, and educational performance. Perhaps most importantly, the results warrant further data collection and analyses, as well as school districts' further consideration of these policies given their low cost, positive, and cumulative impacts on children's learning and schooling outcomes.

ACKNOWLEDGMENTS

Funding

Supplementary data

Supplementary data is available at *Migration Studies* online.

Notes

1. Although the focus of our study is the impact of immigration policies on children, extant literature documents similar negative mental health effects among adults. See, for example, Cavazos-Rehg, Zayas and Spitznagel (2007); Bojorquez et al. (2015); Lopez et al. (2017); Wang and Kaushal (2019).
2. Plyler v. Doe, 457 U.S. 202 (1982). See: https://www.loc.gov/item/usrep457202/.
3. See: https://www.cnn.com/2015/08/16/politics/donald-trump-immigration-plans/index.html.
4. Los Angeles Unified School District. 'LA Unified Campuses as Safe Zones and Resource Centers for Students and Families Threatened by Immigration Enforcement (Res-032-15/16).'
5. See Executive Order 13768 of 25 January 2017, 'Enhancing Public Safety in the Interior of the United States'. https://www.federalregister.gov/d/2017-02102.
6. See: https://www.cde.ca.gov/eo/in/casafehavendistrictslist.asp. Last accessed: January 2022.
7. San Francisco Unified School District. 'Student and Family Handbook: 3.6.6 Rights of Undocumented Students'. https://www.sfusd.edu/student-and-family-handbook. Last accessed: January 2022.
8. See: https://www.cdc.gov/healthyyouth/data/yrbs/questionnaires.htm. Last accessed: September 2020.
9. See: https://www.ers.usda.gov/data-products/food-security-in-the-united-states/. Last accessed: September 2020.
10. See: https://www.ice.gov/287g. Last accessed: August 2020.

11. See: https://www.dhs.gov/sites/default/files/publications/17_0220_S1_Enforcement-of-the-Immigration-Laws-to-Serve-the-National-Interest.pdf. Last accessed: August 2020.

12. See: https://www.ncsl.org/Portals/1/Documents/immig/ImmigPolicy_2018_v04.pdf. Last accessed: August 2020.

13. This approach has been recently used in the immigration enforcement literature to assess the impact of stricter enforcement efforts at the county level on a variety of individual outcomes, including family structure, marriage rates, and infant health (e.g. Amuedo-Dorantes and Arenas-Arroyo 2019; Amuedo-Dorantes, Arenas-Arroyo and Wang, 2020; Amuedo-Dorantes, Churchill and Song 2022).

14. Ideally, we would like to have information on whether grade repetition occurred during the time span safe-zone policies were in place. However, given the seldom occurrence of that event and our small sample size, this broadly defined outcome is also informative.

15. We also experiment with estimating our models without state or month fixed effects and findings remain consistent.

16. Literature in education and psychology has found in different contexts that, on average, girls outperform boys in school, particularly in language courses (e.g. Pomerantz, Altermatt and Saxon 2002; Duckworth and Seligman 2006; Reardon et al. 2019). In addition, boys are twice as likely as girls to be held back (National Center for Education Statistics 2006).

17. The sample size for this exercise fluctuates between 4,000 and 9,000 observations depending on the academic outcome being examined.

18. We also experiment estimating this model using a categorical measure of the duration of exposure to the safe-zone policy. Results, available from the authors, are consistent with the ones using the continuous measure.

19. Table B1 in Supplemental Appendix B reports descriptive statistics for these variables.

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