

Exploring social and environmental predictors of school engagement among first- and second-generation Latino youth: A multidimensional approach

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Abstract

Using a multidimensional, integrative approach this study examined the influence of social position factors (nativity, economic hardship, and language) and environmental contexts (community trauma, geographic location, and discrimination) on three domains of school engagement (cognitive, behavioral, and relational) among a community sample of first- and second-generation Latino adolescents. Findings from this study reveal that both social position and environmental contexts significantly and differentially predicted each of the three domains of school engagement. Participants ($n = 306$) included students from 11 high schools in two US cities. Fifty-three percent were first-generation immigrants and 80% were born, or had a parent from, Mexico or Central America. Results indicated that all three social position factors (nativity, economic hardship, and language) and two of the three environmental contexts (community trauma exposure and discrimination) significantly and differentially predicted each of the three domains of school engagement. Findings emphasize the direct effects of student's social positionality and environmental contexts on their engagement in school.

KEYWORDS

discrimination, Latino youth, school engagement, trauma exposure

Practitioner Points

- Environmental factors, such as community trauma exposure and discrimination predicted lower behavioral and relational engagement in school.
- Greater economic hardship also predicted lower behavioral and relational engagement in school.
- Being a first-generation immigrant and having limited English proficiency predicted greater cognitive engagement but lower relational engagement in school.

1 | INTRODUCTION

Educational attainment is linked to a host of positive outcomes including better health (Zajacova & Lawrence, 2018), mental health (Esch et al., 2014), employment, and economic mobility (Rumberger, 2010). Despite the health and economic benefits of education (Espinosa et al., 2018), racially and ethnically minoritized youth have lower levels of high school completion (de Brey et al., 2019; National Center for Education Statistics [NCES], 2021), academic achievement, and postsecondary enrollment (de Brey et al., 2019), which contribute to health, mental health, and economic disparities across the life cycle (de Brey et al., 2019; Esch et al., 2014; Rumberger, 2010; Zajacova & Lawrence, 2018). School engagement is a malleable construct that represents a pathway by which to address the educational disparities in attainment and achievement experienced by minoritized youth (Fredricks et al., 2004) and the normative academic achievement decline that occurs over the course of adolescence (Fredricks et al., 2019; Lawson et al., 2022; Lawson & Lawson, 2013; Wang & Eccles, 2021a, 2021b; Wang & Fredricks, 2014). Engagement in school is associated with increased school completion (Fall & Roberts, 2012; Stearns et al., 2007), higher grades (Li & Lerner, 2011; Wang & Peck, 2013), and prosocial behaviors (Zaff et al., 2017). School engagement is defined as the extent to which students are committed to or involved in school and encompasses everyday interactions between students and their school contexts (e.g., interactions with staff, students, and coursework) (Fredricks et al., 2004; Suárez-Orozco, Pimentel, et al., 2009; Suárez-Orozco, Rhodes, et al., 2009). As the fastest-growing segment of the US population, Latino youth represent 25% of the national student body and more than 50% of the student body in Texas and core cities on the East Coast, where this study was conducted (Lopez et al., 2018; Rhode Island Kids Count, 2019; Texas Education Agency, 2021). Despite that school districts across the country educate large and growing numbers of Latino youth, little attention is given to the specific school-related strengths and needs of these young people (Schmidt et al., 2015). While disparities in academic outcomes have improved over the past three decades among minoritized youth, the Latino/non-Latino White academic achievement gap has not (Alfaro et al., 2009; de Brey et al., 2019). Notwithstanding the heterogeneity and within-group differences among Latino youth, including differences as related to intersecting identities such as nationality, language, documentation status, gender, and sexual orientation, as a group, Latino youth continue to experience lower levels of school completion, academic achievement, and postsecondary enrollment compared to non-Latino White and other racially and ethnically minoritized groups (e.g., Black and Asian youth) (Gándara & Contreras, 2009; Lopez et al., 2018).

Previous studies on school engagement among Latino youth have laid the groundwork for uncovering factors that promote academic achievement and school engagement. To date, research on school engagement among Latino youth has focused heavily on the predictive roles of home environment and individual-level factors such as parental support and adaptive culture (Constante et al., 2019; Garcia-Reid et al., 2005; Quiñones & Kiyama, 2014).

However, the overarching factors of social position (e.g., nativity, language, socioeconomic status) and environmental contexts (e.g., exposure to community violence, discrimination, and location) that are uniquely experienced by Latino youth have not received the same attention by scholars. The current study examines social and environmental predictors of school engagement among first- and second-generation Latino youth in two major US metropolitan areas. Drawing from Fredricks et al.'s (2004) three-dimensional model of school engagement and García Coll et al.'s (1996) integrative model for the study of developmental competencies in minoritized children, the current study examines specific social and environmental factors and their relation to three domains of school engagement among first- and second-generation Latino youth.

1.1 | School engagement as a multidimensional construct

The concept of school engagement encompasses three interrelated but distinct domains: cognitive engagement, behavioral engagement, and emotional or relational engagement (Fredricks et al., 2004; Suárez-Orozco et al., 2008a, 2008b). *Cognitive engagement* refers to an individual's willingness and interest in learning and mastering skills taught in school (Fredricks et al., 2004). Cognitive engagement is typically considered to be a precursor to behavioral engagement, as it provides the internal motivation to participate in school tasks (Fredricks et al., 2004; Pietarinen et al., 2014). *Behavioral engagement* refers to participation in school-related tasks such as homework completion and attendance (Fredricks et al., 2004; Nguyen et al., 2018). Behavioral engagement is the most often cited metric when reporting on educational outcomes (Nguyen et al., 2018). *Emotional or relational engagement* refers to the type and strength of the relationships that students have with teachers, peers, and the school overall (Fredricks et al., 2004). These relationships subsequently impact how students feel when they are in school and their willingness and interest in completing school-related tasks (Fredricks et al., 2004). While interrelated, these domains represent unique constructs.

1.2 | Integrative model for the study of developmental competencies in minoritized children

Over the past several decades, education scholars, school districts, policymakers, and communities have acknowledged the educational disparities experienced by Latino youth (Lopez et al., 2018). Many studies have focused on adaptive culture and parental involvement to explain these disparities (Constante et al., 2019; Garcia-Reid et al., 2005; Quiñones & Kiyama, 2014). While the importance of social and environmental contexts may be acknowledged, their effects have rarely been examined explicitly within this population (Herda, 2021). García Coll et al. (1996) assert that *social position factors* are intersectional and preeminent to all other factors that influence child development. Society uses attributes of race, ethnicity, gender, and socioeconomic status to create and reinforce dominant social hierarchy, having long-reaching impacts on all developmental domains among minoritized children and adolescents (García Coll et al., 1996). These experiences of social stratification and hierarchy are further compounded for Latino youth in immigrant families, who are uniquely affected by racialized and anti-immigrant policies and experiences of oppression and discrimination based on the racialized perception of theirs or their family's immigration status (Ayón et al., 2017; Szkupinski Quiroga et al., 2014). Indeed, studies have found that Latino youth, regardless of immigration status, report high levels of immigration enforcement fear and immigration-related discrimination, impacting their mental health and well-being (Brabeck et al., 2021; Cardoso et al., 2021; Schildkraut et al., 2019). The sociopolitical climate surrounding immigration and immigration enforcement creates an additional layer of social stratification that uniquely affects first- and second-generation Latino youth (Potochnick et al., 2012; Schildkraut et al., 2019).

One's social position does not directly contribute to their developmental outcomes, rather experiences with racism, discrimination, and oppression intensify or diminish the effects of social position (García Coll et al., 1996).

The intersection of social position, discrimination, and oppression creates racialized societal segregation and stratification, thereby placing youth into different environmental contexts, such as neighborhoods and schools (García Coll et al., 1996; Woo et al., 2020). These environmental contexts create promotive or inhibitive conditions that influence the trajectory of youths' development (García Coll et al., 1996; Fredricks et al., 2019) through available opportunities (Astor et al., 2021; Gray et al., 2018).

1.2.1 | Promoting and inhibiting environments

Some of the clearest evidence of social stratification is found at the neighborhood or community level (Woo et al., 2020). Racial residential segregation has been widely documented and while same-ethnicity communities can be protective, particularly for immigrants (Xie & Baumer, 2018) on some indicators, the systemic nature of racism is such that Latino immigrant families disproportionately live in neighborhoods and attend schools with high rates of violence and poverty (Ludwig-Dehm & Iceland, 2017). Exposure to neighborhood violence and community trauma have been linked to adverse educational and health outcomes (Elsaesser et al., 2020; Ginzburg et al., 2020). However, prior research has not focused on the experiences of immigrant families from Latin America specifically. Immigrant families from Latin America exhibit multiple, unique protective factors (Cardoso & Thompson, 2010; Perreira et al., 2010) but are also at an increased risk of having experienced trauma before and/or during the migration journey (MacLean et al., 2020; Mercado et al., 2021; Perreira & Ornelas, 2013) and discrimination following their arrival in the United States (Almeida et al., 2016; Brabeck et al., 2021; Perreira & Ornelas, 2013; Sangalang et al., 2019). These unique contextual factors and current sociopolitical realities (i.e., racialized immigration enforcement policies) underscore the importance of examining developmental outcomes among these diverse and growing populations (Barajas-Gonzalez et al., 2021). The current study, depicted in Figure 1, examines how indicators of social position (nativity, dominant language, and economic hardship) and promoting or inhibiting environmental contexts (perceived discrimination, community trauma exposure, and location) predict three distinct domains of school engagement among a sample of first- and second-generation Latino adolescents, while controlling for the effects of age and gender.

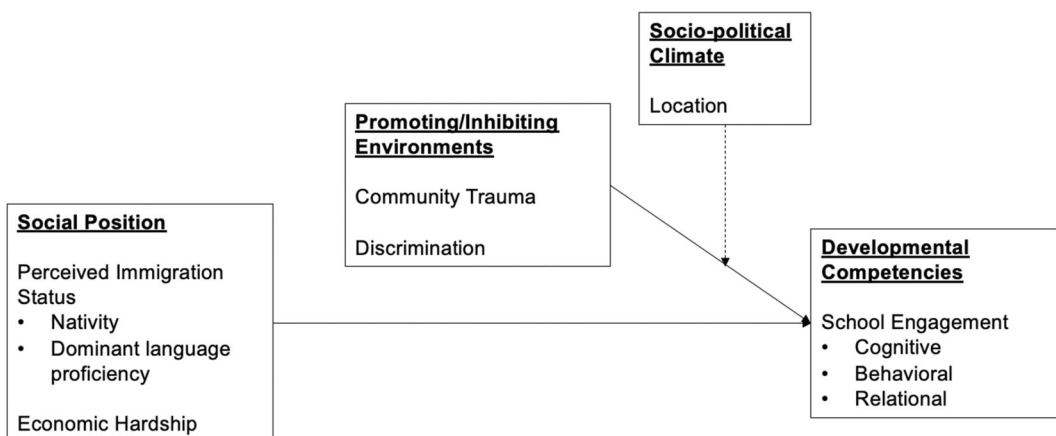


FIGURE 1 Conceptual model depicting the social and environmental predictors of school engagement. Conceptual model depicting the association of social position factors (perceived immigration status and economic hardship), environmental factors (community trauma and discrimination), and interaction effects (location × environmental factors) on three domains of school engagement.

2 | METHOD

2.1 | Procedures

Surveys were administered during the 2018–2019 school year to 306 first- and second-generation Latino students in 11 high schools in Harris County, Texas, and in Providence, Rhode Island, and surrounding cities. In both regions, immigrants comprise over a quarter of the total population, however, these locations differ drastically in their policies and approach to immigration enforcement activities. Harris County has state policies that encourage local law enforcement to stop and detain individuals who they believe may be immigrants and to engage immigration and customs enforcement in law enforcement activities (Texas Office of the Governor, 2022; Texas Senate Bill 4, 2017). In contrast, Rhode Island has explicit policies, including an executive order, prohibiting law enforcement agencies from engaging in federal immigration enforcement (Rhode Island Office of the Governor, 2014). High schools in these two areas were selected based upon: (1) high concentration of Latino students and (2) established relationships with the principal investigators. Students were eligible to participate if they or their parents had migrated from a Spanish-speaking country, excluding Spain and Puerto Rico. Researchers read the questions in either Spanish or English to groups of five to six students. Students responded via iPads. The assessment took an average of 45–60 min to complete. All protocols and procedures were approved by participating school districts and the principal investigator's institutional review boards.

2.2 | Sample

Youth who participated in this study were between the ages of 13 and 25 years old. The sample statistics in Table 1 indicate that approximately half of the surveys ($n = 152$) were completed by youth residing in Harris County, Texas. Just over half (57.8%) of the participants identified as female ($n = 177$) and 53.4% were first-generation immigrants ($n = 163$). Of participants who identified as first-generation immigrants, 36.1% were from Central America (i.e., Guatemala, El Salvador, Honduras), 7.9% were from the Caribbean (i.e., Dominican Republic, Cuba), 6.2% were from South America (i.e., Colombia, Venezuela), and 3.6% were from Mexico. Of the first-generation immigrant youth, 65.9% ($n = 108$) have lived in the United States for 3 years or less. More than half (59.5%) of the participants were proficient in English ($n = 182$). Among parents of the youth surveyed in both locations, 80% were born in El Salvador, Guatemala, Honduras, or Mexico.

2.3 | Measures

2.3.1 | Dependent variables

School engagement

The primary dependent variables are the school engagement subscales developed by the UCLA Longitudinal Immigrant Student Adaptation (LISA) study (Suárez-Orozco et al., 2008a, 2008b). The overall school engagement scale demonstrated acceptable reliability in the current sample ($\alpha = .79$). The LISA school engagement scale measured three dimensions of school engagement via 21 Likert-type scale items. The three school engagement subscales consisted of the following domains: cognitive engagement (i.e., enjoying learning and being engaged in the curriculum) ($\alpha = .50$); behavioral engagement (attending class, paying attention, and completing homework) ($\alpha = .59$); and relational engagement (having peers, teachers, and other supportive individuals with whom students can connect in school) ($\alpha = .79$).

TABLE 1 Participant characteristics by location.

Variables	Total, mean (SD) or n (%)	Harris county mean (SD) or n (%)	Rhode Island mean (SD) or n (%)	χ^2 / t test statistic (df)
School engagement				
Cognitive engagement (potential range: 0–6)	4.19 (1.23)	4.11 (1.20)	4.26 (1.25)	-1.04 (302)
Behavioral engagement (potential range: 0–14)	9.67 (2.59)	9.41 (2.68)	9.91 (2.48)	-1.62 (288)
Relational engagement (potential range: 0–22)	15.91 (4.19)	15.34 (4.21)	16.43 (4.12)	-2.19 (280)*
Social position factors				
Economic hardship (potential range: 0–24)	16.8 (5.07)	16.37 (5.16)	17.20 (4.12)	-1.35 (271)
Nativity (US-born)	163 (53.4%)	77 (50.7%)	86 (56.2%)	0.944 (1)
English proficiency (English proficient)	182 (59.5%)	95 (62.5%)	87 (56.5%)	9.09 (3)*
Environmental factors				
Discrimination (potential range: 0–24)	6.51 (5.39)	6.81 (5.72)	6.21 (5.03)	0.919 (266)
Trauma exposure (potential range: 0–20)	7.49 (4.02)	8.21 (4.48)	6.79 (3.4)	2.74 (231) ^a **
Other demographics				
Gender identity (female)	177 (58%)	83 (55%)	94 (61%)	3.17 (4)
Age	16.61 (1.77)	16.64 (2.03)	16.58 (1.48)	0.328 (276.05)

Abbreviation: SD, standard deviation.

^aLevene's test is significant, suggesting a violation of the assumption of equal variances.

* < .05; ** < .01.

2.3.2 | Independent variables: Social position factors

Economic hardship

Economic hardship was assessed using eight single-item questions that asked about the extent of difficulties youths experienced in their homes related to affording food, rent, utilities, clothing, transportation, and other necessities. This scale demonstrated good reliability in the current sample ($\alpha = .86$). Responses ranged from 0 = never to 3 = almost always. Items were derived from the Keepin' it REAL substance use prevention intervention (Marsiglia et al., 2005) and have been tested and reported on in the literature with Latino youth (Kulis et al., 2012; Marsiglia et al., 2014).

Nativity

Nativity was measured with a dichotomous (yes/no) question asking youths whether or not they were born in the United States.

Dominant language

Dominant language proficiency was measured by asking youths to rate their level of English-language proficiency on a scale of 1–4, with 4 representing “I speak English well” and 1 representing “I do not speak English.” For the purposes of the analyses, this variable was dichotomized (0/1) by combining categories 1 and 2 to indicate youths who endorsed not speaking English or not speaking English well and combining categories 3 and 4, youths who endorsed speaking English well or somewhat well.

2.3.3 | Environmental factors

Discrimination

Discrimination was measured using the Adolescent Discrimination Distress Index (Fisher et al., 2000). Fifteen Likert scale questions assessed levels of experienced discrimination along educational, institutional, and peer discrimination subscales. This scale demonstrated good reliability in this sample ($\alpha = .83$).

Community trauma exposure

Exposure to traumatic events was measured using 20 yes/no items that assessed lifetime exposure to traumatic events aligned with the *DSM 5* (APA, 2013) (e.g., being a victim of violence). These items were derived from the Life Events Checklist (Weathers et al., 2013) and adapted to better fit the school context, removing items that refer to familial factors, including abuse or neglect (Jaycox et al., 2009). The items queried exposure to community violence and victimization (Jaycox et al., 2009) and demonstrated good reliability in this sample ($\alpha = .82$).

Location

Location was measured based on the location of the survey and by querying students on which region they lived in, Harris County, Texas (high immigration enforcement location) or Providence, Rhode Island, and surrounding cities (low immigration enforcement location).

2.3.4 | Interaction effects

Environmental factors \times location

Given the differing political, social, and environmental contexts of Harris County, Texas, and Providence, Rhode Island, and surrounding cities, we explored the interaction effect between location (i.e., high immigration

enforcement vs. low immigration enforcement) and environmental factors (discrimination and trauma exposure) on each of the three domains of school engagement.

2.3.5 | Control variables

Age

Youths were asked to indicate their age (in years) in the survey.

Gender

Youths were asked to select their gender identity (male, female, nonbinary, transgender, or other) in the survey.

2.4 | Analytic procedure

The response rates for constructs ranged from 76.1% (trauma exposure) to 99.3% (school cognitive engagement). To account for the elevated proportion of cases with missing values, multiple imputation was utilized. Twenty data sets were created using multiple imputations developed through the Markov Chain Monte Carlo method and the discriminant function in SAS 9.4. Variables used to create the imputed data set were selected because of their likely correlation to the other variables in the model. Variables included: age, gender, nativity, English-language proficiency, district of school attendance, trauma exposure, economic hardship, discrimination, and school engagement. Data were sampled with 100 iterations between successive imputations after the first 200 iterations. All statistical analyses were run independently on each imputed data set and results were pooled into a single set of estimates and adjusted standard errors. No significant differences between original data and imputed data were found (comparison tables available upon request). In Table 1, descriptive statistics were analyzed for sample characteristics, and comparisons between school districts were examined using *t* tests or χ^2 tests for continuous and categorical variables, respectively. In Table 2, the association between key variables of interest were investigated using correlation analyses.

Using the imputed data, multivariate linear regression models tested the direct associations of social position factors (nativity, English proficiency, and economic hardship) and environmental factors (discrimination, community trauma exposure, and location) on each of the three subscales of school engagement (cognitive, behavioral, and relational) while controlling for age and gender. This method accounts for nonindependence of the subscales and sources of variability that directly or indirectly affect one or all of the variables. Next, moderation analyses were conducted to test the interaction effects of location (high immigration enforcement vs. low immigration enforcement location) and environmental factors (discrimination and community trauma exposure) on the three domains of school engagement (cognitive, behavioral, and relational). Two separate analyses were conducted to investigate moderation effects by employing the cross-product terms of trauma exposure and location, and discrimination and location.

3 | RESULTS

3.1 | Bivariate and descriptive statistics

Table 1 presents the results of the bivariate and descriptive analyses. Overall, youths expressed high levels of school engagement, but they also endorsed high exposure to community trauma and economic hardship. Youths in this study experienced an average of seven traumatic events in their lifetime. Exposure to community trauma was

TABLE 2 Correlation matrix of key variables.

	1	2	3	4	5	6	7	8	9	10	11
1. Cognitive engagement	—										
2. Behavioral engagement	0.406***	—									
3. Relational engagement	0.284***	0.407***	—								
4. Economic hardship	-0.075	0.118	0.15*	—							
5. Discrimination	-0.002	-0.09	-0.256***	-0.165*	—						
6. Trauma exposure	-0.083	-0.215***	-0.172**	-0.063	0.433***	—					
7. District (ref: Rhode Island)	0.067	0.092	0.135*	0.088	-0.036	-0.159*	—				
8. Nativity (ref: US born)	-0.343***	-0.143*	0.108	0.098	0.015	0.164*	-0.056	—			
9. English proficiency (ref: proficient)	-0.329***	-0.106	0.222***	0.170*	-0.012	0.166*	-0.061	0.633***	—		
10. Age	0.127*	0.112	0.027	-0.059	0.031	-0.01	-0.019	-0.339***	-0.298***	—	
11. Gender (ref: female)	-0.022	0.125*	0.124*	-0.071	-0.018	-0.121	0.062	0.085	0.059	-0.061	—

* < .05; ** < .01; *** < .001.

significantly lower for youths residing in Providence, Rhode Island, and surrounding cities ($M = 6.79$, $SD = 3.39$) than for those in Harris County, Texas ($M = 8.21$, $SD = 4.48$) ($t(231)2.74$, $p = .007$). Nearly half of youths surveyed (47.3%) endorsed experiencing economic hardship at least “sometimes.” There were no significant differences in levels of economic hardship or discrimination by location.

As shown in Table 2, correlation analyses revealed that behavioral engagement was negatively associated with trauma exposure ($r = -.215$, $p < .001$), relational engagement was positively associated with economic hardship ($r = .150$, $p < .05$) and negatively associated with discrimination ($r = -.256$, $p < .001$), and trauma exposure ($r = -.172$, $p < .01$). Being born in the United States ($r_s = -.343$, $p < .001$) and being proficient in English ($r_s = -.329$, $p < .001$) were negatively associated with cognitive engagement in school. Being born in the United States was also negatively associated with behavioral engagement ($r_s = -.143$, $p = .004$), while being proficient in English was associated with greater relational engagement in school ($r_s = 0.222$, $p < .001$). Being second-generation as opposed to first-generation was associated with greater exposure to community trauma ($r_s = .164$, $p = .012$) and being proficient in English was associated with greater economic hardship ($r_s = .170$, $p = .005$). In this sample, nativity was strongly associated with English language proficiency ($r_s = .633$, $p < .001$) and age ($r_s = -.339$, $p < .001$), such that participants who were U.S.-born also tended to be proficient in English and to be younger.

3.2 | Multivariate regression analyses—Social position factors

In Table 3, multivariate regression analyses revealed that nativity (multivariate test statistic Wilks' λ $p = .006$) significantly predicted greater cognitive engagement ($B = -0.57$, $SE = 0.178$, $p = .001$) but did not significantly predict the relational ($B = -0.06$, $SE = 0.60$, $p = .915$) or behavioral ($B = 0.69$, $SE = 0.38$, $p = .07$) domains of school engagement. English proficiency (multivariate test statistic Wilks' λ $p < .001$) significantly predicted lower cognitive engagement ($B = -0.37$, $SE = 0.18$, $p = .037$) and higher relational engagement ($B = 1.84$, $SE = 0.61$, $p = .003$) but did

TABLE 3 Multivariate regression analyses testing social and environmental factors predicting domains of school engagement.

School engagement Variable	Cognitive			Behavioral			Relational		
	B	SE	p Value	B	SE	p Value	B	SE	p Value
Social position factors									
Nativity (Ref: US born)	-0.567	0.177	<.001	-0.685	0.379	.070	-0.064	0.600	.915
English proficiency (Ref: Proficient)	-0.374	0.179	.037	-0.080	0.384	.835	1.840	0.609	.003
Economic hardship	0.000	0.014	.974	0.073	0.030	.014	0.099	0.046	.033
Environmental factors									
Discrimination	-0.016	0.013	.241	-0.015	0.028	.604	-0.165	0.045	<.0001
Trauma exposure	0.045	0.024	.062	-0.098	0.050	.050	-0.066	0.078	.401
Location (Ref: Rhode Island)	0.111	0.139	.422	0.222	0.295	.453	0.833	0.468	.075
Interaction effects									
Location × Trauma exp.	-0.073	0.035	.038	0.038	0.074	.605	0.005	0.117	.964
Control variables									
Gender	0.073	0.140	.603	0.596	0.297	.045	0.708	0.471	.133
Age	0.014	0.041	.737	0.098	0.087	.258	0.204	0.137	.137

Abbreviation: SE, standard error.

not significantly predict behavioral engagement ($B = -0.08$, $SE = 0.38$, $p = .835$). Economic hardship (multivariate test statistic Wilks' $\lambda p = .020$) significantly predicted lower behavioral ($B = 0.07$, $SE = 0.03$, $p = .014$) and relational ($B = 0.10$, $SE = 0.05$, $p = .033$) engagement but was not a significant predictor of cognitive engagement ($B = -0.00$, $SE = 0.01$, $p = .974$).

3.3 | Multivariate regression analyses—Environmental factors

Multivariate regression analyses depicted in Table 3 revealed that community trauma exposure (multivariate test statistic Wilks' $\lambda p = .004$) significantly predicted lower behavioral engagement ($B = -0.10$, $SE = 0.05$, $p = .05$) but did not reach significance for cognitive ($B = 0.05$, $SE = 0.02$, $p = .062$) or relational ($B = -0.07$, $SE = 0.08$, $p = .401$) school engagement. Experiencing discrimination (multivariate test statistic Wilks' $\lambda p = .002$) significantly predicted lower relational engagement ($B = -0.17$, $SE = 0.05$, $p < .001$) but not cognitive ($B = -0.02$, $SE = 0.01$, $p = .241$) or behavioral engagement ($B = -0.02$, $SE = 0.03$, $p = .604$). Location alone did not emerge as a significant predictor of any domain of school engagement (multivariate test statistic Wilks' $\lambda p = .364$).

Given the differing political, social, and environmental contexts of Harris County, Texas, and Providence, Rhode Island, and surrounding cities, two separate multivariate regression analyses were conducted to determine whether location (high immigration enforcement location vs. low immigration enforcement location) moderated the effects of environmental factors (community trauma exposure and discrimination) on the three domains of school engagement. Moderation analyses revealed that location did not significantly moderate the effects of discrimination (multivariate test statistic Wilks' $\lambda p = .212$) or community trauma exposure (multivariate test statistic Wilks' $\lambda p = .078$) on school engagement overall, however the model including trauma exposure by location was retained for final analyses to account for the significant difference in trauma exposure by location (i.e., youth in Harris County, Texas, endorsed significantly greater exposure to trauma than youth in Rhode Island). Moreover, location significantly moderated the effect of community trauma exposure on the cognitive engagement subscale in the final analyses ($B = -0.07$, $SE = 0.04$, $p = .038$).

4 | DISCUSSION

Given the disparate educational outcomes experienced by Latino youth in the form of school completion and academic achievement (de Brey et al., 2019), school engagement is an important and malleable construct that can be leveraged to improve educational outcomes (Chase et al., 2014; Li & Lerner, 2011). Using a multidimensional, integrative approach, this study examined the influence of indicators of social position (nativity, economic hardship, and English language proficiency) and environmental contexts (community trauma, geographic location, and discrimination) on each of the three domains of school engagement (cognitive, behavioral, and relational) among a community sample of first- and second-generation Latino adolescents. Findings from this study reveal that both social position and environmental contexts significantly and differentially predicted each of the three domains of school engagement.

This study accounts for the heterogeneity of social positionality among first- and second-generation Latino youth by including measures related to experiences with racialized perceptions of their immigrant status, including where they were born (foreign-born vs. US-born) and their level of English-language proficiency. Being a first-generation immigrant and having limited English proficiency were associated with being more cognitively engaged in school. These findings align with previous research highlighting the protective effects of being a first-generation immigrant in the US despite greater social disadvantages (García Coll & Marks, 2012; Marks et al., 2014). Previous research on this phenomenon suggests that first-generation immigrants tend to have more positive attitudes toward school, formal education, and greater valuing of education (Chun & Mobley, 2014; García Coll & Marks, 2012; Greenman, 2013;

Suárez-Orozco, Pimentel, et al., 2009; Suárez-Orozco, Rhodes, et al., 2009). Immigrant resilience, including strong cultural ties and ethnic identity, also contribute to the protective effects experienced by first-generation immigrant youth, as opposed to their second-generation and beyond counterparts (Aretakis et al., 2015; Marks & Garcia Coll, 2018; Vargas et al., 2017).

Positive attitudes toward schooling and education (i.e., cognitive engagement) are not sufficient to yield greater academic achievement or to foster a greater sense of belonging at school for Latino immigrant students however (Chiu et al., 2012). In this study, this is evidenced by youths with limited English proficiency being more cognitively engaged in school while simultaneously being significantly less relationally engaged. Despite that the schools in this study have large proportions of Latino students (over 25% and in many cases, over 75%), which is a common protective factor among Latino youth (Bellmore et al., 2012; DuPont-Reyes & Villatoro, 2019), those with limited English proficiency had diminished relational engagement in school, including a sense of belonging and positive relationships with peers and teachers in the school context. Relational engagement serves to enhance students' connectedness with individuals embedded in the school system, thereby improving not only academic outcomes, but also social-emotional well-being (McLaughlin & Clarke, 2010) and identity formation (Smyth, 2006). Experiences of economic hardship resulted in decreased behavioral and relational engagement in school as well. Decades of research have demonstrated the pervasive effects of economic hardship on educational outcomes (Baker et al., 2020; Coleman, 1966; Sosina & Weathers, 2019; Weathers & Sosina, 2022). Not only do students of lower socioeconomic status attend under-resourced schools with inadequate preparation (Baker et al., 2020; Sosina & Weathers, 2019; Weathers & Sosina, 2022) but within these schools the extent of hardship youth experience impacts their ability to attend to and complete schoolwork and form meaningful, positive relationships in the school environment.

Like other minoritized populations, first- and second-generation Latino youth have unique experiences within their environmental contexts that serve to promote or inhibit their development (García Coll et al., 1996). Findings from this study revealed that environmental contexts were indeed predictive of school engagement, in two of the three domains. Exposure to community trauma significantly and negatively predicted behavioral engagement while experiences with discrimination predicted diminished relational engagement. Location (high immigration enforcement vs. low immigration enforcement environment) did not moderate the effects of environmental contexts on school engagement overall, however, results revealed that youth in Harris County, Texas (high immigration enforcement environment) had significantly greater exposure to community trauma and the effects significantly and negatively predicted their cognitive engagement in school. Trauma exposure has serious deleterious effects on youth development through neurophysiological and neuroendocrine responses to prolonged traumatic stressors (Cross et al., 2017; Reda et al., 2021). Community trauma exposure specifically is a threat-based phenomena that alters neural structure and functioning thereby impacting youths ability to regulate emotions and behavior, making the comprehension and completion of everyday tasks, such as schoolwork, more challenging (Delaney-Black et al., 2002; Elsaesser et al., 2020; Garcia-Reid, 2007; Larson et al., 2017; McLaughlin et al., 2013; Pierre et al., 2020; Reda et al., 2021; Walkley & Cox, 2013).

Previous studies on the effects of discrimination on school outcomes have highlighted the important indirect contribution of discrimination on diminished school achievement and engagement (Alfaro et al., 2009; Dotterer et al., 2009; Dunbar et al., 2017; Herda, 2021). By contrast, the current study revealed a significant direct effect of perceived discrimination on lower levels of relational engagement in school. Discrimination has long-term adverse effects on youth psychosocial well-being and academic achievement (Benner et al., 2018). Research suggests that school policies and practices promote systemic racism and discrimination that further marginalize minoritized youth (Gray et al., 2018). Discrimination experienced through systematic and individual acts of racism may disrupt youth's ability to form bonds with historically white-dominated institutions and those embedded within (Unnever et al., 2016). These findings are particularly salient given the rise of white nationalism beginning shortly before these data were collected (2018–2019) (Southern Poverty Law Center, 2017) and increased anti-immigrant sentiment and political actions following the 2016 presidential election, which continue today (Enns & Jardina, 2021;

Hooghe & Dassonneville, 2018). These findings can contribute to future research and practice by highlighting areas of strength and potential protective mechanisms that can be harnessed by school personnel and policymakers to create environments that promote pathways to educational resilience through school engagement. School-based programming and support should leverage strong cognitive engagement and positive attitudes toward education exhibited by first-generation Latino youths and encourage the development of positive relationships within the school context to improve outcomes for these students.

5 | LIMITATIONS

This study provides insight into the contexts that support school engagement among first- and second-generation Latino youth in the United States, however, several limitations exist. This research used a cross-sectional design. This design allowed the researchers to capture youths at one point in time and therefore cannot make assumptions about causality or longitudinal trajectories of school engagement. Given that school engagement is malleable and expected to change, it would be interesting to examine how variables of social position and environment contribute to changes in school engagement among Latino youth over time, a phenomenon that has not yet been consistently explored by researchers. This study used convenience sampling, which has the potential to introduce bias and statistical error into the analyses. Caution should be exercised in generalizing these findings to youths living in other locations of the United States. Additionally, this study used student self-reports on all measures. Future studies may consider triangulating findings by including measures from other sources, such as teachers, parents, and school records to gain a more holistic view of students' patterns of engagement. While not a limitation per se, as this sample represents the great diversity that exists within Latino populations, the focus solely on first- and second-generation Latino youth does not allow us to make comparisons between Latino youth in this study and Latino youth who are third generation or beyond, which are distinctly different groups. Finally, due to a limited sample size ($n = 306$), there was insufficient power to conduct more robust statistical analyses, such as structural equation modeling.

6 | IMPLICATIONS

Experiencing everyday discrimination, community trauma, and economic hardship impacts how first- and second-generation Latino students perform in school. School practitioners and school-based programming should focus on student strengths (i.e., cognitive school engagement) and the development of positive relationships within the school context to improve student outcomes, particularly among Latino youth with limited English proficiency and lower socioeconomic status. School policies and practices that foster a sense of belonging and reduce discrimination will enhance academic and social-emotional outcomes among Latino youth. Ongoing teacher and staff training on relational instructional methods paired with supportive school policies are necessary components to encourage school engagement within this population. Results from this study also revealed that local context matters for school engagement. Youths who resided in a community with policies that leverage local law enforcement for immigration enforcement activities (Harris County, Texas) had significantly greater exposure to community trauma and lower levels of cognitive engagement in school than youths in a community that prohibits local law enforcement from engaging in immigration enforcement activities (Providence Rhode Island and surrounding cities). Punitive and racially motivated immigrant and law enforcement policies and practices threaten first- and second-generation Latino youths' sense of safety and impacts their ability to engage in school. School practices that focus on belonging and positive relationships can help mitigate the negative effects of the difficult sociopolitical realities uniquely experienced by Latino students. Advocacy at both the local and national levels are necessary to promote policies that protect Latino families from harm, reduce discrimination, and increase safety.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflict of interest.

DATA AVAILABILITY STATEMENT

Due to the sensitive nature of the data, and the possible consequences of identification, the data are not currently publicly available. However, additional or supplemental analyses are available by request.

ETHICS STATEMENT

This study was approved by the institutional review boards at the University of Houston and Rhode Island College.

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