Bullying Victimization and Bully Prevention Programs as Predictors of Classroom Peer Support for Immigrant and US-born Students

Programas de Victimización por Bullying (Intimidación) y Prevención de Bullying Intimidación) como Predictores del Apoyo entre Compañeros en el Aula para Estudiantes Inmigrantes y Nacidos en los Estados Unidos

http://doi.org/10.17981/culteducsoc.14.2.2023.07

Received: February 27, 2023. Accepted: June 15, 2023. Published: July 10, 2023.

Kerri Evans
University of Maryland Baltimore County. Baltimore (U.S.)
kerrieva@umbc.edu

For cite this article:
Evans, K. (2023). Bullying Victimization and Bully Prevention Programs as Predictors of Classroom Peer Support for Immigrant and US-born Students**.** *Cultura, Educación y Sociedad*, 14(2), 137–156. DOI: http://dx.doi.org/10.17981/culteducsoc.14.1.2023.07

Abstract

Introduction: On average, one in four students in US schools are part of immigrant families, and school is the main place they engage with US-born peers. Their ability to thrive in the classroom can be impacted by both bullying and support of peers and teachers. **Objective**: This paper sought to understand the relationships between bullying victimization, bullying prevention programs, and school mental health staff on classroom peer support, noting differences among immigrant and US-born students. **Methodology**: Data are from 7 881 fifth to tenth graders from The Health Behavior in School Children (HBSC) cross-sectional survey. Stata was used to run descriptive statistics, t-tests, and a Hierarchical Linear Model (HLM) to examine the extent to which different supports, victimizations, and demographics influence the level of peer support that students sense in the classroom. **Results and discussion**: Results indicate no difference in levels of peer support between immigrant and US-born students. However, the influence of interpersonal bullying victimization had a negative relationship with peer support for both US-born and immigrant students across multiple models. Similarly, bullying prevention programs were a significant predictor of increased peer support across multiple models. **Conclusion**: Implications suggest more research on the topic, and advocacy for bullying prevention programs that are peer led and intentionally account for immigrant students.

Keywords: Student; immigrant; bullying; peer support

Resumen

Introducción: En promedio, uno de cada cuatro estudiantes en las escuelas de los Estados Unidos son parte de familias inmigrantes, y la escuela es el lugar principal donde se relacionan con sus compañeros nacidos en los Estados Unidos. Su capacidad para prosperar en el aula puede verse afectada, tanto por el acoso como por el apoyo de sus compañeros y maestros. **Objetivo**: Este documento buscó comprender las relaciones entre los programas de prevención de bullying y el personal de salud mental de escuelas en el apoyo de compañeros en el aula, señalando las diferencias entre los estudiantes inmigrantes y los nacidos en los Estados Unidos. **Metodología**: Los datos provienen de 7 881 estudiantes de quinto a décimo grado de la encuesta transversal The Health Behavior in School Children (HBSC). Stata se utilizó para ejecutar estadísticas descriptivas, pruebas t y un Modelo Lineal Jerárquico (HLM) para examinar la medida en qué los diferentes apoyos, victimizaciones y demografía influyen en el nivel de apoyo de los compañeros que los estudiantes sienten en el aula. **Resultados y discusión**: Los resultados indican que no hay diferencia en los niveles de apoyo de los compañeros, entre los estudiantes inmigrantes y los nacidos en los Estados Unidos. Sin embargo, la influencia de la victimización interpersonal por bullying tuvo una relación negativa con el apoyo entre compañeros, tanto para estudiantes nacidos en Estados Unidos como para inmigrantes, a través de múltiples modelos. **Conclusiones**: Las implicaciones sugieren más investigación sobre el tema y también más defensa de los programas de prevención del bullying que son dirigidos por pares e intencionalmente dan cuenta de los estudiantes inmigrantes.

Palabras clave: Estudiante; inmigrante; bullying; nivel de apoyo de los compañeros

Introduction

Article 26 of the Universal Declaration of Human Rights-UDHR states the importance of free education for all children that promotes "understanding, tolerance and friendship among all nations, racial or religious groups, and … the maintenance of peace" (United Nations-UN, 2015, p. 54). This statement is important to keep in mind because research shows that many immigrant youth struggle to enroll (Evans et al., 2019; Booi et al., 2016), and subsequently thrive in public schools across the US (Feng et al., 2002; Maynard et al., 2016; Nakman et al., 2023; Szlyk et al., 2020).

As discussed below, the immigrant poulation in the US is large (The Annie E. Casey Foundation-AECF, 2021), and they disproportionality experience challenges around social support and bullying (Maynard et al., 2016; Stewart et al., 2008; Strang & Quinn, 2019). Therefore, the author posits the research questions addressed in this paper around peer support, bullying victimizations, and school support systems (counselors and bullying prevention programs) to add to the academic literature on the topic.

Literature review

One out of every four children in the US are part of an immigrant family (AECF, 2021), and school is the first place that many of them are able to meet and interact socially with US-born children. Immigrant students are often overcoming challenges that may be unknown to their teachers. For example, many immigrant and refugee youth arrive to the US with limited or interrupted formal schooling, trauma histories, limited literacy skills, and unfamiliarity with the rules and expectations of the school (Markham, 2012; Szlyk et al., 2020; Socha et al., 2016). Additionally, immigrant students had fewer educational resources at home such as a school desk, textbooks, dictionary, or calculator, than their native-born peers (Chiu et al., 2012), which left them feeling unprepared for classroom learning and behind their peers. Nonetheless, research supports the idea that school social workers and counselors, especially ones that are culturally similar to the school children provide benefit to the adjustment to a new school (Attia et al., 2023; Rodriguez et al., 2020).

Friendship, social support, and social inclusion are important aspects of a healthy and happy life. Refugee youth in the United States are generally lacking social networks at the time of arrival and experience social isolation (Stewart et al., 2008; Strang & Quinn, 2019). Social connections can emerge from participation in school as well as activities such as church, sports, and the arts (Socha et al., 2016), and when present, they are crucial protective factors for a successful life in the US (Rossiter & Rossiter, 2009). These connections can increase sense of well-being (Correa-Velez et al., 2010), as well as eventual educational attainment (Devonald et al., 2021; Roth, 2015), and employment (Beaman, 2011; Hanley et al., 2018).

School is the primary interaction point between immigrant youth and people outside of their family (Birman et al., 2007; Crea et al., 2018). In school, immigrant students who lack meaningful connection to their peers and/or teachers may become disengaged in the classroom academics (Kim & Suárez-Orozco, 2015). Immigrant students may struggle to

both: (1) build same-culture friendships which can provide significant identity formation and support, and to (2) build friendships with US-born students which are more likely to make them popular (Reynolds & Crea, 2017). Conversely, supportive relationships with teachers and peers alike can help immigrant students to learn English and improve academic performance (Kim & Suárez-Orozco, 2015).

Bullying is a common (Feng et al., 2022; National Center for Education Statistics-NCES, 2020), and negative experience (Side & Johnson, 2014; Martin-Pérez & Gascón-Cánovas, 2021; Maynard et al., 2016; Threlfall & Auslander, 2023), for many students in US schools. Being bullied is an isolating experience and can lead to suicide (Side & Johnson, 2014), and therefore is something that social workers and school advocates need to be concerned with. Threlfall & Auslander (2023) found that bullying led to negative social and educational outcomes among black students who also experience discrimination in school. When looking at bullying it is important to not only look at the prevalence and predictors, but to understand how it makes the victim feel, what the policies say, and what we can do about it (Side & Johnson, 2014). Students felt that being bullied changed them and the way they viewed themselves (Side & Johnson, 2014). For some students, this 'ownership' of the bullying creates a desire to change for the ability to fit in, rather than to be true to oneself (Side & Johnson, 2014). Nonetheless, school-based group interventions that focus on adjustment and connection between students can help open the doors to talk about and minimize bullying among (Ma et al., 2023).

Students born outside the US were more likely to be victims of bullying than US-born students (Maynard et al., 2016). Additionally, the impact of this bullying led immigrant youth to report interpersonal, socioemotional and health problems (including substance use) at higher rates (Maynard et al., 2016). Similarly, immigrant students who do not speak English at home are more likely to be bullied in school due to their religion and race (Yu et al., 2003). Side and Johnson (2014) recommend that schools do not view bullying as an individual issue but rather as a problem that schools should tackle in a proactive manner through vision statements, policy, and behavior change. More specifically, they recommend that young people should be involved in creating policies and creating change (Side & Johnson, 2014). However, Reynolds and Crea (2017) found that school level factors such as school size and cultural composition within the school were not significant predictors of positive integration for immigrant students.

Theoretical framework: Un/welcomeness and social dominance theory

This study is guided by two theories. Barillas-Chón (2010) discuss the way that immigrants can be both welcomed and unwelcomed at the same time by their receiving communities. This is an important concept when we think about peer support in school settings as welcoming relationships with peers are key. Social dominance theory discusses unequal power between different groups (Sidanius & Pratto, 1999), and this could contribute to bullying among immigrant students.

In the context of US schools, Barillas-Chón (2010) explains how Latinx immigrant students are placed at the margins in their Newcomer/ESL classes, or within social settings such as the cafeteria. ESL classrooms can provide a positive role of inclusion and same-

ness for immigrant youth (Barillas-Chón, 2010). In the home and family environment, as well as the Latinx community, Latino men mentioned a sense of privilege and pride, but felt marginalized in the community at-large when people see them first as poor, or as an immigrant, struggling to fulfil the ideal of a breadwinner for the family (Hondagneu-Sotelo, 2017). Based on these understandings of racial marginalization, the author expands the ideas to the immigrant population in this study —school aged children— looking at the ideas of how children interact in the classroom, and the variable around classroom peer support. At the same time, school policies and practices that welcome the newcomer —in this case presence of counselors and bullying prevention programs— are key to understanding the macro level of school welcome. Barillas-Chón's (2010) theory of 'unwelcomness' emphasizes the need to analyze and understand the dynamics around bullying victimization for the immigrant population in schools.

Discrimination, oppression, and brutality have become all too common in the world (Sidanius & Pratto, 1999). Intergroup relations, and social dominance theory is one attempt to rationalize why these behaviors occur and why everyone seems to accept it (Sidanius & Pratto, 1999). At the individual level, social dominance orientation is a person's unique belief system in the dominance, attitudes, ideologies, and memberships to which they belong or identify (Sidanius & Pratto, 2011). Societal hierarchy is often based upon racism, sexism, nativity, or socioeconomic status and are present in the educational systems, in addition to others such as the housing market, and criminal justice system (Sidanius & Pratto, 2011). Social dominance theory can be seen as a reason why bullying occurs between immigrant and US-born youth. Therefore, in this study the author draws on the theory of social dominance as a rational for including measures of bullying and bullying prevention programs as independent variables. In today's society, it is important to consider that there are interactions both in person and in the virtual world, and therefore the study includes analysis of cyberbullying in addition to more traditional bullying in school.

The current study

The preceding literature review highlights the need for immigrant students to maintain social relationships and support inside of (Kim & Suárez-Orozco, 2015; Reynolds & Crea, 2017), and outside of school (Rossiter & Rossiter, 2009; Correa-Velez et al., 2010; Socha et al., 2016), and articulates the role that bullying can play in the lives of students (Yu et al., 2003; Maynard et al., 2016). Some studies show the importance of considering school level factors (Side & Johnson, 2014), while others found these to not be significant (Reynolds & Crea, 2017).

Harel-Fisch et al. (2011) used the same dependent measure as this study. They found that being a victim of bullying was significantly associated with the quality of relationships with fellow-students (Harel-Fisch et al., 2011). Specifically, they found that students who are bullied are 2.8 times less likely to think students are kind and helpful, and 5.2 times less likely to feel that their peers accept them (Harel-Fisch et al., 2011). The author aims to build upon this study in the following ways: using a multilevel analysis (Hierarchical Linear Model-HLM), as children are nested within schools, and introduce school level variables as predictors.

The author aims to investigate the differences between immigrant and US-born students in respect to their social support in school. Additionally, the author will use the items of peer supports as a scale rather than each question individually. The research questions are as follows: 1) Do immigrant students feel more or less peer support in the classroom than their native-born peers? 2) To what extent are school supports helpful in increasing classroom peer support, and how does the effect of school supports vary for immigrant students and their native-born peers? And 3) To what extent do bullying victimization and bullying prevention programs influence peer support in the classroom, and how do they vary for immigrant students and their native-born peers?

Methodology

Data

The Health Behavior in School Children (HBSC) cross-sectional survey has been conducted since 1982 in countries around the world in collaboration with the World Health Organization (WHO-Euro) (Inchley et al., 2018; Iannotti, 2013). During the 2009-2010 school year, surveys were conducted in 42 countries (Inchley et al., 2018), and the nationally representative survey conducted in the United States is being used for this assessment.

The 2009-2010 U.S.-based assessment included youth in 5th to 10th grades with the goal of promoting health policy and programs at the local, state and national levels (Iannotti, 2013). The sample of students is nationally representative and was collected from public, Catholic, and other private schools in all 50 states and Washington D.C. (Iannotti, 2013). A list of schools was obtained from Quality Education Data, Inc., and school districts were stratified within each Census Division. The primary sampling unit was 1 302 school districts, of which 94 were randomly selected. All private and Catholic schools were eligible within the 94 school districts selected, and a stratified sample of 314 unique schools was chosen randomly. In the third stage of sampling, one to four classrooms (average of two) were randomly selected from each school, where all students in the class participated (Iannotti, 2013). The total sample consists of 12 642 children nested within 314 schools.

Measurement

The outcome variable, peer support in the classroom, is a scale created from three questions about the student's classmates (The students in my class(es) enjoy being together; Most of the students in my class(es) are kind and helpful; Other students accept me as I am.) each of which is measured on a 5 point Likert scale. The inter-item reliability of the scale is 0.93 for the overall school population and 0.89 for the subpopulation of immigrants, showing it is a strong measure. In order to reduce multicollinearity, the centering point for the scale of peer support in the classroom is zero (ie. youth who answered "strongly disagree" to all questions implying that there was little to no support received from their peers).

Interpersonal bullying victimization is a summed score of frequency for bullying victimization across seven survey items (i.e,. called names or teased; left out of things; physical bullying; telling lies; bullied due to race; bullied due to religion; bullied in the context of sexual jokes). For each question, the student ranked the frequency of these items from "*I have not been bullied in this way in the past couple months*" to "*several times a week*". The inter-item reliability is 0.86 for the total sample, and 0.89 for the subsample of immigrant students. For the scale of interpersonal bullying victimization, a youth who indicated "*I have not been bullied in this way in the past couple months*" for all eleven questions was seen as the zero point (n = 3877). The cyberbullying scale is composed of four questions (ie. bullied via a computer at school; bullied using a cell phone at school; bullied via a computer outside of school; bullied using a cell phone outside of school) and yields an inter-item reliability of 0.92 for the entire sample, and 0.93 for the subsample of immigrant students. The majority of students (89%, n = 7018) had not been a victim of cyberbullying in the past few months and therefore this scale was dichotomized to yes (1) or no (0) for analyses.

School-level variables included urbanicity, presence of counselors, and presence of bullying prevention programs. Each school was coded according to its geographical urbanicity, as reported by the school administrator. Due to small cell sizes, I combined large central city, mid-size city and urban fringe of large city into 'urban', urban fringe of mid-size city and large town into 'suburban', and small town and rural into 'rural'; and then these were dummy coded for analyses. The reference group is rural. Each administrator was asked about the presence of school counselors, and the number of hours that they are in the school each week. Due to small cell counts, the number of hours that counselors are present in the schools was dichotomized to less than 21 hours (0) and more than 21 hours (1).

Demographic control variables included nativity, gender, and age. Students were asked if they were born in the US so that no indicated an immigrant (0), and yes indicated US-born (1). Gender is male (0) and female (1), the sample did not consist of other gender identities. For the purposes of these analyses age was broken down into the following categories: 11 or younger, 12, 13, 14, or 15 and older; and age was grand mean centered. Given the large number of students in the sample, listwise deletion was used.

Analytic Methods

Descriptive statistics and correlations among variables were run to better understand the data. To examine the first research question, the correlation between peer support in the classroom and immigrant status using a t-test to see if there are significant differences between immigrant and native born children.

To answer research questions two and three, a Hierarchical Linear Model (HLM) examines the extent to which different supports, victimizations, and demographics influence the level of peer support that students sense in the classroom. HLM models are uniquely used to take into account both individual level and school level variables. HLM yields standard errors that are more precise than ordinary least squares when assessing outcomes for students within schools (Hox et al., 2017). Immigrant status is used as an interaction effect for all variables of interest. I control for gender, age, and race. Deviance is used as the fit statistic to compare models.

The models are described in the Table 1. The first model is an unconditional model. The second model is an intercept-only model with all level one predictors. As part of finalizing my level one model, random intercepts were tested for both interpersonal and cyber bullying victimization, as well as immigrant status. Conceptually, we could think that levels of bullying vary from one school to the next and therefore the level of classroom support slopes from that point. Likewise, each school will have a different intercept for peer support when bullying equals zero. Lastly, research supports the idea that immigrants' level of peer support may start at a lower level than their native born peers due to language barriers and difficulty understanding norms in the school (Roy-Campbell, 2012; Szlyk et al., 2020). The level one model contains a fixed effect for both cyberbullying victimization and nativity, but a random slope for interpersonal bullying. The third model introduced all level two (school wide) predictors. Bullying prevention programs at the school level as well as each grade 5th through 10th were all tested; because this is a little redundant and because only 5th and school-wide were significant predictors, the specific bullying prevention in grades six to ten were dropped from the model to increase model parsimony.

In model 4, interaction terms were added for the individual level characteristics of interpersonal bullying victimization and cyberbullying victimization, with nativity as a means to recognize the differences by immigrant status. Cross level interaction terms were also included for bullying prevention programs at the school, and in the fifth grade, with nativity. Models two through four are compared in Table 1 Below.

Table 1. *Hierarchical Linear Models.*

Variables	Model 2	Model 3	Model 4
Interpersonal bullying victimization scale score.	x	x	x
Cyberbullying victimization scale score.	x	x	x
Nativity.	x	x	x
Gender.	x	x	x
Race.	x	x	x
Age.	x	x	x
School-wide bullying prevention program.		x	x
Bullying prevention 5th grade.		x	x
Urbanicity.		x	x
School Counselor less than 21 hours per week.		x	x
Interaction Terms.			
Immigrant x Interpersonal bullying victimization.			x
Immigrant × Cyber bullying victimization.			x
Immigrant × bullying prevention.			x
Immigrant × 5th Grade bullying prevention.			x
Random Components.			
Interpersonal Bullying slope.	x	x	x

Source: Authors.

Results and Discussion

Descriptive and Correlational Statistics

The average number of students who took the survey per school was 33.9 (min 4, max 91). Detailed information about individual level variables for the analytic sample can be found in Table 2, and school level variables in Table 3. The majority of the sample was born in the US, with 664 students (8.4%) born in another country. The social dominance theory introduced above, speaks to dynamics among members of a sub-group, and while the immigrant population in this data set is significant enough to study, they are clearly a minority and will feel the pressures of discrimination, oppression, bullying, and other challenges in creating positive peer relationships (Sidanius & Pratto, 1999). The sample is 49.5% female (n = 3,902) and 51.4% white (n = 4,053). The average score of classroom peer support across all schools is 8.1 (SD = 2.5 on a scale of 0 to 12 with 12 being a very supportive environment). The average interpersonal bullying victimization scale score across all schools was 2.6 (SD = 4.7), and cyberbullying score was 0.6 (SD = 2.1).

Table 2. *Description of the individual characteristics for children in the final analytic sample (N = 7.881).*

Variables	*n* (%)	Mean (*SD*)	Range
Immigrants	664 (8.4%)		
Female	3902 (49.5%)		
Classroom Support Scale*		8.1 (2.5)	0, 12
Bullying Victimization			
Interpersonal Bullying Victimization Scale**		2.6 (4.7)	0, 28
Cyber bullying victimization Scale**		0.6 (2.1)	0, 16
Age			
11 or younger	1640 (10.8%)		
Age 12	1387 (17.6%)		
Age 13	1619 (20.5%)		
Age 14	1432 (18.2%)		
Age 15 or older	1803 (22.9%)		
Race			
White	4053 (51.4%)		
Black or African American	1196 (15.2%)		
Hispanic	1518 (19.3%)		
Other/multiple races	1115(14.1%)		

* A high score indicates more classroom support.
** A high scale score indicates frequent bullying.
Source: Authors.

TABLE 3. *Description of the school-level characteristics for youth included in final analytic sample (n = 250).*

School-level Characteristics	n (%)
Bullying Prevention	
School-wide Bullying Prevention Program in Place.	218 (89.3%)
Bullying Prevention in 5th Grade.	51 (20.4%)
Hours of Counselors at School	
Fewer than 21 hours per week.	18 (7.9%)
21+ hours per week.	211 (92.1%)
Urbanicity	
Urban.	82 (32.9%)
Suburban.	86 (34.5%)
Rural.	81 (32.5%)

Source: Authors.

The majority of schools in the sample (n = 218, 89.3%) had a school-wide bullying prevention program in place at the time of the survey, and had a counselor, psychologist, or social worker who provides standard mental health and social services to students for at least 21 hours per week (n =211, 92.1%). The schools in the sample were fairly evenly split in their urbanicity with 82 (32.9%) identifying as urban, 86 (34.5%) as suburban and 81 (32.5%) as rural. Bullying was named a significant problem behaviors impacting children and teenagers by the Surgeon General over 20 years ago (Olweus, 1993; US Office of the Surgeon General-OSG, 2001) and since that time schools have placed a stronger emphasis on bullying prevention programs.

Table 4 shows the Pearson Correlation matrix for the variables in the final sample. The following pairwise correlations were of particular interest: There were significant positive correlations between interpersonal and cyberbullying (r = 0.61, p <.001). Many would think that being victim of both bullying and cyberbullying as identified here makes sense. Yet, this finding is contradictory to a study by John et al. (2023) found that the fewest people who were victim of bullying identified both (6.4%) as compared to those who were victim only in person (18.1%,) and only online (10.5%). There was also a positive correlation between urbanicity and Caucasian participants (r = 0.29, p <.001). There were significant negative correlations between age and bullying prevention in the 5th grade (r = –0.34, p <.001) as well as between classroom peer support and interpersonal bullying victimization (r = –0.29, p <.001).

This finding is critical to the outcome of this study, emphasizing that as someone experiences more bullying, they feel a lower sense of peer support from those in their classroom. Van de Ven et al. (2023) notes the importance of peer support int eh aftermath of victimization in order to help children overcome and push forward. While some others were statistically significant, all other correlations were below 0.25 which indicates a weak relationship.

Peer Support

In order to answer the first research question, a t-test was estimated to see the difference in mean classroom support scores between immigrant and US born students. This yielded a t value of 0.18 which is not significant showing that there is no statistically significant difference in the average classroom peer support scores between immigrant students (8.13) and US-born students (8.11).

TABLE 4. *Pearson Correlation.*

	Classroom Support	Interpersonal Bully Victim	Cyberbully Victim	School - wide Bully Prevention	5th grade Bully Prevention	Immigrant	Female	White	Black / AA	Hispanic	Other Race	Age	MH Counselor	Urbanicity
Classroom Support	1.00													
Inter-personal Bully Victim	–0.29***	1.00												
Cyberbully Victim	–0.11***	0.61***	1.00											
School – wide Bully Prevention	–0.03**	0.02	0.01	1.00										
5th grade Bully Prevention	0.05***	0.01	–0.01	0.12***	1.00									
Immigrant	–0.001	–0.05***	–0.07***	–0.04***	0.03**	1.00								
Female	–0.06***	0.001	0.002	0.01	0.02*	0.01	1.00							
White	0.02*	–0.04***	–0.04***	–0.05***	0.04***	0.19***	–0.02	1.00						
Black/AA	–0.01	0.03***	0.04***	0.03**	–0.05***	0.02	0.01	–0.46***	1.00					
Hispanic	0.01	–0.02	0.01	0.04***	–0.02	–0.20 ***	–0.01	–0.49 ***	–0.23 ***	1.00				
Other Race	–0.03*	0.04***	–0.002	–0.01	0.01	–0.07 ***	0.02**	–0.39 ***	–0.18 ***	–0.20 ***	1.00			
Age	–0.09***	–0.06***	0.02*	·0.05***	–0.34***	–0.03**	–0.03***	–0.03**	0.03**	0.02	–0.01	1.00		
MH Counselor Hours	–0.01	–0.02	0.01	0.03**	–0.12**	–0.03**	–0.02*	–0.0 5***	0.02	0.04***	0.001	0.10 ***	1.00	
Urbanicity	0.01	0.01	–0.02	–0.03**	–0.09***	0.10 ***	–0.001	0.29 ***	–0.11 ***	–0.23 ***	–0.04 ***	0.001	–0.10 ***	1.00

* $p < .05$. ** $p < .01$. *** $p < .001$. Source: Authors.

The first hypothesis was that there would be significantly different levels of peer support between immigrant and US-born students, but the data and t-test did not support this hypothesis. Other research has shown differences in US-born and immigrant students as it relates to sense of belonging (a similar yet different construct), with that of immigrant students being weaker (Ham et al., 2017), and therefore this finding is surprising in a nationally representative sample.

Multilevel Analysis

The empty model (Model 1), yields an intraclass correlation of 0.053 indicating that 5.3% of the variance in classroom peer support is between schools. Therefore, a hierarchical linear model was utilized to explain away the variance between schools. The detailed results for three different models run can be found in Table 5.

TABLE 5. *Hierarchical Linear Models for Peer Support in the Classroom (n = 7881 students in 232 schools).*

	Model 2 B (SE)	Model 3 B (SE)	Model 4 B (SE)
Intercept.	11.20	11.19	11.61
Child Level Fixed Effects.			
Interpersonal bullying victimization (never been bullied).	−0.17*** (0.01)	−0.20*** (0.01)	−0.15*** (0.02)
Cyberbullying victimization (never been bullied).	0.50*** (0.08)	0.43*** (0.09)	0.61 (0.31)
Immigrant.	−0.18* (0.09)	−0.24* (0.10)	−0.77 (0.46)
Female.	−0.33*** (0.05)	−0.32*** (0.05)	−0.33*** (0.05)
Black or African American.	0.15 (0.07)	0.24** (0.09)	0.24** (0.09)
Hispanic.	0.05 (0.07)	0.07 (0.08)	0.07 (0.08)
Other/Multiple Races.	−0.06 (0.07)	−0.05 (0.08)	−0.04 (0.08)
Age (Age 11 or younger).	−0.18*** (0.02)	−0.17*** (0.03)	−0.17*** (0.03)
School Level Fixed Effects.			
School-wide bullying prevention program.	--	−0.32* (0.15)	−0.94* (0.48)
Bullying prevention 5th grade.	--	0.36** (0.11)	0.55 (0.29)
Urbanicity.	--	0.10* (0.05)	0.11* (0.05)
School Counselor less than 21 hours per week.		−0.03 (0.14)	0.002 (0.14)
Interaction Terms.			
Immigrant × Interpersonal bullying victimization.	--	--	−0.03 (0.02)
Immigrant × Cyber bullying victimization.	--	--	−0.13 (0.32)
Immigrant × bullying prevention.	--	--	0.67 (0.46)
Immigrant × 5th Grade bullying prevention.	--	--	−0.15 (0.27)
Random Components.			
Interpersonal Bullying slope.	0.01	--	−0.16
Deviance.	48685.0	32253.0	36342.9
Degrees of Freedom.			
Intraclass (ICC) Correlation (standard error).	0.053 (0.01)	0.041 (0.01)	0.034 (0.01)

* $p < .05$. ** $p < .01$. *** $p < .001$. Reference group is notated in parenthesis for all categorical variables with more than 2 options. Source: Authors.

Bullying Victimization and Peer Support

Model 2 shows that nativity (–0.18, 0.09, p <.05), interpersonal bullying (–0.18, p < .001), cyberbullying (0.49, p <.001), gender (–0.33, p <.001), and age (–0.18, p < .001) are all as significant predictors of peer support. Therefore, for every one unit increase on the interpersonal bullying victimization scale score, age, or being US-born (rather than an immigrant) the model would expect a 0.2 point decrease on the scale score for peer support in the classroom. Results show a 0.3 lower peer support scale for female students as compared to their male counterparts. For each unit increase in cyberbullying victimization scale score, the model expects a 0.5 point increase in peer support scale score. A random slope for interpersonal bullying victimization (0.006, p < .05) was tested and found to be significant, but small so removed from the model. The random intercept for interpersonal bullying was not significant (0.20), indicating that the estimate for the average student (11.17) applied well to all students, regardless of school. The cyberbullying and immigrant status were not significant, where cyberbullying victimization was tested and yielded a fixed effect intercept of 11.21 and slope of 0.48. Nativity yielded a fixed intercept of 11.19 and slope of –0.2, with no significant variability in the slope.

The author hypothesized that being a victim of bullying (interpersonal and cyber) would decrease a student's perception of classroom peer support, and that the rates would be worse for immigrant students. The influence of interpersonal bullying victimization had a negative relationship with peer support across all models as expected. This is supported by the literature that indicates that bullying victimization has a large impact on the life of the student victim (Harel-Fisch et al., 2011; Side & Johnson, 2014; Maynard et al., 2016). However, the relationship of cyberbullying was positive, and only significant in some models. This could be due to the fact that it is occurring online, and perhaps being outside of the classroom led to less of a factor in building relationships in person within the classroom.

School Supports: Bullying Prevention Programs and Mental Health Counselors

In Model 3, the school level predictors of classroom peer support were included to maintain the random slope for interpersonal bullying victimization and an unstructured covariance. Again, many predictors were significant. At the individual level nativity (–0.23, p <.05), interpersonal bullying victimization (–0.18, p <.001), cyberbullying victimization (0.44, p <.001), gender (–0.31, p <.001), age (–0.13, p <.001), and self-identification as Black (0.24, p <.05) were all statistically significant predictors of classroom peer support. This means that for US-born students, females, those who are older, and victims of interpersonal bullying prevention the model would expect a lower peer support scale score. Attar-Schwartz et al. (2019) studied the same constructs (in opposite order) and found that students with a higher sense of support from their peers experienced less bulling. Whereas for students who identify as Black and for those who are victims of cyberbullying, a higher peer support scale score is expected.

Results show that school-wide bullying prevention programs (–0.38, p <.05), and bullying prevention in 5th grade health education courses (0.33, p <.001) were significant predictors of classroom peer support, when all other predictors were held constant. In this model the covariance between the interpersonal bullying and the school ID is -0.01 and is not statistically significant which tells me that the average is held constant across all schools. For someone who is an immigrant, male, scores a zero on both interpersonal and cyberbullying scale scores, of average age (13.0), lives in an urban district, and is at a school with no school-wide bullying prevention program or a 5th grade bullying prevention program, with a school counselor less than 21 hours per week, their predicted score on the classroom peer support scale would be 10.8.

The author hypothesized that school supports, namely bullying prevention programs, would increase levels of peer support. In multiple models, school-wide bullying prevention programs as well as bullying prevention in 5th grade were significant positive predictors of peer support, however school-wide initiatives had a negative effect. For decades the literature has supported these programs and that is why they are common in most public schools today (Birman et al., 2007; Harel-Fisch et al., 2011; Ma et al., 2023; Maynard et al., 2016). Side and Johnson (2014) recommend that a policy on bullying should reflect: 1) the values of the school rather reinforce state legal obligations, 2) the needs and views of the people it is built to protect, 3) that preventing and stopping bullying is the responsibility of the school community as a whole, and 4) that the policy should be written with the influence and insight of young people themselves. Recent research by Zambuto et al. (2022) suggests that peer led bullying prevention programs where one or more peer leaders is of an immigrant background had a significant impact on the reduction of bullying due to ethnicity. From the data set, the author does not have knowledge of whether the bullying prevention programs in place were youth-led, or if they intentionally incorporated the needs and views of immigrant students.

Model 4 includes interaction effects of variables (interpersonal bullying victimization; cyberbullying victimization; school-wide bullying prevention program, and bullying prevention in 5th grade health education class) with nativity in order to test our hypotheses about the differences between the US-born and immigrant subpopulations.

The results showed that each unit higher score in interpersonal bullying victimization score decreases the expected peer support score by 0.13 (p <.001) points. In this model, the interaction between interpersonal bullying victimization and nativity (p <.01), and the interaction between cyberbullying and nativity (p <.01) were found to be significant predictors of peer support for students. The expected peer support scale value would be 11.54 for a student who identifies as a white immigrant, is of average age, who has never been bullied in the past three months, who attends an urban school that offers no bullying prevention at the school level nor in the 5th Grade and has school counselors for less than 21 hours per week.

According to the interaction effects, cyberbullying has a more positive effect on the perceptions of peer support for immigrants than for native born students. This model included the random slope for interpersonal bullying victimization again, however there was not significant variance in the slop indicating that mean level of interpersonal bullying victimization was similar across schools.

The author hypothesized that the presence of mental health counselors would increase levels of peer support. With the current data set, the influence of school counselors had no significant effect on classroom levels of peer support. Yet, the literature emphasizes the importance they can play (Attia et al., 2023), especially when counselors are of similar linguistic or cultural backgrounds (Rodriguez et al., 2020). In a future study, it would be important to look at the influence of school counselors on the individual as some schools have these support people work primarily with individual students, and small groups, rather than having in the classroom and working on interventions at the mezzo level.

Fit statistics

Deviance was used to compare models, where generally speaking the lower the deviance the better fitting the model relative to the number of parameters in the model. Table 5 below shows the deviance for all models. All scores are similar other than the empty model which is expected to be the worst. The Intraclass Correlation Coefficient-ICC tells us how strongly the students within each school resemble each other (Kreft & De Leew, 1998). According to the results in Table 5 below, Model 4 shows an ICC of 0.034 which is better than the ICC of 0.053 in the unconditional model indicating that our overall model does help to explain away the variance between schools.

Limitations

This study has limitations. First, the data is cross-sectional. Second, the data are old. However, the number of immigrant children in this data set is quite large, and the presence of other variables of interest still makes this study worthwhile. Third, the survey is self-report and depending on the age of the child their recall may be better or worse as some questions about frequency of events over multiple months. Fourth, the outcome variable of interest is not part of a standardized measure of peer support.

Lastly, the study asks if the student was born in the US, but does not ask about where they were born; their immigration status; or why they came to the US. Therefore, the author cannot glean any differences among immigrants from different regions of the world, of different legal statuses, or based on how long they have been in the US, all of which are important research questions for future research.

Implications

More research is needed to understand the effectiveness of bullying prevention programs for immigrant students. More specifically, researchers and practitioners alike need to know more about the curriculum and if bullying for reasons related to race, ethnicity, nativity, and religion are explicitly addressed. Future data collection should include additional questions around the country of origin and immigration status so that researchers could assess if these differences influence bullying, peer support, etc. Longitudinal research would allow us to see the influence of the bullying prevention programs if data were collected before and after the students engage in the programs.

From a macro practice perspective, positive findings about bullying prevention programs can be utilized to advocate for more programming. Specifically, it is recommended that more bullying prevention programs have immigrant facilitators in order to reduce ethnicity related acts of bullying (Zambuto et al., 2022). Additionally, more research is needed to identify ways that the curriculum in bullying prevention programs can intentionally work to protect immigrant students as suggested by Ostrander et al. (2018). While there were not findings that directly relate staff in schools to peer support, there are many other benefits of this position. The school can help to advocate for funding, staff, and expertise around working with immigrant students. School staff, parents, and community members should advocate for the inclusion of these practices in schools.

Conclusions

Given the number of immigrant students in US schools, more research needs to address the immigrant student experience. This paper sought to explore relationships among bullying victimization, and support systems (bullying prevention programs and school counselors) to assess their relationship with peer support in the classroom. Results show there is no statistically significant difference in the average level of classroom peer support between immigrant students and US-born students. Nativity and interpersonal bullying are significant predictors of lower level of classroom peer support. Interestingly, cyberbullying has a more positive effect on the perceptions of peer support for immigrants than for native born students. Implications suggest more advocacy for bullying prevention programs.

Financing

The was no funding involved in this project.

Declaration of Conflict of Interest

There are no conflicts of interest to declare.

References

AECF. (2021, october 21). Who are children in immigrant families? *AECF*. https://www.aecf.org/blog/who-are-the-children-in-immigrant-families

Attar-Schwartz, S., Mishna, F. & Khoury-Kassabri, M. (2017). The Role of Classmates' Social Support, Peer Victimization and Gender in Externalizing and Internalizing Behaviors among Canadian Youth. *Journal of Child & Family Studies,* 28(9), 2335–2346. https://doi.org/10.1007/s10826-017-0852-z

Attia, M., Staton, A., Evans, A. & Tang, S. (2023). Supporting Immigrant Students in Schools: A Qualitative Investigation. *Journal of Child & Adolescent Counseling,* 9(1), 34–49. https://doi.org/10.1080/23727810.2023.2168361

Barillas-Chón, D. (2010). Oaxaqueño/a students' (un)welcoming high school experiences. *Journal of Latinos and Education,* 9(4), 303–320. https://doi.org/10.1080/15348431.2010.491043

Beaman, L. (2011). Social networks and the dynamics of labour market outcomes: Evidence from refugees resettled in the US. *Review of Economic Studies,* 79(1), 128–161. https://doi.org/10.2307/41407047

Birman, D., Weinstein, T., Chan, W. & Beehler, S. (2007). Immigrant youth in U.S. schools: Opportunities for prevention. *The Prevention Researcher,* 14(4), 14–17. https://eric.ed.gov/?id=EJ793964

Booi, Z., Callahan, C., Fugere, G., Harris, M., Hughes, A., Kramarczuk, A., Kurtz, C., Reyes, R. & Swaminathan, S. (2016). *Ensuring every undocumented student succeeds: A report on access to public education for undocumented children.* Georgetown Law Human Rights Institute. https://www.law.georgetown.edu/human-rights-institute/scholarship/scholarship/fact-finding-project/ensuring-every-undocumented-student-succeeds-a-report/

Chiu, M., Pong, S-l., Mori, I. & Chow, B. (2012). Immigrant students' emotional and cognitive engagement at school: A multilevel analysis of students in 41 countries. *Journal of Youth and Adolescence,* 41(11), 1409–1425. https://doi.org/10.1007/s10964-012-9763-x

Correa-Velez, I., Gifford, S. & Barnett, A. (2010). Longing to belong: Social inclusion and wellbeing among youth with refugee backgrounds in the first three years in Melbourne, Australia. *Social Science & Medicine,* 71(8), 1399–1408. https://doi.org/10.1016/j.socscimed.2010.07.018

Crea, T., Lopez, A., Hasson, R., Evans, K., Palleschi, C. & Underwood, D. (2018). Unaccompanied migrant children in long term foster care: Identifying needs and best practices from a child welfare perspective. *Children & Youth Services Review,* 92, 56–64. https://doi.org/10.1016/j.childyouth.2017.12.017

Devonald, M., Jones, N. & Yadete, W. (2021). Addressing educational attainment inequities in rural Ethiopia: Leave no adolescent behind. *Development Policy Review,* 39(5), 740–756. https://doi.org/10.1111/dpr.12523

Evans, K., Perez-Aponte, J. & McRoy, R. (2019). Without a paddle: Barriers to school enrollment procedures for immigrant students and families. *Education and Urban Society,* 52(9), 1283–1304. https://doi.org/10.1177/0013124519894976

Feng, D., Zhang, X. & Cao, W. (2022). School adjustment and bullying of Chinese left-behind children: Mediating role of social support. *Social Behavior & Personality: An International Journal,* 50(12), 1–9. https://doi.org/10.2224/sbp.12070

Hanley, J., Al Mhamied, A., Cleveland, J., Hajjar, O., Hassan, G., Ives, N., Khyar, R. & Hynie, M. (2018). The social networks, social support and social capital of Syrian refugees privately sponsored to settle in Montreal: Indications for employment and housing during their early experiences of integration. *Canadian Ethnic Studies,* 50(2), 123–148. https://doi.org/10.1353/ces.2018.0018

Ham, S.-H., Yang, K.-E. & Cha, Y.-K. (2017). Immigrant integration policy for future generations? A cross-national multilevel analysis of immigrant-background adolescents' sense of belonging at school. *International Journal of Intercultural Relations,* 60, 40–50. http://dx.doi.org/10.1016/j.ijintrel.2017.06.001

Harel-Fisch, Y., Walsh, S., Fogel-Grinvald, H., Amitai, G., Pickett, W., Molcho, M., Due, P., de Matos, M. & Craig, W. (2011). Negative school perceptions and involvement in school bullying: A universal relationship across 40 countries. *Journal of Adolescence,* 34(4), 639–652. https://doi.org/10.1016/j.adolescence.2010.09.008

Hondagneu-Sotelo, P. (2017). Place, nature and masculinity in immigrant integration: Latino immigrant men in inner-city parks and community gardens. *NORMA International Journal for Masculinity Studies*, 12(2), 112–126. https://doi.org/10.1080/18902138.2017.1341450

Hox, J., Moerbeek, M. & Van de Schoot, R. (2017). *Multilevel Analysis: Techniques and Applications* (3 ed.). Routledge. https://doi.org/10.4324/9781315650982

Iannotti, R. (2013). *Health Behavior in School-Aged Children (HBSC), 2009-2010 (ICPSR 34792)*. Inter-university Consortium for Political and Social Research. https://doi.org/10.3886/ICPSR34792.v1

Inchley, J., Currie, D., Budisavljevic, S., Torsheim, T., Jåstad, A., Cosma, A., Kelly, C., Arnarsson, Á., Barnekow, V. y Weber, M. M. (2018). *HSBC International Coordinating Centre Child & Adolescent Health Research Unit*. HSBC. https://hbsc.org/publications/reports/spotlight-on-adolescent-health-and-well-being/

John, A., Lee, S., Puchades, A., Del Pozo-Baños, M., Morgan, K., Page, N., Moore, G. & Murphy, S. (2023). Self-harm, in-person bullying and cyberbullying in secondary school-aged children: A data linkage study in Wales. *Journal of Adolescence*, 95(1), 97–114. https://doi.org/10.1002/jad.12102

Kim, H. & Suárez-Orozco, C. (2014). The Language of Learning: The Academic Engagement of Newcomer Immigrant Youth. *Journal of Research on Adolescence*, 25(2), 229–245. https://doi.org/10.1111/jora.12130

Kreft, I. & De Leeuw, J. (1998). *Introducing multilevel modeling*. Sage. https://doi.org/10.4135/9781849209366

Ma, P-W., Torres, A. & Akoto, M. (2023). Feasibility, acceptability, and preliminary findings of a school-based intervention for recently arrived immigrant middle-school students. *Psychology in the Schools*, 60(6), 2072–2089. https://doi.org/10.1002/pits.22861

Markham, L. (2012). Mentoring for resettled youth. *Forced Migration Review*, (40), 33–33. https://www.fmreview.org/young-and-out-of-place/markham

Martín-Pérez, Á. de L. & Gascón-Cánovas, J. (2021). The Impact of the Magnitude of the Group of Bullies on Health-Related Quality of Life and Academic Performance Among Adolescents. *Child Psychiatry & Human Development*, 54(3), 796–805. https://doi.org/10.1007/s10578-021-01290-8

Maynard, B., Vaughn, M., Salas-Wright, C. & Vaughn, S. (2016). Bullying victimization among school-aged immigrant youth in the United States. *Journal of Adolescent Health*, 58(3), 337–344. https://doi.org/10.1016/j.jadohealth.2015.11.013

Nakman, S., Nurulwahida, A. & Busthami Nur, A. (2023). Level of self-esteem: Is there any difference among physical, verbal, anti-social, and cyber bullies? *International Journal of Evaluation & Research in Education*, 12(1), 157–163. https://doi.org/10.11591/ijere.v12i1.22687

NCES. (2020). *Report on Indicators of School Crime and Safety: 2020*. NCES. https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021092

Olweus, D. (1993). *Bullying at school: what we know and what we can do*. Blackwell Publishing.

Ostrander, J., Melville, A., Bryan, J. & Letendre, J. (2018). Proposed modification of a school-wide bully prevention program to support all children. *Journal of School Violence,* 17(3), 367–380. https://doi.org/10.1080/15388220.2017.1379909

Reynolds, A. & Crea, T. (2017). The integration of immigrant youth in schools and friendship networks. *Population Research and Policy Review*, 36, 501–529. https://doi.org/10.1007/s11113-017-9434-4

Rodriguez, S., Roth, B. & Villareal, L. (2020). School social workers as Nepantleras in equity work for immigrant students: A conceptual exploration. *Social Service Review,* 94(4), 748–780. https://doi.org/10.1086/712044

Rossiter, M. & Rossiter, K. (2009). Diamonds in the rough: Bridging gaps in supports for at-risk immigrant and refugee youth. *International Migration & Integration,* 10*,* 409–429. https://doi.org/10.1007/s12134-009-0110-3

Roth, B. (2015). Making Connections in Middle-Class Suburbs? Low-Income Mexican Immigrant Young Men, Social Capital, and Pathways to High School Graduation. *Journal of Immigrant & Refugee Studies,* 13(4), 321–338. https://doi.org/10.1080/15562948.2014.970321

Roy-Campbell, Z. (2012). Meeting the Needs of English Learners. *Journal of Adolescent & Adult Literacy*, 56(3), 186–188. https://doi.org/10.1002/JAAL.00125

Sidanius, J. & Pratto, F. (1999). *Social dominance: An intergroup theory of social hierarchy and oppression*. Cambridge University Press. https://doi.org/10.1017/CBO9781139175043

Sidanius, J. & Pratto, F. (2011). Social Dominance Theory. In Van Lange, P., Kruglanski, A. & Higgins, E. (Eds.), *Handbook of theories of social psychology* (pp. 418–438). SAGE. https://doi.org/10.4135/9781446249222.n47

Side, J. & Johnson, K. (2014). Bullying in schools: Why it happens, how it makes young people feel and what we can do about it. *Educational Psychology in Practice*, 30(3), 217–231. https://doi.org/10.1080/02667363.2014.915209

Socha, K., Mullooly, A. & Jackson, J. (2016). Experiences resettling Eritrean youth through the US unaccompanied refugee minor program. *Journal of Human Rights and Social Work*. 1, 96–106. https://doi.org/10.1007/s41134-016-0008-x

Stewart, M., Anderson, J., Beiser, M., Mwakarimba, E., Neufeld, A., Simich, L. & Spitze, D. (2008). Multicultural meanings of social support among immigrants and refugees. *International Migration*, 46(3), 123–159. https://doi.org/10.1111/j.1468-2435.2008.00464.x

Strang, A. & Quinn, N. (2019). Integration or Isolation? Refugees' Social Connections and Wellbeing. *Journal of Refugee Studies*, 34(1), 328–353. https://doi.org/10.1093/jrs/fez040

Szlyk, H., Berger Cardoso, J., Barros Lane, L. & Evans, K. (2020). "Me Perdía en la Escuela": Latino Newcomer Youths in the U.S. School System. *Social Work*, 65(2), 131–139. https://doi.org/10.1093/sw/swaa001

Threlfall, J. & Auslander, W. (2023). Bullying Victimization in High School: Perceptions and Responses of Black Parents Get access Arrow. *Children & Schools*, 45(2), 79–87. https://doi.org/10.1093/cs/cdad005

UN, General Assembly, *Universal Declaration of Human Rights*, 10 December 1948. https://www.un.org/en/about-us/universal-declaration-of-human-rights

U.S. Public Health Service. OSG. (2001). *Youth Violence. A Report of the Surgeon General.* CDC; SAMHSA; NIH. https://pubmed.ncbi.nlm.nih.gov/20669522/

Van de Ven, P., Leferink, S. & Pemberton, A. (2023). The Key Characteristics and Role of Peer Support in the Aftermath of Victimization: A Scoping Review. *Trauma, Violence & Abuse,* 24(2), 899–912. https://doi.org/10.1177/15248380211043826

Yu, S., Huang, Z., Schwalberg, R., Overpeck, M. & Kogan, M. (2003). Acculturation and the health and well-being of U.S. immigrant adolescents. *Journal of Adolescent Health*, 33(6), 479–488. https://doi.org/10.1016/S1054-139X(03)00210-6

Zambuto, V., Stefanelli, F., Palladino, B., Nocentini, A. & Menesini, E. (2022). The Effect of the NoTrap! Antibullying Program on Ethnic Victimization: When the Peer Educators' Immigrant Status Matters. *Developmental Psychology*, 58(6), 1176–1187. https://doi.org/10.1037/dev0001343

Kerri Evans: Ph.D., LCSW, is an Assistant Professor of Social Work at the University of Maryland, Baltimore County (U.S.A.). Dr. Evans' research uses community partnerships to answer service providers' questions to improve service delivery and make policy recommendations. Topically, her research focuses on unaccompanied and refugee children's well-being and school welcome for immigrant students. https://orcid.org/0000-0001-9979-2105