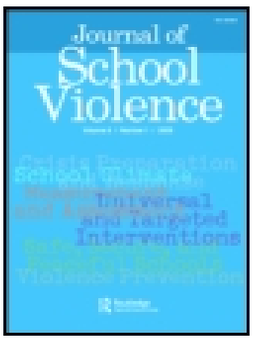

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A Comparative Analysis of School and Student Characteristics on Bullying in Urban Career Academies and a Large Comprehensive High School

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ABSTRACT

In this study, we examined the relationship between school type and students' victimization and observations of bullying in their schools. We compared student perceptions (N = 1,283) of bullying in three urban career academies with different school configurations (e.g., magnet and school-within-a-school) and a large, urban comprehensive high school. We found that compared to their counterparts in the large comprehensive high school, students in two of the career academies – operated as magnet schools – were significantly less likely to experience bullying as a victim or to observe it in their respective schools. However, compared to students in the comprehensive high school, there were no significant differences in bullying among students in the career academy operated under a school-within-a-school model. It is plausible that students in career academies that operate as magnet schools are significantly less likely to become victims and observe bullying.

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Bullying; career academies; high school; magnet schools; school violence; urban education

The ultimate responsibilities of schools across the United States are to keep children safe (Jordan & Austin, 2012). However, school is a place where bullying may occur. In fact, many families have filed lawsuits against school districts for failing to keep their children safe – particularly from bullying behaviors (Glew et al., 2008; Jordan & Austin, 2012). When schools have high levels of learner engagement, positive student outcomes, and affirmative psychological dispositions, students' safety is evident (Mayer & Furlong, 2010). Students' perceptions of safety in schools are associated with higher academic achievement and lower school dropout rates (Cornell & Mayer, 2010; Goldstein et al., 2008; Schneider et al., 2012). Therefore, students' observations and victimization of bullying is critically important.

One of the most popular forms of high school reform models within schools across the United States is career academies (Lanford & Maruco, 2019). School reformers that use the career academy model have repackaged high school curricula around career themes, and created smaller learning communities for students. Career academies include a focus on work-based learning activities (e.g., career development, job shadowing, and internships), development of an advisory board for student and academy support, and integrated curricula (with students learning core academics in the context of a career-based theme) (Fletcher et al., 2018). This movement has led to the development of over 8,000 career academies across the United States, serving over one million students (National Career Academy Coalition, 2019). Researchers have demonstrated the potential of career academies to promote positive school experiences for students as it relates to a heightened sense of community for students in school (Fletcher & Cox, 2012), increased interpersonal connections with peers and adults (Kemple & Snipes,

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2000), higher emotional engagement of students (Fletcher, Tan, & Hernandez-Gantes, 2019), and a positive culture and space for equity, inclusion, and safety for learners (Fletcher et al., 2019). Career academies are thought to be safer school environments for students given their focus on small learning communities. The idea is to break down larger high schools into a small family-like atmosphere where students are assigned to the same teachers for four years – enabling students to form a community of learners as well as a close knit and caring environment (Stern et al., 2010). The structure of each academy is designed such that students interact with teachers and peers in a small learning community who share interests in a given occupational area and are situated within a cohort. Researchers have found that the use of small learning communities is a contributing factor promoting a positive school culture (Fletcher et al., 2019), and that students experience an increased sense of personalization and belonging, and lower levels of school vandalism.

Yet, there have been few research studies investigating how bullying victimization and observations of bullying differ across school contexts – particularly in career academies (Wei et al., 2010). The question remains why bullying observations and victimization are higher in some schools compared to others. While some research has commenced related to career academies and its potential to positively shape the student experience, we are still uncertain how this influences other psychosocial outcomes, particularly those related to bullying. Even further, career academies are embedded in various school configurations, including, charter schools, magnet schools, regional career centers, and school-within -a-school model. To that end, we wonder whether career academies have the potential to reduce bullying behaviors in schools. Moreover, we question whether school configuration matters, particularly now that school choice programs are increasingly growing in popularity (Astor & Benbenishty, 2019; Frankenberg & Siegel-Hawley, 2008). Hence, it is imperative for researchers to examine how programs, such as career academies, as well as school configurations influence bullying behaviors of students as it can lead to identifying prevention programs in addressing bullying in schools.

To address the aforementioned research gaps, the purpose of this study was to examine the relationship between school type (career academies with different school configurations compared to a large comprehensive high school) and students' experiences with bullying. Our research questions included:

(1) Were there significant differences (based on different school configurations) in career academy students' *bullying victimization* compared to their peers at a large comprehensive high school; and
(2) Were there significant differences (based on different school configurations) of career academy students' *bullying observations* compared to their peers at a large comprehensive high school.

Review of literature

Scholars have conceptualized bullying as a situation where an aggressive student (or group of students) continually demeans a peer using tactics that may include bodily attacks, verbal teasing, and/or social exclusion (Mehta et al., 2013). Victimization increases the likelihood of future student involvement in violent behaviors – including bringing weapons to school in self-defense (Astor & Benbenishty, 2019). Researchers have found that bullying has a negative association with academic achievement, school attendance, persistence in school, and psychological well-being (Glew et al., 2008). The school violence literature emphasizes that school environment, peer relationships, students' sense of belonging, and student demographic characteristics are predictors of bullying (Astor & Benbenishty, 2019). Both school and student characteristics play a major role in the likelihood of students experiencing and being exposed to school violence.

School type

There remains a dearth of studies examining school type and its influence on bullying in schools (Astor & Benbenishty, 2019). For example, despite the rapid expansion of the career academy model in

high schools across the country and its potential for promoting increased supports, engagement, and personalization for students, researchers have yet to uncover its potential for reducing bullying in schools. We also know little about different school configurations with the growing number of choice schools and programs (e.g., magnet and charter schools) built within the past three decades.

The career academy model

With the growing popularity of the career academy concept, the quality of implementation has varied greatly as schools and districts have rushed to join the bandwagon. To this end, there have been efforts to inform related implementation with the development of standards of practice by school networks such as NAF (formerly known as the National Academy Foundation) (Stern et al., 2010). The NAF model features four elements. The *academy development and structure* component focuses on small learning communities using student cohorts, career-themed and sequenced coursework, common teacher planning, career-themed guidance, and ongoing professional development. The *integrated curriculum and instruction* piece promotes career and academic learning around a relevant theme (e.g., Business and Finance, Engineering, Health Sciences, Hospitality and Tourism, Information Technology [IT]) through project-based activities involving classroom and work-based learning experiences, and internships. The *advisory board* part includes members representing community stakeholder groups to ensure that academies are locally relevant and supported. The *work-based learning* component includes career awareness and exploration activities in 9th (e.g., field trips) and 10th (e.g., job shadowing) grades, and experiential opportunities (e.g., industry certifications, paid internships) in 11th and 12th grades.

As mentioned previously, there are an array of school configurations for career academies including regional career centers, charter schools, comprehensive schools, and magnet programs. In the case of career academies in large comprehensive schools (school-within-a-school model), they have several features designed to break down large high schools into a more personalized environment for students. These features include small learning communities, student cohorts, and career-themed curricula (Fletcher, Warren, & Hernandez-Gantes, 2019). Most of the career academy research points to positive outcomes for students who participate. Researchers have found that career academy students have significantly higher levels of emotional engagement – a heightened sense of belonging and safety (Fletcher & Cox, 2012; Fletcher et al., 2019). In addition, academy stakeholders (e.g., district and school administrators, school board members, teachers, school counselors, parents, and community partners) perceived the career academy as a safe space for adolescents (Fletcher, et al., 2018). We also know from the school violence literature that positive peer relationships and students' heightened sense of belonging in school are predictors of lower bullying victimization and perpetuation (Hong & Espelage, 2012).

Research on schools of choice

District and school administrators configure public magnet schools around a theme. In magnet career academies, students apply to gain entry. School administrators often use a lottery system for student admission. The main reasons for the growing popularity of choice schools (particularly magnet schools) are to ensure racial desegregation as well as to foster individual choice, student diversity, and high quality and innovative educational programs (Frankenberg & Siegel-Hawley, 2008). Schools of choice are also popular with families because many believe that they provide their children with safe spaces to learn (Astor et al., 2010; Hamlin, 2020). This is of particular concern for students in urban schools challenged with high rates of crime, prevalent gang activities, and concentrated poverty within their surrounding neighborhoods (Sugrue, 2014).

The limited research that has been conducted on schools of choice – particularly magnet schools – demonstrate that these schools increase student achievement compared to large public comprehensive high schools, private, and religious schools (Ballou et al., 2006; Bifulco et al., 2008; Gamoran, 1996; Poppell & Hague, 2001). Frankenberg & Siegel-Hawley (2008) argued that whole school magnets – where all students participate in the school theme – is more beneficial for students compared to

programs that feature school-within-a-school (a comprehensive school that embeds career academies within it). The researchers pointed to issues of racial segregation of students within a school-within -a-school as their rationale for their recommendation. However, there remains a paucity of scholarly evidence comparing magnet schools to comprehensive schools based on school violence (Astor & Benbenishty, 2019). It is also important to note that many career academies are delivered within magnet schools, and many that are not share similar features with magnet schools as they focus on small numbers of students (like small learning communities) where the learners are grouped based on similar interests (around a career theme).

School size

Researchers have examined school size as a predictor of bullying and school violence. However, results of studies related to school size and school violence are mixed. Some researchers have found that larger schools increase students' chances of bullying victimization and observing it in school (Cornell et al., 2013; Ferris & West, 2004; Lleras, 2008; Walker & Gresham, 1997). Researchers have pointed out challenges of establishing positive cultures in large high schools (Letgers et al., 2002). Lee and Smith (1997) posited that an ideal range of students in a school is between 600 and 900. For larger schools, many school administrators have turned to the establishment of small learning communities through school-within-a-school approach. Small learning communities in schools have the potential to increase students' sense of personalization and belonging. Kuo (2010) recommended that: "policy-makers and practitioners should continue to find opportunities to reduce the size of large high schools and increase the sense of personalization, belonging, and safety among students, teachers, and staff." (p. 395)

However, Klein and Cornell (2010) found a mismatch between the perspectives of students and teachers regarding bullying in their schools and actual percentages of occurrences. Mehta et al. (2013) clarified Klein and Cornell (2010) findings by positing that, "It is likely that students in larger schools were exposed to more bullying incidents simply because there were more students to observe, generating an illusory perception that larger schools were less safe than smaller schools." (p. 46). Other researchers claim that schools with large student populations are typically more effective and efficient compared to schools with smaller student populations (O'Moore et al., 1997). On the contrary, other researchers reported no statistically significant relationships between school size and school violence (Khoury-Kassabri et al., 2004). Hence, the association between school size and bullying is inconclusive.

Student characteristics

Several school violence studies found an association with student demographic characteristics, particularly as it relates to age, ethnic and racial backgrounds, gender, and socioeconomic status (Astor & Benbenishty, 2019; Espelage & Horne, 2008; Hong & Espelage, 2012). Most studies demonstrate that incidents of bullying occur more frequently in middle school and tend to decrease as students move through high school (Espelage & Horne, 2008; Nansel et al., 2003). Unfortunately, many low-income students are more likely to identify with a culture of bullying because of their observations of violence within their neighborhoods and communities (Unnever & Cornell, 2003).

Most researchers have also found gender to be a predictor of school violence. Findings have emphasized that male students are more likely to both perpetuate bullying and are more commonly victims of bullying compared to their female counterparts (Varjas et al., 2009). Female students typically experience indirect forms of bullying (e.g., relational aggression and social rejection). While, other researchers have found no gender difference in bullying behaviors (Barboza et al., 2009; Goldstein et al., 2008).

Results of studies that examined differences among the ethnic and racial backgrounds of students are inconclusive. Hannish and Guerra (2000) found that White students were more likely to be victims

of bullying. Nansel et al. (2001) reported higher incidences of Latinx students as perpetuators of bullying, and higher rates of African American adolescents as victims. Mouttapa et al. (2004) found that Asian students were more likely than Latinx students to perpetuate bullying. However, Seals and Young (2003) found no significant differences among students of different ethnic and racial backgrounds. Thus, we have an incomplete understanding of how school size, school type/configuration, and student demographic characteristics influence school violence – especially as it relates to bullying. We attempt to provide insights into these issues within our study.

Method

To respond to our research questions, we designed our study to include three urban career academies that differed in configurations and one large urban comprehensive high school. We collected our data using an online questionnaire. We used a correlational research design to analyze our data.

Data collection procedures

Upon receiving approval from our institution's institutional review board (IRB), we identified a school coordinator (e.g., principal, career specialist) to assist with recruitment, ensuring students understood the study, obtained the consent forms, and completed the online questionnaire. To be eligible to participate in the study, students who were under 18 years of age were required to return signed parental permission and assent forms. For those over the age of 18, we required those students to sign a consent form to participate. Eligible students received an electronic survey link hosted by Qualtrics. The survey duration was approximately 10 to 15 minutes. Students who completed the survey received a 25 USD Amazon gift cards for their time and efforts. It is important to note that this study is a subset of a larger multi-year grant funded project.

Participants

Participants were 9th through 12th grade students from three high school information technology (IT)/STEAM career academies and one large comprehensive high school. In total, 1,909 students attempted the survey – including 1,004 from the career academies (response rate: 59.1%) and 905 from the comprehensive high school (response rate: 29.2%). After removing surveys that were not completed or participants who completed less than half of the questions, we obtained 1,404 completed or mostly completed surveys. We then applied the quality control mechanism embedded in the survey to exclude another 121 responses that had questionable validity. This step resulted in a usable sample of 1,283 students – including 669 career academy students and 614 comprehensive high school students.

Sampling procedure

We used purposive sampling to target three nationally dispersed urban Academies of IT/STEAM and a large urban comprehensive school for comparative purposes (Ary et al., 2006). The three academies represented the Midwestern, Southeastern, and Western parts of the country, and the large comprehensive school was located in the Southeastern region of the nation. We only selected academies affiliated with NAF (formerly known as the National Academy Foundation) because the NAF model provides the grounds for this research to ensure that selected academies follow standards of practice approved by a national organization recognized for such work. Thus, the sites were selected based on the following criteria: (a) a high participation rate (greater than 40%) of ethnically and racially diverse students; (b) a large percentage of students that qualified for free and/or reduced lunch (greater than 50%); and (c) urban schools that are geographically dispersed throughout the nation (Midwest, Southeast, and West). The comprehensive school was selected based on its size of student population

and its student diversity (e.g., ethnically and racially diverse students). Thus, the selected schools represent different contexts (e.g., communities) across the country.

School context

Diverse magnet academy

Diverse Magnet Academy was located in an urban area within the Southeastern region of the country. It was a public whole magnet career academy that was wall-to-wall (every student participated in the IT theme). Diverse Magnet Academy was comprised of 653 students and used a lottery system for admission; thus, students within the school district/county applied to gain admission. The ethnic and racial backgrounds of students were as follows: 57% White, 24% Latinx, 12% African American/Black, 4% Asian, 2% Multiracial, and 1% American Indian. The gender makeup was 31% female and 69% male. Forty-two percent of the student population qualified for free and/or reduced lunch. Diverse Magnet Academy had a 98% graduation rate (within four years) for the 2017 to 2018 academic year.

School-within-a-school academy

School-within-a-School Academy was located in an urban area within the Midwestern region of the country. It was a public high school with STEAM academies (e.g., Animation, Engineering, IT) within it – school-within-a-school model. All middle school students who were zoned for School-within -a-School Academy went to that school. School-within-a-School Academy is commonly referred to as a neighborhood school. It had a population comprised of approximately 700 students and all students participated in one of the academy's themes. The ethnic and racial backgrounds of students at School-within-a-School Academy were 98% African American/Black. One hundred percent of the student population qualified for free and/or reduced lunch. The gender makeup was 48% female. School-within-a-School Academy had a 95% graduation rate (within four years) for the 2017 to 2018 academic year.

Latinx-serving magnet academy

Latinx-serving Magnet Academy was located in an urban area within the Western region of the country. It was a public whole magnet career academy; thus, students within the school district/county applied to gain admission to the school. Latinx-serving Magnet Academy was comprised of approximately 383 students. The ethnic and racial backgrounds of students at Latinx-serving Magnet Academy were as follows: 93% Latinx, 4% Asian, 1% African American/Black, 1% White, 0.3% Multiracial, and 0.3% Hawaiian Native/Pacific Islander. The gender makeup was 52% female and 48% male. Ninety percent of students qualified for free and/or reduced lunch. Ninety-six percent of seniors in the 2017 to 2018 academic year graduated within four years.

Large comprehensive high school

Large Comprehensive High School was located in an urban area within the Southeastern region of the country. It was a large public comprehensive high school. The school was comprised of approximately 3,380 students. The ethnic and racial backgrounds of students at Large Comprehensive High School were as follows: 38% White, 28% African American/Black, 20% Latinx, 11% Asian, and 3% Multiracial. Fifty-seven percent of students qualified for free and/or reduced lunch. The graduation rate for the 2017 to 2018 academic year was 89%.

Data source and analyses

The participants responded to the following items on the questionnaire: "During this school year, how frequently have you been picked on or bullied by another student?" and "During this school year, how frequently have you witnessed an act of bullying?" (*Often, Sometimes, Rarely, Never*). Thus, our dependent variables were: bullying victimization and bullying observations. We used ordinal logistic

regression analyses to predict the probability of bullying victimization and observations of it. To facilitate interpretation, we reported marginal effects to highlight the probability of students who reported "Often", "Sometimes", "Rarely" and "Never" about bullying. The independent variables were school configuration (diverse magnet, school-within-a-school, Latinx-serving Magnet, and Large Comprehensive), gender (female, male), race/ethnicity (African American/Black, Asian/Pacific Islander, Latinx, Multi-racial, Other, White), grade level (9th through 12th), and parental education (high school or less, associate degree, bachelor's degree, graduate degree, and unknown/prefer not to answer). Because there were significant differences in the demographic characteristics of the participants from the four schools (see Table 1), they were included as covariates when we ran logistic regressions to predict the odds of bullying victimization and of observing bullying at school.

Results

As shown in Table 1, there were more male participants from Diverse Magnet Academy, while there were more female participants from School-within-a-School Academy and Large Comprehensive High School. The majority of participants from Latinx-serving Magnet Academy were Latinx, while the majority of participants from School-within-a-School Academy were African American/Black. The ethnic and racial backgrounds of students at Diverse Magnet Academy and Large Comprehensive High School were more diverse.

We summarized the frequencies of students reporting bullying victimization and bullying observations in Table 2. Chi-square tests revealed a significant difference in the proportion of students from the four schools who were victims of bullying or who observed others bullying victimization. For instance, 9.5% of participants from Diverse Magnet Academy reported that they were bullying victims, while 23.4% of participants from School-within-a-School Academy reported that they observed bullying at school.

As shown in Table 3, compared to the Large Comprehensive High School, the probability of participants experiencing bullying victimization "often" in the Diverse Magnet Academy was 3.37% lower, "sometimes" was 7.81% lower, "rarely" was 8.11% higher, and "never" was 19.29% higher. All of the differences were significant (p <.001). Compared to the Large Comprehensive High School, the

Table 1. Summary of participants' demographic backgrounds Ref. (0) by school type (N = 1264–1283).

	Diverse Magnet	School-within -a-School	Latinx-serving Magnet	Large Comprehensive	χ^2	P
Gender					106.12	<.001
Female	73 (25.0%)	112 (60.2%)	92 (50.0%)	363 (60.3%)		
Male	219 (75.0%)	74 (39.8%)	92 (50.0%)	239 (39.7%)		
Race/Ethnicity					955.9	<.001
Asian/Pacific Islander	20 (6.9%)	2 (1.1%)	4 (2.2%)	97 (16.1%)		
African American/Black	26 (8.9%)	158 (85.0%)	3 (1.6%)	105 (17.4%)		
Latinx	34 (11.6%)	0 (0%)	132 (71.7%)	53 (8.8%)		
Other	12 (4.1%)	7 (3.8%)	10 (5.4%)	25 (4.3%)		
Multi-racial	69 (23.6%)	18 (9.7%)	28 (15.2%)	145 (24.1%)		
White	131 (44.9%)	1 (0.5%)	7 (3.8%)	177 (29.4%)		
Grade					67.83	<.001
9^{th}	113 (38.4%)	45 (23.9%)	42 (22.5%)	224 (36.5%)		
10^{th}	62 (21.1%)	39 (20.7%)	35 (18.7%)	181 (29.5%)		
11^{th}	69 (23.5%)	43 (22.9%)	54 (28.9%)	121 (19.7%)		
12^{th}	50 (17.0%)	61 (32.5%)	56 (30.0%)	88 (14.3%)		
Parental Education					241.73	<.001
High school or less	54 (18.4%)	92 (48.9%)	123 (65.8%)	135 (22.0%)		
Associate degree	36 (12.2%)	28 (14.9%)	7 (2.7%)	73 (11.9%)		
Bachelor's degree	81 (27.6%)	21 (11.2%)	10 (5.4%)	160 (26.1%)		
Graduate degree	70 (23.8%)	14 (7.5%)	6 (3.2%)	163(26.5%)		
Unknown/prefer not to answer	53 (18.0%)	33 (17.6%)	41 (21.9%)	83 (13.5%)		

Information was missing for 19 participants.

Table 2. Frequencies of bullying victimization in career academies and a comprehensive high school (N = 1283).

	Bullying Victimization			Bullying Observations		
	No	Yes	χ^2 (df = 3)	No	Yes	χ^2 (df = 3)
School			24.6***			72.4***
Diverse Magnet Academy (n = 294)	266 (90.5%)	28 (9.5%)		255 (86.7%)	39 (13.3%)	
Latinx-serving Magnet Academy (n = 187)	168 (89.8%)	19 (10.2%)		161 (86.1%)	26 (13.9%)	
School-within-a-School Academy (n = 188)	144 (76.6%)	44 (23.4%)		119 (63.3%)	69 (36.7%)	
Large Comprehensive High School (n = 614)	500 (81.4%)	114 (18.6%)		400 (65.2%)	214 (34.9%)	

***p <.001.
Information was missing for 19 participants.

Table 3. Summary of probability of bullying victimization and witnessing bullying (N = 1264).

	Bullying Victimization				Witnessing Bullying			
	Often	Sometimes	Rarely	Never	Often	Sometimes	Rarely	Never
School								
Diverse Magnet Academy	−3.37%***	−7.81%***	8.11%***	19.29%***	−9.64%***	−12.81%***	4.34%***	26.79%***
Latinx-serving Magnet Academy	−2.11%*	−4.90%*	5.06%*	12.07%*	−7.89%***	−10.48%***	3.53%***	21.90%***
School-within -a-School Academy	0.19%	0.04%	0.46%	−1.09%	−0.14%	−0.18%	0	0.38%
Large Comprehensive High School	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Grade Level								
10th	0.27%	0.64%	0.66%	−1.57%	−0.02%	−0.02%	0%	0.49%
11th	0.48%	1.10%	1.14%	−2.73%	1.80%	2.39%	0.08%	−4.99%
12th	−1.54%*	−3.59%*	−3.70%*	8.84%*	−0.07%	−0.09%	−0.03%	1.92%
9th	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Gender								
Female	0%	0%	0%	0%	0%	0%	0%	0%
Male	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Ethnicity								
Asian	−1.73%	−4.04%	−4.24%	9.87%	−1.84%	−2.44%	−0.08%	5.09%
African-American /Black	−1.23%	−2.86%	−2.95%	7.04%	−0.52%	−0.70%	−0.23%	1.45%
Latinx	−2.45%**	−5.67%**	−5.85%**	13.97%**	−1.85%	−2.45%	−0.82%	5.12%
Other	1.75%	4.05%	4.18%	−9.97%	2.20%	2.92%	0.98%	−6.09%
Multi-racial	0.46%	1.08%	1.11%	−2.66%	0%	0.12%	0%	−0.25%
White	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Parental Education								
High school or less	1.55%*	3.59%*	3.71%*	−8.85%*	2.98%*	3.96%*	1.33%*	−8.27%*
Associate degree	2.61%**	6.03%**	6.23%**	−14.87%**	2.44%	3.24%	1.09%	−6.77%
Bachelor's degree	1.60%*	3.71%*	3.83%*	−9.14%*	1.05%	1.39%	0.47%	−2.90%
Unknown/no answer	1.35%	3.13%	3.22%	−7.71%	1.51%	2.00%	0.67%	−4.19%
Graduate degree	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)

*p <.05. **p <.01. ***p <.001.

probability of participants in the Latinx-serving Magnet Academy experiencing bullying victimization "often" was 2.11% lower, "sometimes" was 4.90% lower, "rarely" was 5.06% higher, and "never" was 12.07% higher. All of the differences were significant ($p < .05$). Compared to the Large Comprehensive High School, the probability of participants experiencing bullying victimization in the School-within -a-School Academy were not significantly different ($p = .82$).

As shown in Table 3, compared to the Large Comprehensive High School, the probability of participants at Diverse Magnet Academy observing bullying "often" was 9.64% lower, "sometimes" was 12.81% lower, "rarely" was 4.34% higher, and "never" was 26.79% higher. All of the differences were significant ($p < .001$). Compared to the Large Comprehensive High School, the probability of participants at the Latinx-serving Magnet Academy observing bullying "often" was 7.89% lower, "sometimes" was 10.48% lower, "rarely" was 3.53% higher, and "never" was 21.90% higher. All of

the differences were significant ($p < .001$). Compared to the Large Comprehensive High School, the probability of participants in the School-within-a-School Academy experiencing bullying victimization were not significantly different ($p = .93$).

Overall, respondents at the Diverse Magnet Academy and Latinx-serving Magnet Academy experienced a significantly lower probability of bullying victimization than their peers at the Large Comprehensive School (See Appendix A for a summary of the logistic regression parameter coefficients).

Discussion

In the United States, career academies have experienced tremendous growth (Lanford & Maruco, 2019; National Career Academy Coalition, 2019). Concomitantly, families have taken advantage of the opportunities of choice schools to send their children, particularly in areas where poverty and violence are common (Sugrue, 2014). However, investigating specific school contexts has garnered less attention in the literature on bullying (Hamlin, 2020). In our study, we investigated how school type predicted students' perceptions of bullying victimization and observations. The schools in our analysis operated in varying school-related contexts, namely urban career academies (configured as both school-within-a-school and magnet schools). We compared the bullying victimization and observations in the career academies to a large urban comprehensive high school. We found that school type/configuration was a significant predictor of bullying victimization and observations in schools.

We found that for participants in career academies operated as magnet schools, the probability of experiencing bullying victimization and observation was significantly lower than in a large comprehensive high school. This finding adds to the limited research resulting in positive student outcomes for youth in schools of choice (Ballou et al., 2006; Bifulco et al., 2008; Gamoran, 1996; Poppell & Hague, 2001). It also contributes to the growing body of literature pointing to schools of choice as safe refugee for adolescents coming of age and living in challenging urban neighborhoods (Astor et al., 2010; Hamlin, 2020; Sugrue, 2014). Further, our study adds to Frankenberg et al.'s (2008) study who found that whole school magnet schools might be more beneficial for students than a school-within-a-school model. It is important to note that over 90% of the students at Latinx-serving Magnet Academy were Latinx, qualified for free and/or reduced lunch, and were growing up in a high crime neighborhood.

Yet, we found students that were in a career academy that operated as a neighborhood school – under a school-within-a school model – did not experience bullying victimization or observations significantly different from students in a large comprehensive high school. It is important to point out that both School-within-a-School and Latinx-serving Magnet Academy served a substantially high percentage (90% in Latinx-serving Magnet and 100% in School-within-a-School) of youth who qualified for free and/or reduced lunch. While the two academies served different student populations related to ethnic and racial demographics (91% Latinx in Latinx-serving Magnet and 98% African American in School-within-a-School), they had different perceptions of bullying within each school. Again, the main difference in the two schools seemed to be the recruitment mechanism – with the Latinx-serving Magnet Academy using an application procedure drawing students from the entire county through the magnet program, and School-within-a-School Academy serving students in the surrounding neighborhood.

It is also important to note that one of the distinguishing features of career academies is the small learning community, which is designed to promote a sense of community among learners. Even further, both of the magnet academies in this research study have small student populations. Researchers have examined the issue of school size as a predictor of bullying and school violence. However, results of studies related to school size and school violence are mixed (Cornell et al., 2013; Ferris & West, 2004; Klein & Cornell, 2010; Lleras, 2008; Mehta et al., 2013; O'Moore et al., 1997; Walker & Gresham, 1997). While it is quite possible that the small size and small learning community contributed to significantly lower victimization and observations of bullying at the magnet academies, it is not possible to verify this given our research design. Therefore, we recommend that researchers study the effect of small size as well as a small learning community on bullying.

In studying perceived indicators of bullying in schools as presented in our manuscript, we must highlight several limitations. First, we base our findings on only four schools that clearly are a small subset of schools and schooling configurations across the country – with substantially varying student racial compositions across the schools; hence, the schools in this study are not nationally representative. Second, this study does not include any controls for neighborhood factors contributing to school safety. Therefore, we are unable to determine how neighborhood factors contributed to bullying victimization or observations within the schools in this study. Third, the recruitment feature of students within each school may play a role in explaining the observed variations in bullying among the different types of schools. To that end, families who decide to send their children to magnet schools are likely to possess social capital that differentiates them from other students and families. These factors could lead to advantages for those students attending magnet schools and other schools of choice as well as heightened perceptions of safety within those schools (Cowen, 2010; Hamlin, 2017). Fourth, it is quite plausible that school size influences bullying victimization and observations, but our analyses are limited in its ability to control or address school size. While, the magnet schools are much smaller than the comprehensive school, we are not certain that school size was a contributing factor in lowering bullying victimization and observations. Fifth, the issue of self-selection could skew the results of this study, as the respondents of this study may not represent the entire student population of the four schools. As our study relied on student volunteers, it is unknown whether the findings represent the experiences of nonparticipating students due to possible self-selection bias.

We also present findings that raise a number of questions for further research. Based on the differences in School-within-a-School and the Magnet Academies, qualitative studies could yield insights into the school culture and climate of schools as well as how that might account for the nuanced findings in our study. In addition, researchers might consider how parents and families influence the decisions of students to participate in schools of choice. Researchers also need to examine the school culture, climate, and the experiences of students related to signature features of high school career academies (e.g., small learning communities, students sharing similar interests in a career theme, career and core subject curricular integration, supports from advisory boards, and experiences resulting from work-based learning activities). Moreover, future researchers might include different forms of bullying to disentangle which specific types of bullying children experience in their respective schools. With the growing number of students participating in career academies as well as schools of choice, it is imperative that we have a clearer understanding of students' psychosocial experiences related to their participation under different school conditions. This is of critical importance given the implications the findings could have for large urban comprehensive neighborhood schools that serve the masses.

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Appendix A. Summary of parameter coefficients in predicting bullying victimization and bullying observations (N = 1264)

	Bullying Victimization				Bullying Observations			
	Estimate	S.E.	t	p	Estimate	S.E.	t	p
School								
Diverse Magnet Academy	0.88	0.16	5.39	<.001	1.20	0.16	8.07	<.001
Latinx-serving Magnet Academy	0.55	0.23	2.39	0.02	0.98	0.20	4.79	<.001
School-within-a-School Academy	−0.05	0.21	−0.23	0.82	0.02	0.19	0.09	0.93
Large Comprehensive High School	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Grade Level								
10^{th}	−0.07	0.15	−0.47	0.64	0.02	0.14	0.15	0.88
11^{th}	−0.12	0.16	−0.78	0.44	−0.22	0.14	−1.55	0.12
12^{th}	0.40	0.18	2.29	0.02	0.09	0.15	0.56	0.57
9^{th}	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Gender								
Female	−0.002	0.12	−0.02	0.99	−0.002	0.11	−0.01	0.99
Male	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Ethnicity								
Asian	0.45	0.23	1.98	<.05	0.23	0.20	1.13	0.26
African-American/Black	0.32	0.20	1.60	0.11	0.07	0.19	0.35	0.73
Latinx	0.64	0.23	2.77	<.01	0.23	0.20	1.14	0.26
Other	−0.45	0.29	−1.58	0.11	−0.27	0.28	−0.99	0.32
Multi-racial	−0.12	0.17	−0.72	0.47	−0.01	0.16	−0.07	0.94
White	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)
Parental Education								
High school or less	−0.40	0.19	−2.10	<.05	−0.37	0.17	−2.22	<.05
Associate degree	−0.68	0.23	−2.98	<.01	−0.30	0.20	−1.49	0.14
Bachelor's degree	−0.42	0.20	−2.08	<.05	−0.13	0.18	−0.73	0.47
Unknown/no answer	−0.35	0.21	−1.71	0.09	−0.19	0.18	−1.03	0.30
Graduate degree	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	Ref. (0)	