

Report to the Chairman, Committee on Education and Labor, House of Representatives

November 2021

K-12 EDUCATION

Students' Experiences with Bullying, Hate Speech, Hate Crimes, and Victimization in Schools



GAO@100 Highlights

Highlights of GAO-22-104341, a report to the Chairman, Committee on Education and Labor, House of Representatives

Why GAO Did This Study

Hostile behaviors, including bullying, harassment, hate speech and hate crimes, or other types of victimization like sexual assault and rape, in schools can negatively affect K-12 students' short- and long-term mental health, education, income, and overall wellbeing. According to Education's guidance, incidents of harassment or hate, when motivated by race, color, national origin, sex (including sexual orientation and gender identity), or disability status can impede access to an equal education. In certain circumstances, these kinds of incidents may violate certain federal civil rights laws, which Education's OCR is tasked with enforcing in K-12 schools.

GAO was asked to review hostile behaviors in K-12 schools. This report examines (1) the prevalence and nature of hostile behaviors in K-12 public schools; (2) the presence of K-12 school programs and practices to address hostile behaviors; and (3) how Education has addressed complaints related to these issues in school years 2010-11 through 2019-20.

GAO conducted descriptive and regression analyses on the most recent available data for two nationally generalizable federal surveys: a survey of 12- to 18-year-old students for school years 2014-15, 2016-17, and 2018-19, and a survey of schools for school years 2015-16 and 2017-18. GAO also analyzed 10 years of civil rights complaints filed with OCR against schools; reviewed relevant federal laws, regulations, and documents; and interviewed relevant federal and national education and civil rights organization officials. GAO incorporated technical comments from Education as appropriate.

View GAO-22-104341. For more information, contact Jacqueline M. Nowicki at (617) 788-0580 or nowickij@gao.gov.

November 2021

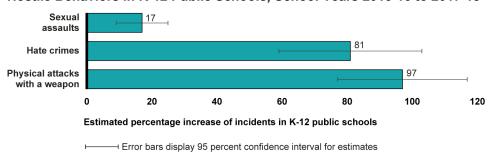
K-12 EDUCATION

Students' Experiences with Bullying, Hate Speech, Hate Crimes, and Victimization in Schools

What GAO Found

Students experience a range of hostile behaviors at schools nationwide, according to GAO's analysis of nationally generalizable surveys of students and schools. About one in five students aged 12 to 18 were bullied annually in school years 2014-15, 2016-17, and 2018-19. Of students who were bullied in school year 2018-19, about one in four students experienced bullying related to their race, national origin, religion, disability, gender, or sexual orientation. About one in four of all students aged 12 to 18 saw hate words or symbols written in their schools, such as homophobic slurs and references to lynching. Most hostile behaviors also increased in school year 2017-18, according to our analysis of the school survey. Hate crimes—which most commonly targeted students because of their race and national origin—and physical attacks with a weapon nearly doubled (see figure). Sexual assaults also increased during the same period.

Hostile Behaviors in K-12 Public Schools, School Years 2015-16 to 2017-18



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Nearly every school used programs or practices to address hostile behaviors, and schools' adoption of them increased from school year 2015-16 to 2017-18, according to our analysis of the school survey. About 18,000 more schools implemented social emotional learning and about 1,200 more used in-school suspensions. Additionally, 2,000 more schools used school resource officers (SRO)—career officers with the ability to arrest students—in school year 2017-18. SROs' involvement in schools, such as solving problems, also increased.

The Department of Education resolved complaints of hostile behaviors faster in recent years, due in part to more complaints being dismissed and fewer complaints being filed. In the 2019-20 school year, 81 percent of such resolved complaints were dismissed, most commonly because Education's Office for Civil Rights (OCR) did not receive consent to disclose the complainant's identity to those they filed the complaint against. Complaints of hostile behaviors filed with OCR declined by 9 percent and 15 percent, respectively, in school years 2018-19 and 2019-20. Civil rights experts GAO interviewed said that in recent years they became reluctant to file complaints on students' behalf because they lost confidence in OCR's ability to address civil rights violations in schools. The experts cited, in part, Education's rescission of guidance to schools that clarified civil rights protections, such as those for transgender students. Since 2021, Education has started reviewing or has reinterpreted some of this guidance.

Contents

Letter		1
	Background	6
	Students Experience a Range of Hostile Behaviors at Schools	4.4
	Nationwide Nearly Every School Has Used Programs or Practices to Address	14
	Hostile Behaviors	26
	Recently, Education Resolved Complaints of Hostile Behaviors Faster, Due in Part to More Dismissals and Fewer Complaints	
	Filed	41
	Agency Comments	52
Appendix I	Objective, Scope, and Methodology	53
Appendix II	Regression Analysis	59
Appendix III	GAO Contact and Staff Acknowledgments	84
Tables		
	Table 1: Selected Department of Education Documents and	
	Resources on Addressing Discrimination, Including Harassment	11
	Table 2: Estimated Number of Hate Crimes in K-12 Public	- 11
	Schools, School Years 2015-2016 to 2017-2018	22
	Table 3: Estimated Percentage of K-12 Public Schools with	
	School Resource Officers (SRO) That Had Agreements on Roles and Responsibilities, School Years 2015-2016	
	to 2017-2018	40
	Table 4: Average Number of Days to Resolve Complaints of	
	Hostile Behaviors in K-12 Schools Filed with the Department of Education's Office for Civil Rights (OCR)	
	by Resolution Type, School Years 2010-2011 to 2019-	
	2020	44

	Table 5: Variables Included in GAO's Regression Model on the Department of Education's School Crime Supplement (SCS) to the Department of Justice's National Crime Victimization Survey, School Years 2014-2015, 2016-2017, and 2018-2019	61
	Table 6: Associations of Regression Model Variables with Bullying based on the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey, School Years 2014-2015, 2016-2017, and 2018-2019	63
	Table 7: Created Variables Used in the Regression Analysis of the Department of Education's School Survey on Crime and Safety (SSOCS), School Years 2015-2016 and 2017-2018	69
	Table 8: Variables Included in Our Regression Models Using the Department of Education's School Survey on Crime and Safety (SSOCS), School Years 2016-2017 and 2017-2018	76
	Table 9: Associations of Multinomial Logistic Regression Model Variables based on the Department of Education's School Survey on Crime and Safety, School Years 2015-2016 and 2017-2018	78
	Table 10: Associations of Poisson and Binary Logistic Regression Model Variables for the Department of Education's School Survey on Crime and Safety, School Years 2015-2016 and 2017-2018	81
Figures		
	Figure 1: Estimated Percentage of Students Who Were Bullied, by Presence or Availability of Alcohol, Drugs, Weapons, and Gangs in Their Schools, School Year 2018-2019	16
	Figure 2: Estimated Percentage of Students Experiencing Bullying Related to Identity in K-12 Public Schools, School Years 2014-2015, 2016-2017, and 2018-2019	18
	Figure 3: Estimated Percentage of Students Targeted by a Hate- Related Word in K-12 Public Schools, by Identity, School	
	Years 2014-2015, 2016-2017, and 2018-2019 Figure 4: Estimated Number of K-12 Public Schools Where at Least One Hate Crime Occurred by Student Identities	20
	Targeted, School Years 2015-2016 and 2017-2018 Figure 5: Example of K-12 Public School Response to Hate	22 23

Figure 6: Estimated Number of Rapes or Attempted Rapes and Sexual Assaults in K-12 Public Schools, School Years	
2015-2016 to 2017-2018	24
Figure 7: Estimated Number of Physical Attacks with Weapons	'
and Threats of Attack with Weapons in K-12 Public	
Schools, School Years 2015-2016 to 2017-2018	25
Figure 8: Estimated Number of Physical Attacks without Weapons	
in K-12 Public Schools, School Years 2015-2016 to 2017-	
2018	26
Figure 9: Estimated Percentage of K-12 Public Schools with	
Student Programs to Address Hostile Behaviors and	
Promote School Safety, School Years 2015-2016 and	
2017-2018	28
Figure 10: Estimated Percentage of K-12 Public Schools with	
Diversity Groups, School Years 2015-2016 and 2017-	
2018	30
Figure 11: Estimated Percentage of K-12 Public Schools Offering	
Training to Teachers, Staff, and Parents to Address	
Hostile Behaviors and Promote School Safety, School	
Years 2015-2016 and 2017-2018	31
Figure 12: Estimated Percentage of K-12 Public Schools with	
Available Mental Health Services, School Year 2017-	
2018	33
Figure 13: Estimated Percentage of Disciplinary Actions Most	
Commonly Available and Used to Address Issues in K-12	
Public Schools, School Years 2015-2016 and 2017-2018	34
Figure 14: Security Mechanisms Most Commonly Used to	
Maintain Safety in K-12 Public Schools Increased, School	
Years 2015-2016 and 2017-2018	36
Figure 15: Examples of Security Mechanisms in K-12 Public	
Schools	37
Figure 16: School Resource Officers' (SRO) Most Common	
Activities (Estimated), School Years 2015-2016 and	
2017-2018	39
Figure 17: Average Resolution Time (days) of Complaints of	
Hostile Behaviors in K-12 Schools Filed with the	
Department of Education's Office for Civil Rights, School	
Years 2010-2011 to 2019-2020	42
Figure 18: Department of Education's Office for Civil Rights'	
(OCR) Complaint Processing Procedures and Resolution	
Types	43

Figure 19: Percentage of Resolved Complaints of Hostile	
Behaviors in K-12 Schools Filed with Education's Office	
for Civil Rights, by Resolution Type, School Years 2010-	
2011 to 2019-2020	46
Figure 20: Five Most Common Reasons for Dismissals of	
Complaints of Hostile Behaviors in K-12 Schools by	
Education's Office for Civil Rights, School Years 2010-	
2011 to 2019-2020	47
Figure 21: Complaints of Hostile Behaviors in K-12 Schools Filed	
with the Department of Education's Office for Civil Rights,	
School Years 2010-2011 to 2019-2020	49

Abbreviations

Education U.S. Department of Education Health and Human Services U.S. Department of Health and

Human Services

Justice U.S. Department of Justice
OCR Education Office for Civil Rights
SAMHSA Substance Abuse and Mental Health

Services Administration

SCS School Crime Supplement to the

National Crime Victimization Survey

Section 504 Section 504 of the Rehabilitation Act

of 1973

SRO School Resource Officer

SSOCS School Survey on Crime and Safety
Title II Title II of the Americans with Disabilities

Act of 1990

Title VI Title VI of the Civil Rights Act of 1964
Title IX Title IX of the Education Amendments

of 1972

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.

Washington, DC 20548

November 24, 2021

The Honorable Robert C. "Bobby" Scott Chairman Committee on Education and Labor House of Representatives

Dear Mr. Chairman:

Every year millions of K-12 students experience hostile behaviors including bullying, hate speech, and hate crimes while in school. In recent years, the U.S. Departments of Education and Justice have issued reminders to schools about their obligations to address harassment and discrimination targeting Muslim, Asian-American, Jewish, LGBTQI+, and immigrant students.¹ According to Education's guidance, incidents of harassment or hate, when motivated by race, color, national origin, sex (including sexual orientation and gender identity), or disability status can impede access to an equal education.² In certain circumstances, these kinds of incidents may violate one or more federal civil rights laws or regulations.

Hostile behaviors, like sexual assault, rape, and hate crimes, are generally underreported to authorities, according to Justice's Bureau of Justice Statistics and the Federal Bureau of Investigation.^{3, 4} In other cases, allegations are reported but ignored for years. For example, a

¹While a number of variations on this acronym are currently in use to describe individuals with diverse sexual orientations and gender identities, in this report, we define LGBTQI+ as lesbian, gay, bisexual, transgender, queer, questioning, or intersex. The "plus" is meant to be inclusive of identities that may not be covered by the acronym LGBTQI, including asexual, non-binary, and individuals who identify their sexual orientation or gender identity in other ways.

²Title VI of the Civil Rights Act of 1964 does not explicitly cover discrimination on the basis of religion. In certain cases, Education may become involved in investigations of allegation of discrimination or harassment based on religion and national origin. Education does, however, collect information on harassment based on religion.

³U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics, Criminal Victimization, NCJ 255113 (2020).

⁴Federal Bureau of Investigation, FBI Baltimore Launches Hate Crimes Awareness Campaign (Baltimore, Md.: 2021), accessed October 19, 2021, https://www.fbi.gov/contact-us/field-offices/baltimore/news/press-releases/fbi-baltimore-launches-hate-crimes-awareness-campaign.

2019 investigation by Education's Office for Civil Rights (OCR) revealed that sexual harassment, sexual assault, and rape of students by other students and staff in Chicago Public Schools persisted for years, creating a hostile environment as the district failed to respond to allegations. 5 OCR reported that the district "management, handling, and oversight of complaints of . . . sexual harassment [of students] have been in a state of disarray." Further, OCR reported that the "the district's investigations were poorly managed and were often conducted by staff who were not properly trained." According to OCR, over the course of the investigation, "the district acknowledged systemic failures to ensure a prompt and equitable response to student sexual harassment complaints," which was "consistent with OCR's . . . review of the information produced in connection with 2,800 student on student complaints and 357 adult on student complaints." More recently, in September 2021, Justice reported that school and district officials in Utah's Davis School District "had actual knowledge of at least 212 incidents in which Black students were called the n-word across 27 schools, as well as additional incidents of racebased harassment of Black or Asian-American students." For example, according to Justice, Black students in the Davis School District reported that "White and other non-Black students routinely called Black students the n-word . . . [said] that their skin was dirty and looked like feces . . . taunted Black students with monkey noises, [and] touch[ed] and pull[ed] their hair."7 Justice also found that school and district officials ignored student and parent complaints about hostile behaviors, and "were deliberately indifferent to known racial harassment of students." Justice's investigation also "found that the district disregarded student witnesses who corroborated allegations and took no or minimal action to eliminate the hostile environment. For example, one school received a complaint that a teacher constantly ridiculed a Hispanic student and taunted him for working at a taco truck (though the student did not)." Justice's

⁵U.S. Department of Education, Office for Civil Rights, Letter to the Chicago Public Schools District, 05-15-1178 and 05-17-1062 (2019).

⁶U.S. Department of Justice, Civil Rights Division, Education Opportunities Section, Letter to the Davis School District, DJ 169-77-26 SS:WP:AV:JJ and USAO:2019V00231 (2021).

⁷Among other examples, Justice reported that "peers taunted Black students . . . repeatedly referencing slavery and lynching, and telling Black students 'go pick cotton' and 'you are my slave'" and that a "White student dressed as Hitler for Halloween, marched in a parade throughout his elementary school while performing the Nazi salute, and no school staff stopped him or reported his costume and behavior to school administration."

investigation "uncovered systemic failures in the district's handling of complaints of racial student-on-student and staff-on-student harassment."

Exposure to such harassment and victimization can have lifelong consequences for students' overall well-being if left unaddressed.8 These may include: depression, anxiety, involvement in interpersonal violence or sexual violence, substance abuse, poor social functioning, and poor school performance, including lower grade point averages, standardized test scores, and poor attendance. The Centers for Disease Control (CDC) reported that youth who report frequently bullying others and youth who report being frequently bullied are at increased risk for suicide-related behavior. It also reported that the serious and lasting negative effects on mental health and overall well-being affect youth involved in bullying in any way including: those who bully others, those who are bullied, as well as those who both bully others and are bullied by others (bully-victims). According to CDC, even youth who have observed but not participated in bullying behavior report significantly more feelings of helplessness and less sense of connectedness and support from responsible adults (parents/schools) than youth who are have not witnessed bullying behavior.

Some federal agencies have long recognized the importance of providing resources for students, parents, school staff, and others struggling with such issues. For example, stopbullying.gov, a federal government website managed by the Department of Health and Human Services, provides information from various government agencies on what bullying is, what cyberbullying is, who is at risk, and how to prevent and respond to bullying. These include, among other things, information on how to file complaints with Education and Justice, how to find counselors and local mental health services, how to document and report cyberbullying, and contact information for the National Suicide Prevention Lifeline. Health and Human Services' Substance Abuse and Mental Health Services Administration (SAMHSA) is responsible for maintaining the National Suicide Prevention Lifeline—(800) 273-8255.9 The Lifeline is a network of over 150 crisis centers nationwide that offer free, confidential support from trained counselors for individuals in crisis. More recently, In October

⁸K. Wang, et al., *Indicators of School Crime and Safety: 2019*, NCES 2020-063/NCJ 254485 (Washington, D.C.: National Center for Education Statistics, U.S. Department of Education, and Bureau of Justice Statistics, Office of Justice Programs, U.S. Department of Justice, 2020).

⁹⁴² U.S.C. § 290bb-36c

2021, Education and Justice also released information on supporting students at the risk of self-harm during the COVID-19 pandemic, including students being bullied related to physical or mental health disabilities. ¹⁰ The document includes steps schools can take to create a supportive environment for students, as well as contact information and links to Health and Human Services-recommended crisis resources such as the National Suicide Prevention Lifeline and information on where to find 24/7 crisis intervention and suicide prevention services for LGBTQI+ youth.

You asked us to examine hostile behaviors, such as bullying, harassment, hate, and victimization in K-12 public schools. This report examines: (1) the prevalence and nature of hostile behaviors in K-12 public schools; (2) the presence of K-12 school programs and practices to address hostile behaviors; and (3) how Education has addressed complaints related to these issues in school years 2010-11 through 2019-20.

To address the first two objectives, we analyzed the most recent data from two nationally generalizable federal surveys. To address the third objective, we analyzed 10 years of Education's OCR case management system data. The surveys and case management system are:

• School Crime Supplement to the National Crime Victimization Survey (student survey). We analyzed data from Education's biennial survey of students between the ages of 12 to 18 for school years 2014-15, 2016-17, and 2018-19, the most recent available. We conducted a descriptive analysis of the data to learn about the prevalence of hostile behaviors in K-12 public schools, and practices and programs schools use to address these behaviors. We also conducted a regression analysis to examine the relationship between

¹⁰U.S. Department of Justice Civil Right Division and U.S. Department of Education Office for Civil Rights, Supporting and Protecting the Rights of Students at Risk of Self-Harm in the Era of COVID-19 (2021), accessed November 18, 2021, https://www2.ed.gov/about/offices/list/ocr/docs/ocr-factsheet-students-self-harm-covid-19.pdf.

¹¹With a 95 percent confidence interval, we estimated that there were approximately 22 million students ages 12 to 18 (20,986,567 to 23,972,017) in school year 2014-15; 22 million students ages 12 to 18 (21,218,217 to 23,327,983) in school year 2016-17; and 23 million students ages 12 to 18 (21,733,074 to 24,488,300) in school year 2018-19. In general, the number of students ages 12 to 18 attending K-12 public schools in the United States has remained similar for the time periods we analyzed.

the prevalence of bullying and hate, and school characteristics, such as size, grade level, and demographics.

- School Survey on Crime and Safety (school survey). We analyzed data from Education's survey of K-12 schools for school years 2015-16 and 2017-18, the most recent available. We conducted a descriptive analysis to learn about the prevalence of hostile behaviors and school practices and programs to address these behaviors, such as teacher and student training, disciplinary actions, and security mechanisms, in K-12 public schools. Additionally, we conducted a regression analysis to examine the association between the incidence of bullying, harassment, hate, and victimization, and school practices and programs.
- OCR Case Management System. We analyzed data from Education's OCR case management system to identify trends in the types and numbers of complaints, resolutions, and processing times of hostile behaviors in K-12 schools related to race, color, national origin, sex, or disability status for school years 2010-11 through 2019-20.

We assessed the reliability of these data by reviewing existing documentation about the data and performing electronic testing on required data elements and determined they were sufficiently reliable for the purposes of our analysis.

In addition, we conducted a search of recent media articles published between January 2019 and September 2020 to identify reported incidents of bullying, harassment, hate, and victimization of K-12 students related to race, color, national origin, religion, sex, or disability status. We randomly selected examples of these reported incidents and used them for illustrative purposes in the report. We did not independently verify these incidents. Finally, we reviewed relevant federal agency documentation, regulations, and laws; and interviewed relevant federal and national education officials and civil rights organization experts. See appendix I for detailed information about our methodology.

We conducted this performance audit from May 2020 to November 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain

¹²Respondents to the school survey are primarily principals and other knowledgeable school administrators. With a 95 percent confidence interval, we estimated 83,591 schools (83,532 to 83,651) in school year 2015-16 and 82,288 schools (82,190 to 82,385) in school year 2017-18. In general, the number of public schools in the United States has remained similar for the time periods we analyzed.

sufficient, appropriate evidence to provide a reasonable basis for our findings, and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Background

Hostile Behaviors

For the purposes of this report, the term hostile behaviors is used as an umbrella term to capture a range of behaviors. These behaviors are not necessarily mutually exclusive, and can overlap. We defined these terms as follows:¹³

- **Bullying.** Unwanted, aggressive behavior among school-aged children that involves an observed or perceived power imbalance, physically or socially. The behavior can be repeated, or has the potential to be repeated, over time. Such behavior can involve verbal, social, or physical incidents—for example, students being made fun of, called names, or insulted; being the subject of rumors; being threatened with harm; being pushed, shoved, tripped, or spit on; being made to do things they did not want to; being excluded from activities on purpose; or having their property destroyed on purpose.
- Cyberbullying. Bullying that occurs when willful and repeated harm is inflicted through the use of computers, cell phones, or other electronic devices.
- Harassment. Conduct that is unwelcome and denies or limits a student's ability to participate in or benefit from a school's education program. All students can be victims of harassment and the harasser can share the same characteristics as the victim.
- Hate speech. Words or symbols—either verbally directed at students or written on school surfaces—that express or incite hatred against a

¹³Unless otherwise noted, we used Education's definitions as listed in the School Survey on Crime and Safety for school year 2017-18.

¹⁴We developed our bullying definition based on how the term is used in questions from Education's School Crime Supplement to Justice National Crime Victimization Survey and the School Survey on Crime and Safety.

group or individuals based on their belonging to a specific identity group. 15

- Hate crimes. A committed criminal offense that is motivated, in whole
 or in part, by the offender's bias(es) against a race, ethnicity, national
 origin, religion, disability, sex, sexual orientation, or gender identity.
- Physical attack or fight. An actual and intentional touching or striking of another person against their will, or the intentional causing of bodily harm to an individual.
- Rape. Forced sexual intercourse (vaginal, anal, or oral penetration).
 This includes sodomy and penetration with a foreign object. All students, regardless of sex or gender identity, can be victims of rape.
- Sexual assault. An incident that includes threatened rape, fondling, indecent liberties, or child molestation. All students, regardless of sex or gender identity, can be victims of sexual assault.
- Victimization. Victimization includes direct personal experience of threats or harm, such as sexual assault, rape, or physical assault.¹⁶

Hostile behaviors may negatively affect students' short- and long-term mental health, education, income, and overall well-being. ¹⁷ These issues may persist into adulthood and may affect students who bully, as well as students who witness the bullying (see text box).

¹⁵We developed our hate speech definition based on academic literature as well as how the term is used in questions from Education's School Crime Supplement to the National Crime Victimization Survey for school year 2018-19 and the School Survey on Crime and Safety for school year 2017-18.

¹⁶For the purposes of this report, victimization is used as an umbrella term for sexual assault, rape, and physical attacks.

¹⁷National Academies of Sciences, Engineering, and Medicine, *Preventing Bullying Through Science, Policy, and Practice* (Washington, D.C.: 2016), accessed July 27, 2021, https://doi.org/10.17226/23482.

Effects of Hostile Behaviors on K-12 Students

Students who experience hostile behaviors are more likely to experience:

- Depression and anxiety
- Interrupted sleep and eating disorders
- Loss of interest in activities they used to enjoy
- Physical health complaints
- Decreased academic achievement and school participation

Students who bully others are more likely to:

- Abuse alcohol and other drugs in adolescence and as adults
- Get into fights, vandalize property, and drop out of school
- Engage in early sexual activity
- Have criminal convictions and traffic citations as adults
- Be abusive toward their romantic partners, spouses, or children as adults

Students who witness bullying are more likely to:

- Have increased use of tobacco, alcohol, or other drugs
- Have increased mental health problems, including depression and anxiety
- Miss or skip school

Source: www.stopbullying.gov. | GAO-22-104341

Relevant Federal Civil Rights Laws Enforced by Education

Education's OCR is responsible for enforcing certain federal civil rights laws. 18 These include:

- Title VI of the Civil Rights Act of 1964 (Title VI), which prohibits discrimination on the basis of race, color, or national origin in programs or activities that receive federal assistance;¹⁹
- Title IX of the Education Amendments of 1972 (Title IX), which
 prohibits sex discrimination in programs or activities that receive
 federal financial assistance;²⁰ and
- Section 504 of the Rehabilitation Act of 1973 (Section 504) and Title II of the Americans with Disabilities Act of 1990 (Title II), which prohibit discrimination on the basis of disability.²¹ Section 504 prohibits discrimination in programs or activities that receive federal financial assistance, and Title II prohibits discrimination by public entities, whether or not they receive federal financial assistance.

According to Education's guidance, schools might violate Title VI, Section 504, or Title II and related regulations enforced by Education when the hostile behavior that targets a victim based on an identity protected under

¹⁸The U.S. Departments of Justice and Health and Human Services also play a role in addressing hostile behaviors in schools. Justice's Educational Opportunities Section has jurisdiction to address certain complaints of prohibited harassment or other prohibited activity in public schools, as well as private schools that receive federal funding from Justice. In addition, Health and Human Services manages the website stopbullying.gov, which provides information about preventing and responding to bullying. Health and Human Services' SAMHSA funds and manages the National Suicide Prevention Lifeline, (800) 273-8255. This report focuses on OCR's enforcement of the civil rights laws listed

¹⁹42 U.S.C. § 2000d et seq. Title VI of the Civil Rights Act of 1964 prohibits discrimination on the basis of race, color, and national origin in programs and activities receiving federal financial assistance. Although Title VI does not prohibit discrimination on the basis of religion, according to Education, Title VI protects students of any religion from discrimination, including harassment, based on a student's actual or perceived shared ancestry or ethnic characteristics, or citizenship or residency in a country with a dominant religion or distinct religious identity.

²⁰20 U.S.C. § 1681 et seq.

²¹Section 504: 29 U.S.C. § 794; Title II: 42 U.S.C. § 12131 et seq. OCR also enforces the Age Discrimination Act of 1975, which prohibits discrimination based on age in programs or activities that receive federal financial assistance, and the Boy Scouts of America Equal Access Act of 2001, which prohibits public schools or state or local education agencies from excluding groups officially affiliated with the Boy Scouts of America from meeting on school premises or in school facilities if the opportunity is available to other youth or community groups. OCR's enforcement of these two Acts is excluded from this report.

relevant federal law is sufficiently serious that it limits the ability of a student to participate in or benefit from a school's program or activities, and is not adequately addressed by school employees. Relevant protected classes in this context include race, national origin, color, or disability.²²

Under Title IX, a recipient must follow Education's implementing regulations, as amended in 2020, which require, among other things, that a recipient with actual knowledge of sexual harassment respond promptly in a manner that is not deliberately indifferent.²³

According to Education's guidance, OCR's enforcement of these laws is primarily focused on responding to complaints of alleged violations. Anyone can file a complaint with OCR if they experienced, witnessed, or heard about an alleged violation. Once a complaint is received, OCR evaluates it to determine if an investigation is warranted, and if a violation is found, how the school district should address it. In addition to responding to complaints, OCR may also initiate investigations to examine potential systemic violations based on sources other than complaints.

In addition to responding to complaints of alleged civil rights violations, in recent years, Education has published several reminders detailing schools' responsibilities to address discrimination in schools, often in response to hostile incidents happening in schools (see table 1). For example, in a recent factsheet, Education described incidents that OCR could investigate, such as if students record and post on social media videos of themselves yelling "virus spreaders!" at their Asian American classmates, and then, after being made aware of the video, school

²²Other federal or state laws may provide additional legal protections. For example, the Department of Justice has jurisdiction over Title IV of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, sex, religion, or national origin by public elementary and secondary schools and public institutions of higher education. 42 U.S.C. § 2000c et seq.

²³Sexual harassment is defined under 34 C.F.R. § 106.30 in Education's Title IX implementing regulations. 34 C.F.R. § 106.44 outlines recipient's obligations to respond to sexual harassment.

administrators refuse to investigate or take any action to protect Asian American students from further harassment.²⁴

Table 1: Selected Department of Education Documents and Resources on Addressing Discrimination, Including Harassment

Date	Statute	Title and focus	Link
10/13/2021	Section 504 of the Rehabilitation Act of 1973 (Section 504) Americans with Disabilities Act of 1990 (Title II)	Supporting and Protecting the Rights of Students at Risk of Self-Harm in the Era of COVID-19 Education's Office for Civil Rights (OCR) and Justice's Civil Rights Division (CRT) issued a reminder for schools that students with mental health disabilities are protected by federal civil rights laws and shared resources for students at risk of self-harm.	https://www2.ed.gov/about/offices/list/ocr/docs/ocr-factsheet-students-self-harm-covid-19.pdf
8/19/2021	Title VI of the Civil Rights Act of 1964 (Title VI)	Confronting Discrimination Based on National Origin and Immigration Status Education's OCR and Justice's CRT issued an updated resource on confronting discrimination based on national origin and immigration status.	https://www2.ed.gov/about/offices/list/ ocr/docs/confronting-discrimination-national-origin-immigration-status
6/23/2021	Title IX of the Education Amendments of 1972 (Title IX)	Dear Educator Letter on 49th Anniversary of Title IX Education's OCR clarified Title IX's protection against discrimination based on sexual orientation or gender identity.	https://www2.ed.gov/about/offices/ list/ocr/correspondence/stakeholders/ educator-202106-tix.pdf
6/23/2021	Title IX	Confronting Anti-Lesbian, Gay, Bisexual, Transgender, Queer, Question, or Intersex+ (LGBTQI+) Harassment in Schools Education's OCR and the Justice's CRT explained that discrimination against students based on their sexual orientation or gender identity is a form of sex discrimination.	https://www2.ed.gov/about/offices/list/ ocr/docs/ocr-factsheet-tix-202106.pdf

²⁴U.S. Department of Education Office for Civil Rights and U.S. Department of Justice, Civil Rights Division, *Confronting COVID-19-Related Harassment in Schools A Resource for Families* (2021), accessed November 3, 2021, https://www2.ed.gov/about/offices/list/ocr/docs/ocr-factsheet-aapi-202105.pdf.

Date	Statute	Title and focus	Link
5/26/2021	Title VI Title IX Section 504	Letter to Educators regarding Discrimination Against Asian American and Pacific Islander Students	https://www2.ed.gov/about/offices/list/ ocr/correspondence/stakeholders/ educator-202105-aapi.pdf
		Education's OCR issued a reminder of schools' obligations to address increased harassment and violence directed at Asian American and Pacific Islanders.	
1/19/2021	Title VI	Questions and Answers on Executive Order 13899 (Combatting Anti-Semitism) and OCR's Enforcement of Title VI of the Civil Rights Act of 1964	https://www2.ed.gov/about/offices/list/ ocr/docs/qa-titleix-anti-semitism-20210119.pdf
		Education's OCR provided information on Executive Order 13899, Title VI, and enforcement of Title VI by OCR in cases involving anti-Semitism.	
6/26/2020	Title VI	56th Anniversary of the Civil Rights Act of 1964	https://www2.ed.gov/about/offices/list/ ocr/correspondence/stakeholders/
		As a result of recent events that contributed to racial discord and strife, Education issued a reminder to schools of their responsibilities to investigate discrimination based on race, color, or national origin.	20200625-qa-titlevi-56thanniversary.pdf
3/4/2020	Title VI	Letter from Assistant Secretary Marcus to Education Leaders on Preventing and Addressing Potential Discrimination Associated with COVID-19	https://www2.ed.gov/about/offices/list/ ocr/correspondence/stakeholders/ 20200304-covid-19-outbreak-statement.pdf
		Education reminded schools about their responsibilities to ensure healthy, safe, and free from bias or discrimination, particular in regards to COVID-19-related harassment of Asian Americans, including persons perceived to be of Chinese-American or Asian descent.	

Date	Statute	Title and focus	Link
6/6/2016	Title VI	Combatting Discrimination against Asian American, Native Hawaiian, and Pacific Islander (AANHPI) and Muslim, Arab, Sikh, and South Asian (MASSA) students	www.ed.gov/about/offices/list/ ocr/docs/aanhpi-massa-factsheet-201606.pdf
		Education's OCR, Justice's CRT, and the White House Initiative on Asian Americans and Pacific Islanders outlined technical assistance for combating discrimination against AANHPI and MASSA.	
10/21/2014	Title II Section 504	Dear Colleague Letter on Bullying of Students with Disabilities	http://www2.ed.gov/about/offices/list/ ocr/letters/colleague-bullying-201410.pdf
		Education's OCR reminded schools of the rights of students with disabilities, particular in regards to bullying	
10/26/2010	Title VI Title IX Section 504 Title II	Dear Colleague Letter on Bullying and Harassment Education's OCR reminded schools that student misconduct that falls under a school's antibullying policy also may trigger responsibilities under one or more of the federal antidiscrimination laws enforced by OCR. As of 2020, OCR noted that this document is inconsistent in some respects to Education's regulations implementing Title IX and Executive Orders 13988 and	https://www2.ed.gov/about/offices/list/ ocr/letters/colleague-201010.pdf

Source: GAO Analysis of Selected Department of Education Documents and Resources | GAO-22-104341

Students Experience a Range of Hostile Behaviors at Schools Nationwide

Bullying Is Widespread in Schools Nationwide

In general, bullying occurred in nearly every school, with about one in five students aged 12 to 18 (an estimated 5.2 million students in school year 2018-19) bullied each year, according to the most recent data available from nationally generalizable surveys of schools and students.^{25, 26, 27} Specifically, we estimate that:

 School officials were aware of students being bullied regularly in about 30 percent of schools and occasionally in about 64 percent of schools.²⁸

²⁵ The School Survey on Crime and Safety surveys a representative sample of schools. The School Crime Supplement surveys a representative sample of students as part of the National Crime Victimization Survey. We analyzed the school survey for school years 2015-16 and 2017-18 and the student survey for school years 2014-15, 2016-17, and 2018-19. We conducted descriptive analyses and regression analyses to better understand the prevalence of bullying, harassment, or violence. Unless otherwise stated, all data comparisons are statistically significant. Because the design used a probability procedure based on random selections, the sample is only one of a large number of samples that might have been drawn. Since each sample could have provided different estimates, we express our confidence in the precision of the particular sample's results as a 95 percent confidence interval. All estimates from the survey are subject to sampling error. See appendix I for more information on sampling error for survey estimates. See appendix II for more information on the regression methodology.

²⁶The 95 percent confidence interval for the estimated number of students bullied is 4.7 to 5.8 million students in school year 2018-19.

²⁷For the purposes of this report, students who said that they experienced any of the following behaviors were counted as having been bullied: being made fun of (e.g., name calling or insults); spreading rumors; threatening harm; being pushed, shoved, tripped, or spit on; being coerced to do things (e.g., give money); being excluded from activities on purpose; or having property destroyed. Education's school survey defined bullying as any unwanted aggressive behavior(s) by another youth or group of youths that involves an observed or perceived power imbalance and is repeated multiple times or is highly likely to be repeated. Bullying occurs among youth who are not siblings or current dating partners.

²⁸For the purposes of this report, bullying is "regular" if a school responded that it occurs daily, weekly, or monthly. The 95 percent confidence interval for the estimated percentage of schools reporting regular bullying is 29.9 to 30.5 percent in school year 2017-18. For schools reporting occasional bullying, the 95 percent confidence interval is 63.9 to 64.5 percent in school year 2017-18.

- School officials were aware of students being cyberbullied regularly in about 30 percent of schools and occasionally in about 52 percent of schools.²⁹
- Fewer than one-half of all bullied students (44 percent in school year 2018-19) reported the bullying to a teacher or another adult at school.³⁰

Our regression analysis of the student survey found that certain school characteristics were associated with more bullying, while controlling for other student and school characteristics.³¹ For example:

- middle school students were more likely to be bullied than high school students, and
- students in schools with 300 or fewer students were more likely to report being bullied than were students in schools with 1,000 or more students.

Our descriptive and regression analyses of the student survey found that certain aspects of school climate were associated with more bullying. Our descriptive analysis found that students who observed the presence or availability of drugs, alcohol, or weapons at school reported being bullied more than students who did not (see fig. 1).

Even when controlling for key student and school characteristics, our regression analyses found that certain aspects of school climate were associated with more bullying. For example:

 Schools experiencing widespread disorder in the classroom, student verbal abuse and disrespect of teachers, gang activities, and student racial/ethnic tensions were also more likely to report that bullying and cyberbullying occurred daily, weekly, or monthly, according to the school survey.

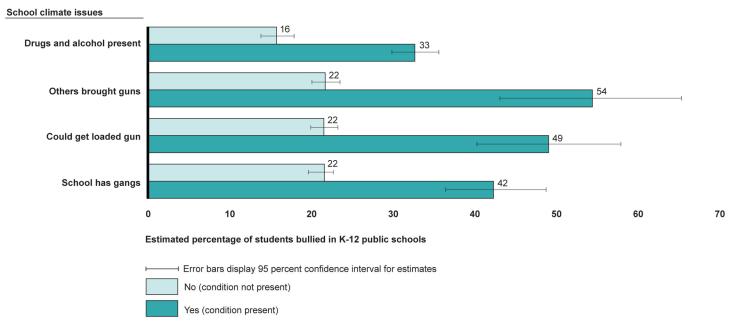
²⁹The 95 percent confidence interval for the estimated percentage of schools reporting regular cyberbullying is 29.8 to 30.3 percent and occasional cyberbullying is 51.9 to 52.8 percent in school year 2017-18.

³⁰The 95 percent confidence interval for the percentage of students who reported being bullied to an adult is 40 to 47 percent in school year 2018-19.

³¹All regression analysis results in this report are associational and do not imply a causal relationship. See appendix II for more details.

 Students who observed the presence or availability of drugs, alcohol, or weapons in their schools were also more likely to be bullied, according to the student survey.

Figure 1: Estimated Percentage of Students Who Were Bullied, by Presence or Availability of Alcohol, Drugs, Weapons, and Gangs in Their Schools, School Year 2018-2019



Source: GAO analysis of the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey for school year 2018-19. | GAO-22-104341

Bullying Related to Students' Identity

Of the estimated 5.2 million students bullied in school year 2018-19, one in four students (an estimated 1.3 million students) experienced bullying related to their race, national origin, religion, disability, gender, or sexual orientation, according to the student survey (see text box).³² Figure 2 shows the student identities that bullying most commonly targeted in schools.

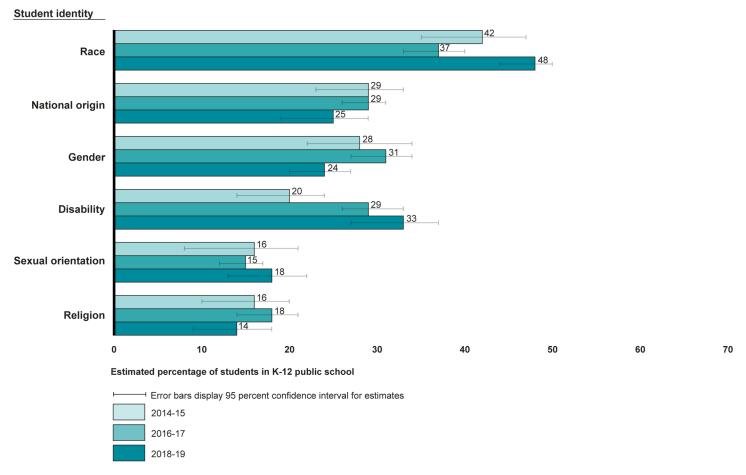
³²The 95 percent confidence interval for the estimated number of students that experienced bullying related to their race, national origin, religion, disability, gender, or sexual orientation is about 1 million to 1.5 million in school year 2018-19. We did not assess whether these incidents could constitute unlawful discrimination or hate crimes under federal or state law. The School Crime Supplement to the National Crime Victimization Survey asks survey respondents about gender and does not include questions about sex.

Examples of Media Reports of Bullying or Harassment of K-12 Students Related to Race, National Origin, Religion, Disability, Sex, Gender Identity, or Sexual Orientation, January 2019 to September 2020

- Students were sent a video of a fellow classmate wearing blackface and using a racial slur. After reporting it, one student was harassed by fellow students.
- A homophobic message was attached to the picture of a student on social media. When the victim confronted the perpetrator, the confrontation escalated into a physical fight.
- A transgender student emailed a teacher to ask that the teacher refer to her with female pronouns. The teacher refused and told the student to either identify as a man or switch classes.
- A Muslim student was physically attacked, subjected to anti-Muslim slurs, and had her hijab yanked off of her head on video.
- A Jewish student was harassed by another student who was using anti-Semitic slurs and Holocaust related threats. It culminated with the student making a swastika with tape on the classroom wall.
- A teacher at a high school was accused of criminal sexual conduct.
- Two high-school students pushing and hitting a student with autism were captured on video.

Source: GAO analysis of selected news media reports. | GAO-22-104341

Figure 2: Estimated Percentage of Students Experiencing Bullying Related to Identity in K-12 Public Schools, School Years 2014-2015, 2016-2017, and 2018-2019



Source: GAO analysis of the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey for school years 2014-15, 2016-17, and 2018-19. | GAO-22-104341

According to the school survey, the percentage of schools affected by racial or ethnic tension increased, from an estimated 58 percent to 61 percent from school years 2015-16 to 2017-18.³³ The estimated percentage of schools where students were sexually harassed or

³³The 95 percent confidence interval for the percent of schools affected by racial or ethnic tension regularly is 5.92 to 6.28 for 2015-16 (estimate 6.10) and 6.33 to 6.70 in school year 2017-18 (estimate 6.51). For those affected occasionally, the confidence interval is 51.44 to 52.45 (estimate 51.94) in school year 2015-16 and 53.57 to 54.32 (estimate 53.94) in school year 2017-18.

experienced harassment related to their sexual orientation or gender identity increased similarly during the same time period.³⁴

Hate Speech: Words or Symbols That Express or Incite Hatred

We estimate that about one in four students aged 12 to 18 (about 5.8 million students in 2018-19) saw hate words or symbols written at school in 2014-15, 2016-17, and 2018-19, according to the student survey.³⁵ These could include racial and homophobic slurs, anti-Semitic slurs and symbols, references to lynching and the Holocaust, and anti-immigrant rhetoric.

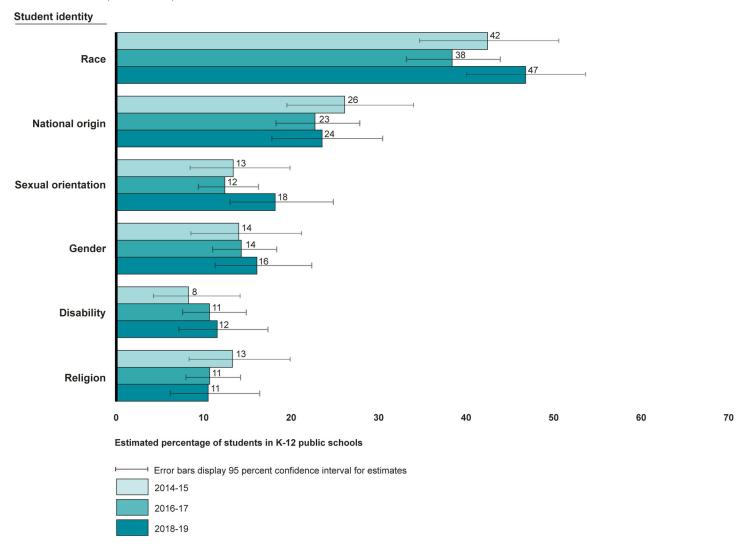
We estimate that about 7 percent of students (about 1.6 million students in school year 2018-19) were subjected to hate speech related to their race, religion, ethnic background/national origin, disability, gender, or sexual orientation.³⁶ Figure 3 shows the student identities that hate-related words most commonly targeted in schools, with race being the most common identity, by far. The textbox below lists examples of hate speech verbally directed at students from our analysis of media reports published in 2019 and 2020.

³⁴Data on harassment related to disability status and religion were not collected in the 2015-16 survey, therefore we were unable to test for any patterns in these incidents.

³⁵The 95 percent confidence interval for the estimated number of students that saw hate words or symbols written in their schools is 5.2 to 6.3 million in school year 2018-19.

³⁶The survey asked students if anyone had called them an insulting or bad name having to do with their race, religion, ethnic background or national origin, disability, gender, or sexual orientation. The survey subsequently referred to these as "hate-related words." The 95 percent confidence interval for the estimated number of students that were targets of hate speech in their schools is 6.19 to 8.24 percent or 1.4 to 1.9 million in school year 2018-19.

Figure 3: Estimated Percentage of Students Targeted by a Hate-Related Word in K-12 Public Schools, by Identity, School Years 2014-2015, 2016-2017, and 2018-2019



Source: GAO analysis of the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey for school years 2014-15, 2016-17, and 2018-19. | GAO-22-104341

Examples From Media Reports of Hate Speech Verbally Directed at Students

Students reported being taunted using phrases such as:

- Chinese virus or Asian virus (referring to COVID-19)
- Build that wall
- Go back to your country
- Where is your passport?
- · We are going to call ICE on you
- Wall jumper
- I'm going to lynch you
- Savages
- · Burn in the oven

Source: GAO analysis of media reports published from January 2019 to September 2020. | GAO-22-104341

Hate Crimes: Criminal Offenses Motivated, in Whole or in Part, by Bias

We estimate that the number of hate crimes in schools and the number of schools where at least one hate crime occurred almost doubled from 2015 -16 to 2017-18, according to our analysis of the school survey (see table 2).³⁷ Figure 4 shows the number of schools where hate crimes occurred and the student identities targeted, with hate crimes motivated by race or color the most common, by far.

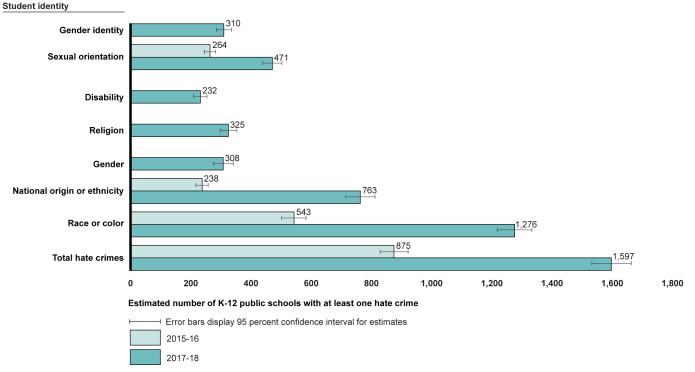
³⁷In school year 2015-16, of the estimated 83,591 schools nationwide, an estimated 875 schools had at least one hate crime occur. The 95 percent confidence interval for schools nationwide is 83,532 to 83,651 and for number of schools where at least one hate crime occurred is 829 to 922. In school year 2017-18, of the estimated 82,288 schools nationwide, an estimated 1,597 schools had at least one hate crime occur. The 95 percent confidence interval for schools nationwide is 82,190 to 82,385, and for number of schools where at least one hate crime occurred is 1,532 to 1,663.

Table 2: Estimated Number of Hate Crimes in K-12 Public Schools, School Years 2015-2016 to 2017-2018

	2015-16	2017-18	Change
Number of hate crimes	3,166	5,732	+ 81%
	(2,900 to 3,432)	(5,228 to 6,235)	(59 to 103%)
Number of schools where at	875	1597	+ 82%
least one hate crime occurred	(829 to 922)	(1532 to 1663)	(70 to 95%)

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for 2015-16 and 2017-18 | GAO-22-10434 Note: Numbers in parentheses provide 95 percent confidence intervals.

Figure 4: Estimated Number of K-12 Public Schools Where at Least One Hate Crime Occurred by Student Identities Targeted, School Years 2015-2016 and 2017-2018



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Note: To maintain confidentiality, data necessary to estimate the number of schools affected by crimes targeting students because of the students' gender, gender identity, disability, and religion in 2015-16 were not available.

Some schools and district officials have responded to incidents of hate speech or hate crimes by issuing statements condemning the incidents,

implementing new teacher and staff training, conducting listening sessions with students or parents, establishing protocols for addressing hate speech on campus, or creating spaces in their schools that celebrate diversity. For example, a school district worked with an organization with experience in matters of equity to study, among other things, students' experiences at school with regard to social, cultural, and racial identities, including instance of hostile behaviors. Figure 5 shows an example of a high school's response to hate-related incidents.

Figure 5: Example of K-12 Public School Response to Hate

members made a statement against hate.

After experiencing incidents of racism, high school community

Source: Calvert High School. | GAO-22-104341

Rape and Sexual Assault

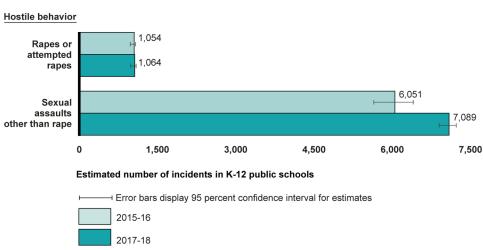
An estimated 1,064 rapes or attempted rapes occurred in 726 schools in school year 2017-18, similar to 2015-16 data, according to the school survey.³⁸ We also found that sexual assaults other than rape increased by an estimated 17 percent during the same time period (see fig. 6).³⁹ In addition, during this period:

³⁸The 95 percent confidence interval for the number of rapes in 2017-18 is 1009 to 1120. The 95 percent confidence interval for the number of schools reporting rape in school year 2017-18 is 689 to 763.

³⁹The 95 percent confidence interval for the percentage increase in sexual assaults other than rape in school year 2017-18 is 9.25 to 25.02 percent.

- The number of schools reporting at least one sexual assault increased, from an estimated 2,805 schools to 4,247 schools.⁴⁰
- An estimated 939 schools reported sexual misconduct from staff against students.⁴¹

Figure 6: Estimated Number of Rapes or Attempted Rapes and Sexual Assaults in K-12 Public Schools, School Years 2015-2016 to 2017-2018



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

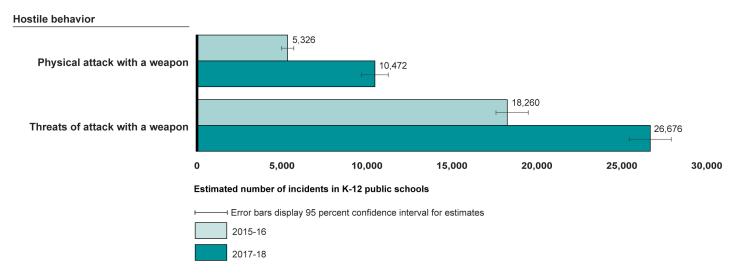
⁴⁰The 95 percent confidence interval for the number of schools reporting sexual assaults is 4,141 to 4,353 in school year 2017-18 and 2,716 to 2,894 in school year 2015-16. With a 95 percent confidence interval, the percentage of schools reporting at least one sexual assault was about 3.4 percent (2.6 to 4.2 percent) in school year 2015-16 and about 5.2 percent (5 to 5.3 percent) in school year 2017-18.

⁴¹The 95 percent confidence interval for number of schools reporting sexual misconduct is 895 to 982 in school year 2017-18. In school year 2015-16, Education's School Survey on Crime and Safety did not ask about sexual misconduct.

Physical Attacks

We found that the estimated number of physical attacks in schools with and without weapons increased from school year 2015-16 to 2017-18 (see figs. 7 and 8).⁴² While the number of physical attacks with weapons are much less prevalent, they almost doubled during this time period.⁴³ Physical attacks without weapons were the most common type of incident, by far.

Figure 7: Estimated Number of Physical Attacks with Weapons and Threats of Attack with Weapons in K-12 Public Schools, School Years 2015-2016 to 2017-2018

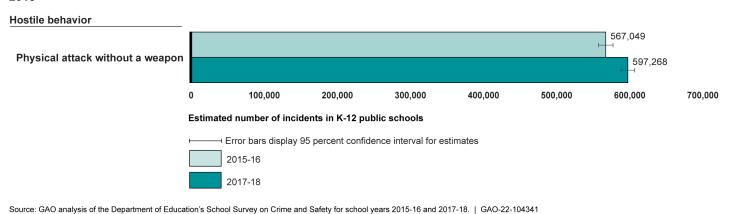


Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

⁴²With a 95 percent confidence interval, there were about 5,326 (4,968 to 5,684) incidents of physical attack with a weapon in school year 2015-16 and about 10,472 (9,673 to 11,270) incidents of physical attack with a weapon in school year 2017-18. With a 95 percent confidence interval, there were about 567,049 (556,750 to 577,349) incidents of physical attack without a weapon in school year 2015-16 and 597,268 (587,740 to 606,796) incidents of physical attack without a weapon in school year 2017-18.

⁴³With a 95 percent confidence interval, the number of physical attacks with weapons nearly doubled (an estimated 96.63 percent increase) (76.65 to 116.62 percent) in school year 2017-18.

Figure 8: Estimated Number of Physical Attacks without Weapons in K-12 Public Schools, School Years 2015-2016 to 2017-2018



Nearly Every School Has Used Programs or Practices to Address Hostile Behaviors

Programs Have Been Common in Schools in Recent Years, and Their Adoption Increased in School Year 2017-18

Training and Programs for Students

Nationwide, in school years 2015-16 and 2017-18, schools used a variety of programs and approaches—including programs and training for students, teachers, and staff; diversity groups; mental health services; disciplinary action; security mechanisms; and school resource officers—to help address hostile behaviors and to create positive school environments.⁴⁴ In addition, schools added more programs and practices to address hostile behaviors in school year 2017-18.

We estimate that nearly all schools offered students programs, including social emotional learning, peer mediation, and restorative circles, to address hostile behaviors in school years 2015-16 and 2017-18,

⁴⁴We analyzed Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. We conducted descriptive analyses and regression analyses to better understand the presence of school programs and practices that could address bullying, harassment, or violence, and the relationship between those programs and practices and these issues. Unless otherwise stated, all data comparisons presented are statistically significant.

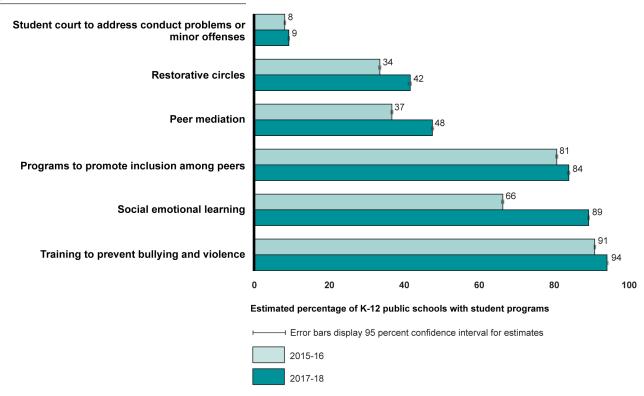
according to our analysis of the school survey (see fig. 9).⁴⁵ From school year 2015-16 to 2017-18, the percentage of schools that used such programs generally increased. Schools that offered these programs to students had slightly less bullying occur regularly than schools that did not offer such programs.⁴⁶ According to subject matter experts we interviewed, schools that experience bullying on a regular basis—daily, weekly, and monthly—benefit from programming for students, which help improve school climates.

⁴⁵According to Education's School Survey on Crime and Safety for school year 2017-18, restorative circles are a formal mediation process led by a facilitator that brings affected parties of a problem together to explore what happened, reflect on their roles, find a solution, and ultimately restore harmony to individual relationships and the larger community.

⁴⁶For the purposes of this report, bullying is "regular" if it occurs daily, weekly, and monthly. With a 95 percent confidence interval, an estimated 30 percent of schools (29.7 to 30.3) where regular bullying occurred had student programs, compared to 32 percent of schools (31.3 percent to 33.4 percent) where regular bullying occurred without such programs. While the comparison between schools where regular bullying occurred with student programming and schools without those programs are statistically different, the difference may not be of practical importance. An estimated 65 percent of schools (64.4 to 65.05) where occasional bullying occurred had student programs, compared to 56 percent (54.9 to 57.3) where bullying occasionally occurred without such programs.

Figure 9: Estimated Percentage of K-12 Public Schools with Student Programs to Address Hostile Behaviors and Promote School Safety, School Years 2015-2016 and 2017-2018

Student program



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

There was an increase of about 17 percent (or about 5,000) in schools offering diversity groups in school year 2017-18 (see fig. 10), and schools where bullying regularly occurred added LGBTQI+ and cultural clubs at higher rates than those with occasional bullying.⁴⁷ For example, between school years 2015-16 and 2017-18, in schools where bullying regularly occurred:

- The number of schools with the presence of LGBTQI+ clubs increased by an estimated 55 percent, compared to a 32 percent increase where bullying happened occasionally.⁴⁸
- The number of schools with the presence of cultural clubs increased by an estimated 22 percent, compared to a 9 percent increase where bullying happened occasionally.⁴⁹

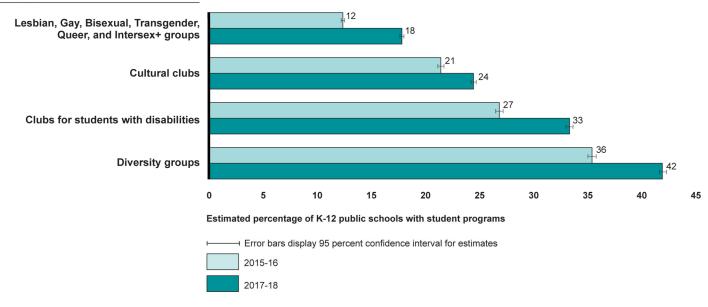
⁴⁷For the purposes of this report, schools with diversity groups were those with at least one of the following: LGBTQI+ groups, cultural groups, or clubs for students with disabilities. The 95 percent confidence interval for the percentage increase, from school years 2015-16 to 2017-18, in number of schools that offered diversity groups to students is 15.1 to 18.3 percent. In addition to LGBTQI+ and cultural clubs, schools offered clubs for students with disabilities. From 2015-16 to 2017-18, we found that the number of schools with the presence of clubs for students with disabilities increased by an estimated 18.5 percent (15.3 to 22) in schools with regular bullying, compared to a 23 percent (20.4 to 25.5) increase where bullying happened occasionally. These comparisons are not statistically significant.

⁴⁸The 95 percent confidence interval for the percentage increase, from school year 2015-2016 to 2017-18, in number of schools with LGBTQI+ groups where bullying regularly occurred is 50.8 to 60 and in schools where bullying happened occasionally is 28.7 to 35.3. From school years 2015-16 to 2017-18, we found that an estimated 4,336 schools (4,079 to 4,592) added these groups, up from an estimated 10,329 schools (10,182 to 10,475) that had these groups in school year 2015-16. We found that schools that never experienced bullying added these groups at higher rates (an estimated 98 percent), however these schools represented the smallest number of schools (an estimated 178 schools) compared to schools where bullying regularly and occasionally occurred (an estimated 4,157).

⁴⁹The 95 percent confidence interval for the percentage increase, from school years 2015-2016 to 2017-18, in number of schools with cultural clubs where bullying regularly occurred is 17.9 to 25.4 and in schools where bullying happened occasionally is 6 to 11.5. From school years 2015-16 to 2017-18, we found that an estimated 2,205 schools (1,851 to 2,560) added these groups, up from an estimated 17,907 schools (17,653 to 18,160) that had these groups in school year 2015-16. We found that schools that never experienced bullying added these groups at lower rates (an estimated -2.9 percent), representing about 29 fewer schools, compared to about 2,235 schools where bullying regularly and occasionally occurred.

Figure 10: Estimated Percentage of K-12 Public Schools with Diversity Groups, School Years 2015-2016 and 2017-2018





Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Note: For the purposes of this report, schools with diversity groups were those with at least one of the following: LGBTQI+ groups, cultural groups, or clubs for students with disabilities.

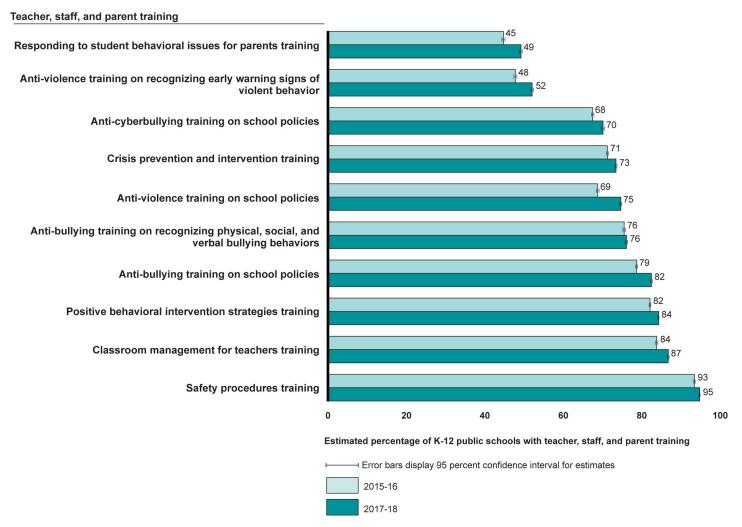
Training for Teachers and Staff

We estimate that nearly all schools offered teacher and staff training to address hostile behaviors and to build positive school environments in school years 2015-16 and 2017-18, according to our analysis of the school survey. In school year 2017-18, of schools that offered teacher and staff training on bullying policies, an estimated 29 percent had regular bullying and 65 percent had occasional bullying, compared to an estimated 37 and 57 percent, respectively, that did not offer this training. We would expect to see less regular bullying (e.g., daily, weekly, or monthly incidents) in schools with training and more occasional bullying, according to subject matter experts. This is because, if the behavior is reduced, but not completely extinguished, the reduction in the regular

⁵⁰The 95 percent confidence interval for schools that offered teacher and staff training on bullying policies with regular bullying is 28.44 to 29.16, and for schools with occasional bullying is 65.5 to 66 for school year 2017-18. The 95 percent confidence interval for schools that did not offer teacher and staff training on bullying policies with regular bullying is 36.1 to 37.9, and for schools with occasional bullying is 56 to 57.9 for school year 2017-18.

category would result in more schools reporting occasional bullying. As shown in figure 11, the percentage of schools that added such trainings generally increased in school year 2017-18.

Figure 11: Estimated Percentage of K-12 Public Schools Offering Training to Teachers, Staff, and Parents to Address Hostile Behaviors and Promote School Safety, School Years 2015-2016 and 2017-2018



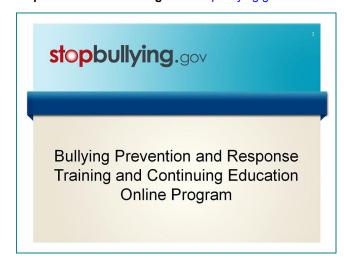
Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

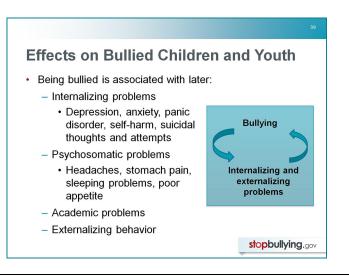
Federal technical assistance and resources are also available to schools and districts to help address hostile behaviors (see textbox).

Federal Efforts to Help Address Hostile Behaviors

Education, along with other federal partners, have developed initiatives to help schools and districts address hostile behaviors. For example, a federal government website—stopbullying.gov—provides information on federal laws and training materials on bullying prevention programs (see figure). Additionally, stopbullying.gov lists resources for students in crisis—such as the National Suicide Prevention Lifeline's toll-free number, (800) 273-8255—and provides information for reporting incidents to Education and Justice. Education has also provided school leaders with information on preventing and addressing civil rights violations. For example, Education's National Center on Safe Supportive Learning Environments provides information and technical assistance to states, districts, and schools, among others, focused on improving school learning environments and conditions for learning. Education has also developed initiatives to address specific issues. For example, in 2020, Education launched a new civil rights initiative to combat sexual assault in K-12 public schools to address the rise of sexual assault in schools. According to Education officials, for this initiative, they have conducted compliance reviews that examine school district's handling of sexual assault cases.

Example of Federal Training from stopbullying.gov





Source: stopbullying.gov. | GAO-22-104341

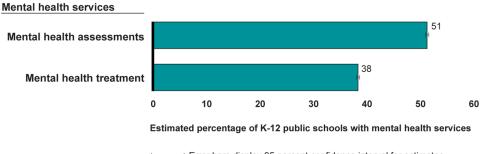
Mental Health Services

Mental health services were available in many schools to promote safe environments in school year 2017-18 (see fig. 12).⁵¹ For school years 2015-16 and 2017-18, schools offering mental health services were also more likely to have higher rates of crime and violence than in schools

⁵¹With a 95 percent confidence interval, 51.24 percent of schools (50.9-51.6) offered mental health assessments, and 38.31 percent of schools (38-38.63) offered mental health treatments in school year 2017-18. Education changed how they asked about mental health services in the school survey after school year 2015-16. We do not have comparable data for school year 2015-16.

without mental health services, according to our regression analysis of the school survey.⁵²

Figure 12: Estimated Percentage of K-12 Public Schools with Available Mental Health Services, School Year 2017-2018



⊢ Error bars display 95 percent confidence interval for estimates

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school year 2017-18. | GAO-22-104341

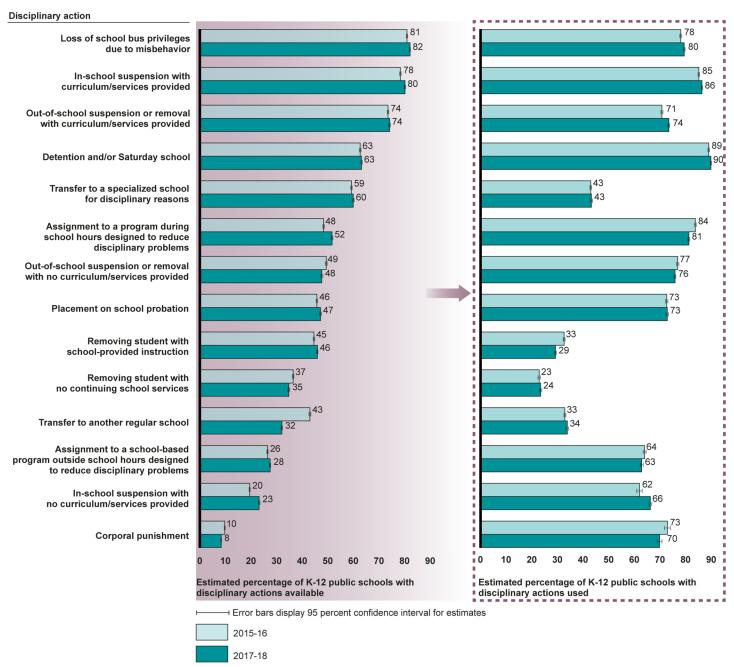
Disciplinary Actions

Schools have at their disposal a range of disciplinary actions to address hostile behaviors.⁵³ Figure 13 shows the percentages of schools that have disciplinary actions available and percentage of schools that use them.

⁵²All regression analysis results in this report are associational and do not imply a causal relationship. See appendix II for more details.

⁵³In 2018, we reported that Black students, boys, and students with disabilities were more likely to be disciplined than their peers. *GAO, K-12 Education: Discipline Disparities for Black Students, Boys, and Students with Disabilities*, GAO-18-258 (Washington, D.C.: Mar. 22, 2018).

Figure 13: Estimated Percentage of Disciplinary Actions Most Commonly Available and Used to Address Issues in K-12 Public Schools, School Years 2015-2016 and 2017-2018



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

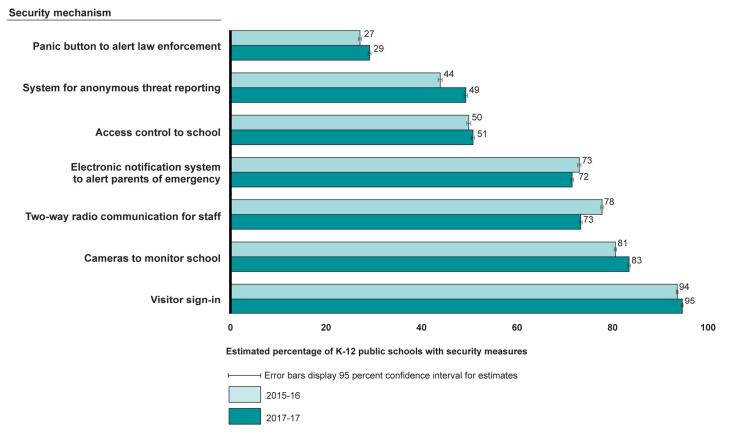
Monitoring and Security Mechanisms

Most schools generally increased the use of security mechanisms and protocols to maintain safe school environments and to provide students with avenues to report safety concerns from school years 2015-16 to 2017-18, according to our analysis of the school survey (see fig. 14). Figure 15 shows examples of schools' security mechanisms.

Regarding security mechanisms, according to our regression analysis of the student survey for school years 2014-15, 2016-17 and 2018-19 we found that:

- Students attending schools where there were options to anonymously report hostile behaviors were also less likely to hear hate-related speech or to get into fights.
- Students attending schools where staff supervised students in hallways were also less likely to say they experienced or witnessed emotional bullying or heard hate speech.

Figure 14: Security Mechanisms Most Commonly Used to Maintain Safety in K-12 Public Schools Increased, School Years 2015-2016 and 2017-2018



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Figure 15: Examples of Security Mechanisms in K-12 Public Schools



Left picture shows an anonymous drop box where students can report hostile behaviors—e.g., bullying, harassment, hate, or violence. Center picture features a sign that reminds visitors to check in with the administrative office and that they are under surveillance. Right picture features a sign requiring visitors to check in with administrative office.

Source: GAO. | GAO-22-104341

School Resource Officers

The number of schools with school resource officers (SRO) increased by over 2,000 schools from school year 2015-16 to 2017-18.⁵⁴ Unlike other school security personnel (e.g., security guards or adult hall monitors), SROs are career sworn law enforcement officers with the authority to arrest, have specialized training, and are to work in collaboration with school organizations.⁵⁵ In school year 2017-18, an estimated 51 percent of schools nationwide had SROs present at least once a week compared to 48 percent in school year 2015-16, according to our analysis of the

⁵⁴The 95 percent confidence interval for the number of more schools that used SROs in school year 2017-18 is 1,776 to 2,674. With a 95 percent confidence interval, about 39,911 schools (39,573 to 40,248), or about 48 percent (47.3 to 48.2 percent), had SROs in school year 2015-16 compared to about 42,136 schools (41,863 to 42,409), or about 51 percent (50.9 to 51.5 percent) had SROs in school year 2017-18.

⁵⁵U.S. Department of Education, *Survey on School Crime and Safety,* 2019 (Washington, D.C.: September 2019).

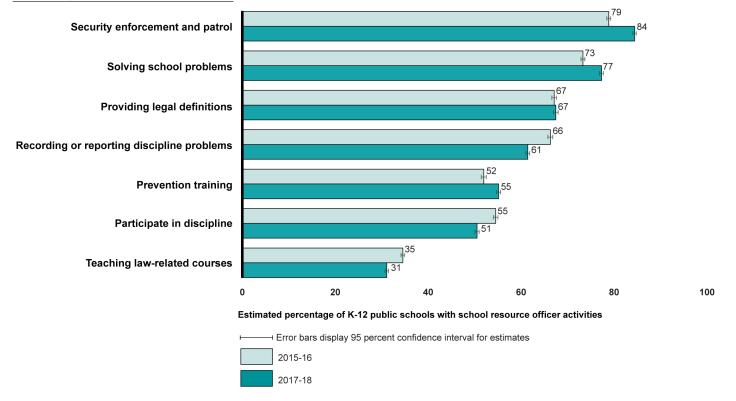
school survey.⁵⁶ Subject matter experts told us that SROs are often added in response to hostile behaviors. This is in line with our data analysis, which found that schools that had SROs had more frequent incidents of regular bullying, harassment, or sexual harassment, compared to schools that did not use SROs.⁵⁷ SROs' involvement in particular activities to address hostile behaviors in schools also increased from school year 2015-16 to 2017-18 (see fig.16).

According to our regression analysis of the school survey, for school years 2015-16 and 2017-18, schools reporting sworn law enforcement (including SRO) participation in school activities were also more likely to have higher rates of crime and violence in schools compared to schools which did not have participation.

⁵⁶The 95 percent confidence interval for the percentage of schools that had SROs in school year 2017-18 is 50.9 to 51.4 percent and in school year 2015-16 is 47.3 to 48.2 percent.

⁵⁷Similar to our regression analysis, this relationship does not imply causation. In school year 2017-18, with a 95 percent confidence interval, 34 percent of schools (33.8 to 34.6) had SROs and regular bullying, compared to 26 percent of schools (25.6 to 26.4) without SROs; 73 percent of schools (72.2 to 73.1) had SROs and harassment incidents, compared to 65 percent of schools (64 to 65.6) without SROs; and 7 percent of schools (6.9 to 7.3) had SROs and sexual harassment incidents, compared to 3.8 percent of schools (2.6 to 5.2) without SROs.

Figure 16: School Resource Officers' (SRO) Most Common Activities (Estimated), School Years 2015-2016 and 2017-2018 SRO activity



Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Note: SROs provide information to school authorities about the legal definitions of behavior for recording or reporting purposes (e.g., defining assault for school authorities).

Schools vary in the types of activities SROs are involved in. About two-thirds of schools had written agreements in place to govern SROs' relationship with schools; the remainder did not. 58 Further, most SROs carry firearms, chemical sprays, and/or physical restraints. Over one-third of officials from schools that had written agreements did not know whether the agreements include information about SROs' roles and responsibilities in administering student discipline, making arrests, or using firearms in the school (see table 3). The use of body cameras

⁵⁸With a 95 percent confidence interval, an estimated 63.74 percent of schools (63.32-64.15) had some type of written agreement on SROs' roles and responsibilities and 36.26 percent of schools (35.85-36.68) did not in school year 2017-18.

approximately doubled, with over one-third of SROs wearing them in school year 2017-18 compared to about 15 percent in school year 2015- 16.59

Table 3: Estimated Percentage of K-12 Public Schools with School Resource Officers (SRO) That Had Agreements on Roles and Responsibilities, School Years 2015-2016 to 2017-2018

SRO agreement		2015-2016			2017-2018	
	Yes	No	Don't know	Yes	No	Don't know
Student discipline	57.9	13.8	28.4	55.2	12.2	32.6
	(57.2-58.6)	(13.8-14.2)	(27.7-29.1)	(54.7-55.6)	(11.9-12.6)	(32.2-33)
Use of physical or chemical	44.9	18.46	36.64	43.7	16.03	40.28
restraints	(44.2-45.6)	(18-18.9)	(35.9-37.4)	(43.3-44.1)	(15.6-16.4)	(39.8-40.8)
Use of firearms	40	19.79	40.22	41	16.65	42.34
	(39.3-40.7)	(19.4-20.2)	(39.5-40.9)	(40.6-41.4)	(16.3-17)	(41.9-42.8)
Making arrests on school	57.5	11.05	31.46	55.7	10.21	34.13
grounds	(56.8-58.2)	(10.7-11.4)	(30.7-32.2)	(55.2-56.1)	(9.9-10.5)	(33.6-34.6)
Reporting criminal offenses to	64.32	7.27	28.41	64.8	4.88	30.31
authorities	(63.7-64.9)	(7-7.5)	(27.7-29.1)	(64.4-65.2)	(3.8-6.2)	(29.9-30.7)

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Note: Numbers in parentheses provide 95 percent confidence intervals.

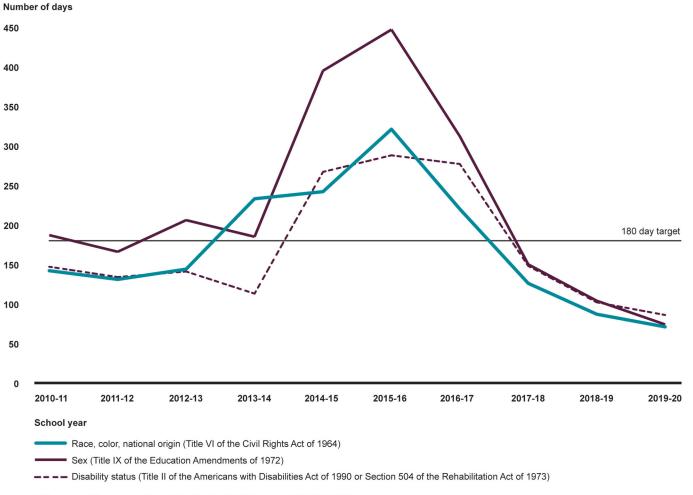
⁵⁹With a 95 percent confidence interval, an estimated 32.59 percent of schools (32.07-33.12) had SROs with body cameras in school year 2017-18 and an estimated 16.33 percent of schools (15.94-16.72) had SROs with them in school year 2015-16.

Recently, Education Resolved Complaints of Hostile Behaviors Faster, Due in Part to More Dismissals and Fewer Complaints Filed

Since the 2016-17 School Year, the Length of Time to Resolve Complaints of Hostile Behaviors Declined Since the 2016-17 school year, Education's OCR has resolved complaints of alleged civil rights violations in K-12 schools that involved hostile behaviors targeting people in protected classes faster than it did in each previous year. 60 For this set of complaints, our analysis showed that the average resolution time dropped and remained below the 180 day target for each protected class—race, color, or national origin; sex; or disability status since school year 2017-18 (see fig. 17). Such declines were the greatest for complaints of alleged violations on the basis of sex, with the average number of days to resolve these complaints peaking at 447 in school year 2015-16, and declining every year until reaching an average of 74 days in school year 2019-20.

⁶⁰For this section of the report, hostile behaviors are limited to complaints categorized by OCR as: racial harassment (verbal, assault, or other); retaliation based on race, color, or national origin; national origin discrimination involving religion; sexual harassment (verbal, physical, sexual violence, gender stereotyping, other); retaliation based on sex; disability harassment (verbal, assault, or other); or retaliation based on disability status at elementary or secondary schools. See appendix I for additional information about the complaints included in our analysis. According to OCR officials, they do not collect information about the alleged victim that would allow us to isolate incidents that affected students. Similarly, the alleged perpetrators can be students or staff and are not distinguishable in the data available in OCR's case management system.

Figure 17: Average Resolution Time (days) of Complaints of Hostile Behaviors in K-12 Schools Filed with the Department of Education's Office for Civil Rights, School Years 2010-2011 to 2019-2020



Source: GAO analysis of Department of Education's Office for Civil Rights data. | GAO-22-104341

Notes: School years in figure begin July 1 and end June 30. Hostile behaviors include those categorized by the Office for Civil Rights as: racial harassment (verbal, assault, or other); retaliation based on race, color, or national origin; national origin discrimination involving religion; sexual harassment (verbal, physical, sexual violence, gender stereotyping, other); retaliation based on sex; disability harassment (verbal, assault, or other); or retaliation based on disability status.

Figure 18 describes the different ways OCR resolves complaints. Of the ways to resolve complaints, dismissing them generally took the least amount of time over the 10 years included in our analysis, and closures with change took the most time (see table 4).

Figure 18: Department of Education's Office for Civil Rights' (OCR) Complaint Processing Procedures and Resolution Types A complaint is filed by someone who experienced, witnessed, or heard about alleged civil rights violation(s) in a school or district Complaint **Evaluation** OCR evaluates the written information that it receives to determine whether it constitutes a complaint that is subject to further processing. Among other criteria, a complaint must: If criteria If criteria Fall within OCR's legal authority to investigate not met met Be filed within 180 days of the alleged discrimination Provide sufficient information · Not be speculative Describe the same allegations against the same recipient that were previously resolved by OCR OCR opens an investigation If OCR deems it appropriate, Investigation OCR will review documentary evidence submitted by complaint may be resolved prior to the both parties; conduct interviews with the complainant, completion of investigation recipient's personnel, and other witnesses; and/or conduct site visits to determine if there is sufficient If OCR finds violation(s) evidence to support a conclusion that the recipient failed to comply with the law If OCR finds no violation(s) Insufficient evidence:a **Enforcement:** Closure with change: **Facilitated** Dismissal: Resolution OCR determines that the If recipient does not Recipient signs a resolution resolution **OCR** preponderance of the agreement to address the violation(s) sign a resolution between the dismisses evidence does not agreement or fails to and/or concern(s), and OCR parties: support a conclusion that comply with a resolumonitors the agreement to verify it is OCR helps the complaint.c the recipient failed to tion agreement, OCR being implemented. Resolution parties involved to comply with applicable initiates proceedings to agreements outline corrective steps voluntarily resolve suspend, terminate, the complaint. statutes and regulations. to be taken by recipients, for or refuse financial example providing training for OCR does not assistance to recipient teachers or revising policies, to bring monitor any agreements.b or refers the case to the them into compliance with the law. Failure to comply with the terms of Department of Justice. the agreement may result in OCR initiating an enforcement action.

Appeal

Complainant can appeal OCR's determination of insufficient evidence or certain types of dismissal

Source: GAO summary of OCR's case processing procedures. | GAO-22-104341

^aThis is coded as "no violation or insufficient evidence" in OCR's Case Management System.

^bPrior to 2015, a facilitated resolution between the parties was called an early complaint resolution.

^cPrior to 2018, OCR distinguished between dismissals and administrative closures based on when, during the investigation, the determination was made that the complaint met the criteria for dismissal.

Table 4: Average Number of Days to Resolve Complaints of Hostile Behaviors in K-12 Schools Filed with the Department of Education's Office for Civil Rights (OCR) by Resolution Type, School Years 2010-2011 to 2019-2020

	2010-2020 10-year average	2010- 2011	2011- 2012	2012- 2013	2013- 2014	2014- 2015	2015- 2016	2016- 2017	2017- 2018	2018- 2019	2019- 2020
Dismissal	100	69	63	77	70	161	201	166	82	59	60
Facilitated resolution between the parties	199	79	82	98	172	322	360	391	200	154	117
No violation or insufficient evidence	319	225	217	225	324	414	463	451	307	218	186
Closure with change	364	291	297	323	393	514	526	432	273	230	167

Source: GAO analysis of Department of Education's Office for Civil Rights data. | GAO-22-104341

Notes: Two complaints that resulted in enforcement action during the 10-year period are not depicted in the table because an average could not be calculated. School years in table begin July 1 and end June 30. Hostile behaviors include those categorized by the Office for Civil Rights as: racial harassment (verbal, assault, or other); retaliation based on race, color, or national origin; national origin discrimination involving religion; sexual harassment (verbal, physical, sexual violence, gender stereotyping, other); retaliation based on sex; disability harassment (verbal, assault, or other); or retaliation based on disability status.

Higher Dismissal Rates and, More Recently, Fewer Complaints Contributed to Shorter Resolution Times

Education's OCR uses timeliness metrics to evaluate its effectiveness in addressing complaints of alleged civil rights violations in schools, aiming to resolve at least 80 percent of all new complaints within 180 days. 61 Across all types of complaints received, OCR has reported meeting this metric every fiscal year between 2009 and 2020, with the exception of 2016. For the set of complaints of hostile behaviors we analyzed, an increase in the use of dismissals and a decrease in the number of complaints filed with OCR in recent years contributed to faster resolution times and also helped OCR address its case backlog.

⁶¹According to OCR officials, OCR also aims to have no more than 25 percent of all pending complaints older than 180 days. We focused on the timeliness of resolutions for our analysis. In addition, according to OCR officials, OCR uses two metrics associated with annual staff performance plans, both also centered on timeliness: (1) the staff reduces the number of pending complaints that are 730 days old and older by 20 percent compared to the number of such pending complaints on the first day of the fiscal year, and (2) the staff, on average, responds to appeals that are filed and for which a response is due within 90 days of receipts by the regional office. GAO did not analyze metrics related to individual OCR staff or regional offices.

Increased Dismissals

Over the 10-year period, OCR increasingly resolved complaints of hostile behaviors by dismissing them. Dismissals accounted for 49 percent of resolutions in the 2010-11 school year, rising to 81 percent in the 2019-20 school year, as shown in figure 19. Complaints of alleged civil rights violations on the basis of sex were the most frequently dismissed complaint in the 2019-20 school year (88 percent), followed by those on the basis of race, class, or national origin (87 percent), and disability status (76 percent).

Complaints can be dismissed for a variety of reasons. As shown in figure 20, OCR most frequently dismissed complaints in recent years because it did not receive consent to disclose the name of the complainant. Such dismissals accounted for 8 percent of resolutions at the beginning of the 10-year period, rising to 21 percent at the end of the 10-year period. 62

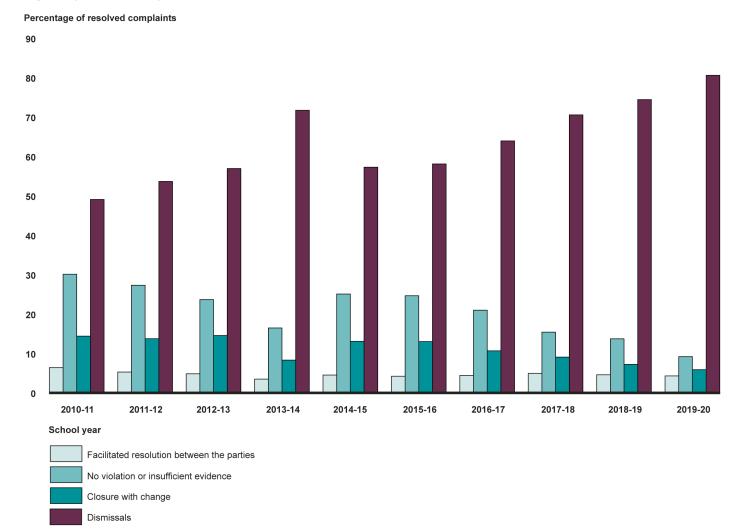
When asked about the increase in dismissals in recent years, OCR officials only chose to comment on the increase in dismissals of complaints related to gender identity. OCR officials said that after Education rescinded its May 2016 Dear Colleague Letter on Transgender Students in February 2017, it subsequently dismissed the majority of these kinds of complaints.⁶³

⁶²OCR requires written consent from the complainant to disclose the complainant's identity to the recipient and witnesses when such disclosure is needed to resolve the complaint. When written consent is necessary, OCR informs the complainant that the complaint will be dismissed if it does not receive the written consent within 20 calendar days of the date that OCR requests consent from the complainant. This requirement was in place for the 10-year period we reviewed. According to OCR officials, prior to 2008 these dismissals were coded as "insufficient factual basis."

⁶³In May 2016, Education and Justice issued a joint Dear Colleague Letter to affirm Title IX protections for transgender students. The guidance did not add requirements to applicable law, but instead clarified how Education and Justice evaluate a school's compliance with the law. For example, the guidance addressed issues such as treating students consistent with their gender identity in terms of their names and pronouns and their participation in single-sex activities and facilities. The letter was rescinded by both agencies on February 22, 2017.

In June 2021, Education issued a Notice of Interpretation clarifying that Education interprets Title IX's prohibition on sex discrimination to encompass discrimination based on sexual orientation and gender identity. Enforcement of Title IX of the Education Amendments of 1972 With Respect to Discrimination Based on Sexual Orientation and Gender Identity in Light of Bostock v. Clayton County, 86 Fed. Reg. 32,637 (June 22, 2021). Justice issued a Memorandum to Federal Agency Civil Rights Directors in March 2021 concluding that Bostock's analysis applies to Title IX. Both of these changes were made subsequent to our analysis of complaints filed with OCR.

Figure 19: Percentage of Resolved Complaints of Hostile Behaviors in K-12 Schools Filed with Education's Office for Civil Rights, by Resolution Type, School Years 2010-2011 to 2019-2020

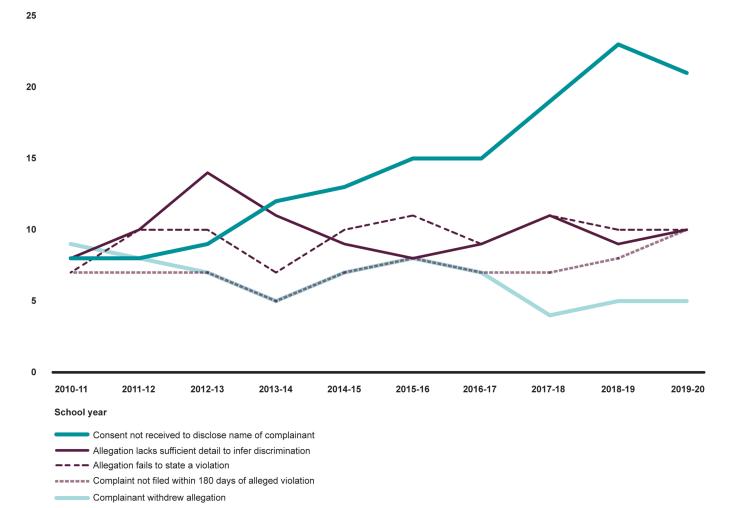


Source: GAO analysis of Department of Education's Office for Civil Rights data. | GAO-22-104341

Notes: Two complaints that resulted in enforcement action during the 10-year period are not depicted in the figure. School years in figure begin July 1 and end June 30. Hostile behaviors include those categorized by the Office for Civil Rights as: racial harassment (verbal, assault, or other); retaliation based on race, color, or national origin; national origin discrimination involving religion; sexual harassment (verbal, physical, sexual violence, gender stereotyping, other); retaliation based on sex; disability harassment (verbal, assault, or other); or retaliation based on disability status.

Figure 20: Five Most Common Reasons for Dismissals of Complaints of Hostile Behaviors in K-12 Schools by Education's Office for Civil Rights, School Years 2010-2011 to 2019-2020





Source: GAO analysis of Department of Education's Office for Civil Rights data. | GAO-22-104341

Notes: School years in figure begin July 1 and end June 30. Hostile behaviors include those categorized by the Office for Civil Rights as: racial harassment (verbal, assault, or other); retaliation based on race, color, or national origin; national origin discrimination involving religion; sexual harassment (verbal, physical, sexual violence, gender stereotyping, other); retaliation based on sex; disability harassment (verbal, assault, or other); or retaliation based on disability status.

While OCR reported an overall substantial increase in the number of complaints resolved with change across all of its complaints for the 4-year period between fiscal years 2017 and 2020, we found that the number of complaints specifically related to hostile behaviors in K-12 schools that were resolved with change declined for the 4-school-year period 2016-17 through 2019-20. Resolutions with change, which include complaints closed with change and complaints resolved through facilitated resolutions between the parties according to OCR officials, require schools or districts to make substantive changes to protect students' civil rights, such as training teachers or revising school or district policies. OCR reported resolving 4,443 complaints with change over the 4-year period from fiscal year 2013 through 2016, and resolving 6,018 over the following 4-year period from fiscal 2017 through 2020. In contrast, since school year 2017-18, the number of complaints alleging civil rights violations in K-12 schools that involved hostile behaviors targeting people in protected classes that were resolved with change declined, falling from 1,300 from school years 2012-13 through 2015-16 to 1,078 from school years 2016-17 through 2019-20.

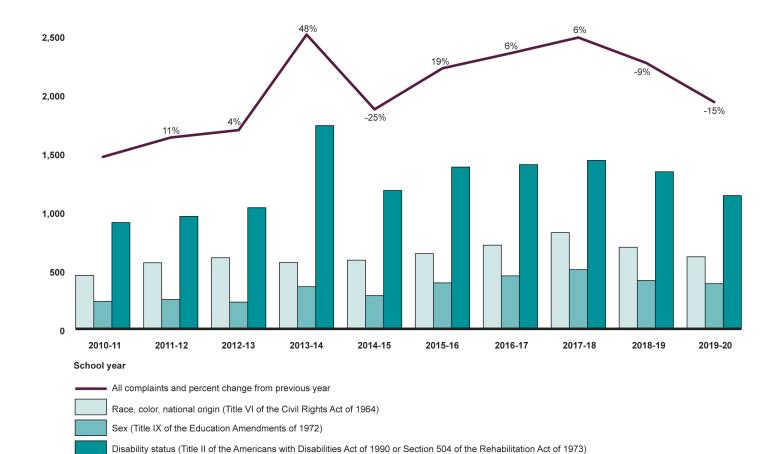
Declining Number of Complaints

The number of complaints of hostile behaviors filed with OCR declined in both the 2018-19 and 2019-20 school years following a general increase over the previous 8 years (see fig. 21). This decline in recent years contributed to faster resolutions in two ways: (1) with fewer complaints to address, OCR could tend to them more quickly and (2) OCR could address the complaint backlog that had grown in previous years.

Figure 21: Complaints of Hostile Behaviors in K-12 Schools Filed with the Department of Education's Office for Civil Rights, School Years 2010-2011 to 2019-2020

Number of complaints

3,000



Source: GAO analysis of Department of Education's Office for Civil Rights data. | GAO-22-104341

Notes: Sum of bars for each identity may exceed the total line in a year because complaints can contain alleged violations related to more than one group. School years in figure begin July 1 and end June 30. Hostile behaviors include those categorized by the Office for Civil Rights as: racial harassment (verbal, assault, or other); retaliation based on race, color, or national origin; national origin discrimination involving religion; sexual harassment (verbal, physical, sexual violence, gender stereotyping, other); retaliation based on sex; disability harassment (verbal, assault, or other); or retaliation based on disability status.

OCR officials said that several factors could affect the number of complaints they receive each year, including new guidance or regulations, changes in the law, and administration specific projects or initiatives. A portion of the decline in complaints filed in the 2019-20 school year—for example those related to physical harassment/assault—is also likely attributable to schools' transition to distance learning in March 2020 due to the COVID-19 pandemic.

Several civil rights experts we spoke with said that in recent years, changes to OCR's guidance made them reluctant to file some types of complaints on behalf of students or to encourage students and their families to file some types of complaints with OCR. As OCR's priorities changed, some civil rights experts lost confidence in OCR's ability to address civil rights violations in schools, they noted. For example:

- Representatives from one legal organization focused on civil rights protections said that in recent years they have opted to file complaints related to racial harassment or discrimination in federal court instead of filing complaints with OCR. They said that OCR no longer following its 2014 Dear Colleague Letter on the Nondiscriminatory Administration of School Discipline was a deterrent to filing racial harassment or discrimination complaints with OCR. That guidance, which had discussed disproportionate discipline of students of color and called for investigations to examine disproportionate impact in complaints related to discipline, was rescinded in December 2018.⁶⁴ Although the guidance specifically applied to school discipline, the legal organization perceived the rescission as a broader shift in Education's investigations of alleged racial harassment violations.
- Representatives of another civil rights organization said that in recent years they were hesitant to encourage students and families to file complaints with OCR, particularly in instances of alleged sex

⁶⁴In January 2014, Education and Justice issued a Joint Dear Colleague Letter on Nondiscriminatory Administration of School Discipline on the basis of race, color, or national origin. According to the guidance, the administration of student discipline can result in unlawful discrimination based on race if a student is subjected to different treatment based on the student's race or if, even though a policy is neutral on its face and is administered in an evenhanded manner, the policy has an unlawful disparate impact, i.e., a disproportionate and unjustified effect on students of a particular race. The guidance acknowledges racial disparities in the frequency and severity of the administration of school discipline, particularly for Black students, and provides guidance for both agencies to assess for different treatment and disparate impact in the investigation of complaints. The guidance was rescinded by both agencies on December 21, 2018. As of July 30, 2021, subsequent to our analysis of complaints filed with OCR, the guidance and underlying issues are under review by Education and Justice.

discrimination against LGBTQI+ students. They said this was because of Education rescinding its Dear Colleague Letter affirming Title IX protections for transgender students. The representatives said rescinding this guidance in February 2017 also created concern that continued filing of such complaints might have prompted Education to create new policies that could further impact students.

Representatives from a third organization said that in the last 5 years students and advocates have been reluctant to file complaints related to sexual harassment and violence. They said that under Education's 2011 guidance on standards of evidence for investigating alleged sexual assault and violence, students felt like they understood their rights. That guidance was withdrawn in September 2017 and the Title IX Final Rule went into effect in August 2020.65 As a result, the organization said that there has been a mistrust of Education and lack of confidence in OCR.

Regarding the changes to guidance cited by civil rights experts above, Education has started to review or has reinterpreted each of them. The Joint Dear Colleague Letter on Nondiscriminatory Administration of School Discipline to assess for different treatment based on race that was rescinded in 2018 is under review by both Education and Justice as of July 2021. While the guidance affirming Title IX protections for transgender students was rescinded in 2017, Education issued a Notice of Interpretation in June 2021 clarifying that Education interprets Title IX's prohibition on sex discrimination to encompass discrimination based on sexual orientation and gender identity. ⁶⁶ Finally, regarding regulations related to investigating allegations of sexual misconduct in schools,

In April 2021, subsequent to our analysis of complaints filed with OCR, Education announced that OCR would be launching a comprehensive review of Title IX regulations. During this review process, the existing Title IX regulations, as amended in 2020, remain in effect

⁶⁶Enforcement of Title IX of the Education Amendments of 1972 With Respect to Discrimination Based on Sexual Orientation and Gender Identity in Light of Bostock v. Clayton County, 86 Fed. Reg. 32,637 (June 22, 2021).

⁶⁵On April 4, 2011, Education had issued a Dear Colleague Letter addressing sexual violence. Among other things, the Dear Colleague Letter stated that preponderance of the evidence is the appropriate standard for investigating allegations of sexual harassment or violence in schools, as opposed to the clear and convincing standard. On September 22, 2017, Education issued a Dear Colleague Letter withdrawing the 2011 Dear Colleague Letter and additional guidance related to sexual harassment and violence. These 2017 guidance documents were rescinded in August 2020, when the Title IX Final Rule went into effect. The Title IX Final Rule defines sexual harassment, including sexual assault, as unlawful sex discrimination and established new processes for investigating allegations of sexual misconduct in schools.

Education announced in April 2021 that OCR would be launching a comprehensive review of Title IX regulations, including the new Title IX Final Rule.

Agency Comments

We provided a draft of this report to the Department of Education for review and comment. Education provided written technical comments, which we incorporated as appropriate.

At this time, we will send copies of this report to the appropriate congressional committees and the Secretary of Education. In addition, the report is available at no charge on the GAO website at https://www.gao.gov.

If you or your staff have any questions about this report, please contact me at (617) 788-0580 or nowickij@gao.gov. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. GAO staff who made key contributions to this report are listed in appendix III.

Sincerely yours,

Jacqueline M. Nowicki, Director

Education, Workforce, and Income Security Issues

Overview

This report examines: (1) the prevalence and nature of hostile behaviors in K-12 public schools; (2) the presence of K-12 school programs and practices to address hostile behaviors; and (3) how the Department of Education has addressed complaints related to these issues in school years 2010-11 through 2019-20.

To conduct this work, we analyzed the most recent years of data available that capture hostile behaviors exhibited in K-12 public schools, including bullying, hate speech and hate crimes, sexual assault and rape, and physical violence, from two nationally generalizable federal surveys. Specifically, we conducted descriptive and regression analyses on Education's School Crime Supplement (SCS) to the Department of Justice's National Crime Victimization Survey and the School Survey on Crime and Safety (SSOCS). See appendix II for information on our regression analysis. The SCS provides information from students' perspectives and the SSOCS provides information from schools' perspectives. We assessed the reliability of the data by reviewing existing documentation about the data and performing electronic testing on required data elements from both surveys and determined they were sufficiently reliable for the purposes of our analyses. We analyzed the SCS and SSOCS data using the analysis weights and sampling design information in order to account for the complex sample design. We express the precision of our particular sample's results with a 95 percent confidence interval, meaning we are 95 percent confident that the true values in the study population are within this range. All regressions use the 0.05 level of significant to determine statistically significant.

Additionally, we analyzed Education's Office for Civil Rights' (OCR) case management system database for school years 2010-11 through 2019-20, which captures the types and numbers of complaints it receives, resolutions, and processing times. We assessed the reliability of OCR's case management system data by checking for errors or inconsistencies in the data and interviewing OCR officials familiar with the system. We limited our analysis to data elements that were sufficiently reliable.

To inform all aspects of our work, we interviewed academic researchers, education policy organizations, civil rights experts, and federal agency officials from Education and Justice. We also selected examples of hostile behaviors by randomly selecting from a list of news articles from calendar years 2019 and 2020. Finally, we reviewed relevant federal agency documentation, regulations, and laws. The following sections contain detailed information about the scope and methodology for this report.

Analysis of the School Crime Supplement to the National Crime Victimization Survey (student survey)

The School Crime Supplement (SCS)—referred to in the body of this report as the student survey—is a biennial survey that was created as a supplement to the National Crime and Victimization Survey.¹ The survey is co-designed by Education's National Center for Education Statistics and Justice's Bureau of Justice Statistics and is a nationally representative survey of approximately 9,500 students between the ages of 12 through 18 in grades 6 to 12, enrolled in U.S. public and private elementary, middle, and high schools.² Because our focus is on public schools, we excluded students that attended private schools for each survey year in our analysis.

Our analysis was conducted using the public-use data file of the SCS for the three most recent surveys (school years 2014-15, 2016-17, and 2018-19.) The SCS data are self-reported by students, and consequently, as is generally true with self-reported data, there is potential for misreporting of information. The SCS asks about school-related topics such as alcohol and drug availability; fighting, bullying, and hate-related behaviors; fear and avoidance behaviors; safety measures; gun and weapon carrying; and gangs at school.

We analyzed the 3 most recent school years of the SCS to learn about (1) the prevalence of hostile behaviors (e.g., bullying, harassment, and hate speech), (2) student perceptions of the school climate and fear and avoidance behaviors, and (3) characteristics of schools where such incidents happen more frequently.

In some instances, we consolidated responses to multiple related survey questions. For example, to estimate the percentage of all students nationwide that were bullied related to their identity, we consolidated all responses by students who were bullied related to their identity. In

¹The National Crime Victimization Survey is administered by Justice's Bureau of Justice Statistics and collects data every year from a nationally representative sample of households. Persons are interviewed on the frequency, characteristics, and consequences of criminal victimization. In some years, the survey included the School Crime Supplement, which collects data about victimization at school. For more information, please see https://bjs.ojp.gov/data-collection/ncvs.

²With a 95 percent confidence interval, we estimated that there were approximately 22 million students ages 12-18 (20,986,567 to 23,972,017) in school year 2014-15; 22 million students ages 12-18 (21,218,217 to 23,327,983) in school year 2016-17; and 23 million students ages 12-18 (21,733,074 to 24,488,300) in school year 2018-19. In general, the number of students ages 12 to 18 attending K-12 public schools in the United States has remained similar for the time periods we analyzed.

addition, we estimated percentages of students experiencing various types of hostile behavior by certain school characteristics—location, school size, grade level, percent who were minority, percent who were eligible for free or reduced priced lunch, and residential classification (urban, suburban, and rural).

Analysis of the School Survey on Crime and Safety (school survey)

The School Survey on Crime and Safety (SSOCS)—referred to in the report as the school survey—is a nationally representative survey of principals in K-12 public schools conducted by the National Center for Education Statistics about every 2 years.³ The survey collects data from schools to provide estimates of school crime, security mechanisms, programs and policies.⁴ The survey samples approximately 4,800 U.S. public school principals or other administrators. Our analysis was conducted using the restricted-use data file of the SSOCS for school years 2015-16 and 2017-18, the most recent data available at the time of our analysis. The SSOCS data are self-reported by principals or other administrators, and consequently, as is generally true with self-reported data, there is potential for misreporting of information.

The survey covers school security practices, student training programs, parent and community involvement at school, numbers and duties of school security staff, school mental health services, staff training and practices, adverse incidents, disciplinary problems and disciplinary actions. The survey also includes information on hate crimes and other types of crime.

We conducted a descriptive analysis of the SSOCS using the 2 most recent years. For the SSOCS, there were two sets of variables we analyzed: (1) incidents of bullying, hate crimes, and victimization; and (2) programs to address behavior and create safe environments, such as training and programs for staff and students, mental health services, discipline and school security staff and programs.

To further understand the extent to which incidents such as bullying or hate crimes may vary by school characteristics, and the extent to which

³Respondents to the school survey are primarily principals and other knowledgeable school administrators. We estimated 83,591 schools (83,532 to 83,651) in school year 2015-16 and 82,288 schools (82,190 to 82,385) in school year 2017-18. In general, the number of public schools in the United States has remained similar for the time periods we analyzed.

⁴For the 2017-18 survey, 4,803 public schools were sampled, and a total of 2,762 submitted completed questionnaires for a weighted response rate of 61.7 percent.

programs to address behavior and create safe environment may vary by school characteristics, we also analyzed those data by characteristics such as a schools' locale, size, level (e.g., elementary or high school), percent of students who were minority, and percent of students who were eligible for free or reduced lunch.

We conducted generalized linear regressions using the 2015-16 and 2017-18 SSOCS data to explore associations between selected school-level characteristics and programs and frequencies of crime and violence, in addition to occurrences of hate crimes, disciplinary problems, and bullying, while controlling for other factors. Such a model allowed us to test the association between adverse school climate incidents, such as bullying or incidents of crime and violence, and school characteristics, programs and policies, while holding other school characteristics constant (e.g. student demographics, school security measures, teacher training, school type).

Analysis of Education's Office for Civil Rights Case Management Data

To assess Education's response to complaints of hostile behaviors, we analyzed data from OCR's case management system that met the following criteria:

- institution type was elementary or secondary;
- case type was complaint;
- case opening date was between July 1, 2010 and June 30, 2020;
- specific basis was Title VI of the Civil Rights Act of 1964 (Title VI),
 Title IX of the Education Amendments of 1972 (Title IX), Title II of the
 Americans with Disabilities Act of 1990 (Title II), or Section 504 of the
 Rehabilitation Act of 1973 (Section 504), and the complaint filed
 involved one of the following:
 - Title VI: racial harassment (assault); racial harassment (insults, slurs, derogatory expressions); racial harassment (other); retaliation; national origin discrimination involving religion;
 - Title IX: sexual harassment (sexual violence); sexual harassment (physical harassment or intimidation); sexual harassment (insults,

⁵We used a Poisson generalized linear regression for this analysis because the data on incidents of crime and violence represent counts and therefore are not appropriate for a traditional normal linear model. In addition, we used a negative binomial regression instead of a Poisson regression because negative binomial models are appropriate for count analyses with observed over-dispersion (i.e., when the variance of the count variable is much larger than the mean of that variable).

- slurs, derogatory expressions); sexual harassment (gender stereotyping); sexual harassment (other); gender harassment (not of a sexual nature), retaliation; or
- Title II or Section 504: disability harassment (assault); disability harassment (insults, slurs, and derogatory expressions); disability harassment (other); and retaliation.

If the complaint data in the case management system did not include information in any of the fields related to the criteria mentioned above, we excluded the case from our analysis.

We performed descriptive analyses of the complaints that met the criteria to understand trends in the nature of complaints filed over the 10-year period, including the number of complaints filed and their specific bases (protected class); the manner of resolution; the most common reasons for dismissing complaints; and average resolution times and resolution types, compared to OCR's 180 day resolution target. Some complaints contained alleged violations related to more than one protected class or more than one type of hostile behavior. In these instances, we counted such complaints as one complaint, but counted each alleged violation named in a complaint separately in our analyses.

Selecting Examples of Hostile Social Behaviors

News Articles

Because the surveys we analyzed do not contain detailed, descriptive information about the hostile behaviors that occur in K-12 schools, we conducted a news media search and randomly selected examples from the results for inclusion in the report to provide illustrative examples of some of these types of incidents. To obtain recent results, we limited the search to articles published between January 2019 and September 2020. We searched databases using specific keywords to identify incidents where students were targeted related to their membership in certain identity groups: race, color, or national origin; religion; sex (including sexual orientation and gender identity); or disability status. Next, we sorted the results into lists by identity group (for example race or disability status) and type of incident (for example sexual harassment) and randomized the lists. In randomized order, we analyzed the incidents using sufficiency and relevancy criteria, including whether the article had information about the nature of the incident and where it occurred, and whether a student was the alleged target. We selected the first two examples from each list that met our criteria: one in which a student was the alleged perpetrator and one in which school staff was the alleged

perpetrator. The news articles provide illustrative descriptions of individual incidents and do not represent the experiences of all students and schools. We did not assess whether the incidents could potentially constitute unlawful discrimination or hate crimes under federal or state law.

Interviews

In total, we interviewed representatives of 25 groups representing civil rights experts, education advocacy organizations, and academic researchers, among others. Our interviews gathered information on the prevalence of hostile behaviors in schools (e.g., bullying, harassment, hate, and victimization); practices and programs schools use to prevent and address these issues; and Education's role in responding to incidents involving discriminatory harassment, hate, and victimization.

We selected groups for interviews based on their knowledge of relevant information and their ability to describe school practices. Regarding civil rights experts, we interviewed leadership from several associations representing a range of identity groups including race and ethnicity; sex; sexual orientation and gender identity; and disabilities because students in those categories have experienced increased hostile behaviors. These groups accounted for the largest share of bullying, discriminatory harassment, hate speech and hate crimes, and victimization incidents in our data analysis. We also interviewed national groups representing a range of K-12 school officials, including teachers, principals, and school social workers.

We conducted this performance audit from May 2020 to November 2021 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II: Regression Analysis

Overview

We conducted generalized linear regressions using the School Crime Supplement (SCS) to the National Crime Victimization Survey and the School Survey on Crime and Safety (SSOCS) survey data to explore associations between selected school-level characteristics and programs and outcomes of hostile behaviors such as bullying. Such a model allowed us to test the association between incidents of hostile behaviors, such as bullying, and school programs and policies, while holding other school characteristics constant (such as school demographics). We conducted a separate regression for each of the hostile behaviors relating to adverse climate incidents.

Typically, a generalized linear regression model is appropriate when the model assumption of normality is not appropriate, as is the case with a binary (yes/no) outcome for logistic regressions, or a count outcome for Poisson regressions. A logistic regression model provides an estimated odds ratio of an event occurring, such as whether a school characteristic is associated with higher or lower odds of bullying. A Poisson regression model provides an estimated incidence rate ratio of an event, such as whether a school policy or program is associated with higher rates of crime and violence. For both the estimated odds ratio and estimated incidence rate ratio, a value greater than one indicates a higher or positive association, and a value less than one indicates a lower or negative association. For example, an estimated odds ratio less than one indicates lower odds of being bullied when a factor is present. Additionally, one can quantify just how much more or less likely the incidence is, according to the estimated model coefficients. For example, an incidence rate ratio of 2.5 would indicate that a school having regular student disorder would be associated with 2.5 times higher incidence of bullying relative to schools never experiencing student disorder, holding all other variables in the model constant. Given limitations of our models, including that we must rely on observational data which did not come from an experimental design which would allow for causal inference, we present a general summary of associations by providing the direction, rather than an estimated rate (incidence) of hostile behaviors.

To obtain a better understanding of potential control variables and their association with outcomes, and to identify potential controls used by subject matter experts from studies using similar methodologies, a literature review was performed. In particular, regression studies, which were similar in scope to the engagement objectives, were reviewed and summarized. Data from these regression studies represent a range of school years from 2003 to 2015. This information was used to inform our final control variable selection.

Regression Analysis of the School Crime Supplement to the National Crime Victimization Survey

Our regression model used the same universe of approximately 22 million students as our descriptive analysis of the SCS data for each of the three time periods surveyed. Since the regression models are based on observations across all independent variables, and some variables had a small number of missing data points, our final models had between 5,600 and 6,000 observations, depending on the outcome. For two survey years, 2014-15 and 2018-19, a split sample questionnaire was used for bullying-related items, where only a portion of the sample was relevant for items in our analysis. For each year, we used the SCS person weights (incoming and continuing) for our analyses. For the 2014-15 and 2018-19 SCS data, we only used respondents to version 1 of the respective questionnaires and adjusted those weights to account for this, following technical documentation. For 2014-15, we doubled the person weights. For 2018-19, we multiplied person weights by a factor of 100/60.

All regression models are subject to limitations and for this model, some known limitations include:

- Some variables that might be related to student or school characteristics were not available in the data. For example, in this context, it could be household income adjusted for family size or household type (single- versus multiple-headed households) that could be related to students' vulnerability or bully-related experiences. Additionally, these data are subject to both sampling and nonsampling error. While the analysis has accounted for sampling error, survey data are also affected by non-sampling error which could occur for many reasons, including a failure to sample a segment of the population, inability to obtain information for all respondents in the sample, inability or unwillingness of respondents to provide correct information, mistakes by respondents, and errors made in the collection or processing of data (such as imputation or data quality checks). A nonresponse bias analysis and nonresponse adjustments were carried out in order to address non-sampling error associated with nonresponse.
- Results of our analyses are associational and do not imply a causal relationship.

Table 5 lists the variables we included in our regression model. We conducted a separate regression for each of the hostile behaviors listed as an outcome variable.

Appendix II: Regression Analysis

Table 5: Variables Included in GAO's Regression Model on the Department of Education's School Crime Supplement (SCS) to the Department of Justice's National Crime Victimization Survey, School Years 2014-2015, 2016-2017, and 2018-2019

Independent variables

Percent of the student population racial/ethnic demographics: percent of combined American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander: 0 to less than 5 percent, 5 to less than 20 percent, 20 to less than 50 percent, 50 percent or more (SCS220)

School level: primary, middle, high (SCS217)

Locale: rural, suburban, town, city (SCS216)

School size: 1-299 students, 300-599 students, 600-999 students, 1,000-1,499 students, 1,500-1,999 student, 2,000 or more students (SCS218)

School region: Midwest, Northeast, South, West (SCS218)

School security measures: guards or assigned police officers (VS0036), adult hall supervisor (VS0036), metal detectors (VS0038), locked entrance/exit (VS0039), visitor sign in and badge (VS0040), locker checks (VS0041), students wear badge or picture ID (VS0042), security cameras (VS0043), code of conduct (VS0044), anonymous reporting of threats (VS0045)

Student teacher ratio: less than 13, 13-15, 16-19, 20 or more (SCS219)

Alcohol and drug availability: students under the influence of illegal drugs or alcohol at school (SCS210), access to illegal drugs or alcohol at school (VS0058, VS0059, VS0067, SCS209)

Weapon carrying and availability: brought gun, knife, or other weapons to school or know of/see others at school with a gun (VS0127, VS0128, VS0129, VS0130)

Gang presence: gangs at school (VS0133)

Feelings about school: agree that rules are fair and enforced, punishment is known and the same for all students, feel safe at school, crime in the neighborhood of the school (SCS189)

Student demographics: sex (V3018), white non-Hispanic (V3023A, V3024), household income (categories: \$0-\$24,999, \$25,000-\$49,999,\$ 50,000-\$74,999, \$75,000 or more) (SCS214A)

Extracurricular activities: participated in any activity (VS0029, VS0030, VS0031, VS0033, VS0033, VS0034, VS0035)

School year: 2014-15, 2016-17, or 2018-19

Outcome (or dependent) variables

- Any bullying (VS0073, VS0074, VS0075, VS0076, VS0077, VS0078, VS0079)
- Physical bullying (VS0075, VS0076, VS0079)
- Emotional bullying (VS0073, VS0074, VS0077, VS0078)
- Hate words (VS0105)
- Physical fight (VS0071)
- Bullied related to students' identity/bullied for any other reason (SCS200, SCS201, SCS202, SCS203, SCS204, SCS205)

Source: GAO analysis of the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey for school years 2014-15, 2016-17, and 2018-19. | GAO-22-104341

Given the limitations of our model as described above, we present the results of our regression model in table 6 by describing the direction of the associations, rather than the estimated odds of outcome variables. For categorical variables in these tables, we describe the comparison school characteristic in the column labeled "Effect: groups compared in Odds Ratio Estimate." For example, the results in these tables should be

Appendix II: Regression Analysis
interpreted as a student that reports feeling safe in school (yes) is less likely to report being bullied than a student that reports not feeling safe, because the association is negative.

Table 6: Associations of Regression Model Variables with Bullying based on the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey, School Years 2014-2015, 2016-2017, and 2018-2019

Variable label	Effect: groups compared in odds ratio estimate	Logistic any bullying	Logistic physical bullying	Logistic emotional bullying	Logistic hate words	Logistic physical fight	Multinomial bullied identity vs. not bullied	Multinomial bullied not identity vs. not bullied
Security measure: guards or assigned police officers	Yes vs. no	_	_	_	_	_	_	_
Security measure: hall supervisor	Yes vs. no	Negative	_	Negative	Negative	_	_	_
Security measure: metal detectors	Yes vs. no	Negative	_	Negative	Negative	_	_	_
Security measure: locked entrance/exit	Yes vs. no	_	_	_	_	_	_	_
Security measure: visitor sign in or badge	Yes vs. no	Positive	_	Positive	Positive	_	Positive	Positive
Security measure: locker checks	Yes vs. no	_	_	_	_	_	_	_
Security measure: student wear badge/picture ID	Yes vs. no	_	_	_	_	_	_	_
Security measure: security cameras	Yes vs. no	_	_	_	_	_	_	_
Security measure: code of conduct	Yes vs. no	_	_	_	_	_	_	_
Security measure: anonymous reporting of threats	Yes vs. no	Negative	_	Negative	Negative	Negative	_	Negative
Observed students under influence of illegal drugs or alcohol at school	Yes vs. no	Positive	Positive	Positive	Positive	_	Positive	Positive
Access to illegal drugs or alcohol at school	Yes vs. no	Positive	Positive	Positive	Positive	_	Positive	Positive

Variable label	Effect: groups compared in odds ratio estimate	Logistic any bullying	Logistic physical bullying	Logistic emotional bullying	Logistic hate words	Logistic physical fight	Multinomial bullied identity vs. not bullied	Multinomial bullied not identity vs. not bullied
Brought gun, knife, or other weapons to school or know of/seen others at school with gun	Yes vs. no	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Gangs at your school?	Yes vs. no	Positive	Positive	Positive	Positive	Positive	Positive	Positive
Agree with any of the fairness questions, rules known and consequences are the same.	Yes vs. no	_	_	_	_	_	_	_
Feel safe at school	Yes vs. no	Negative	Negative	Negative	Negative	_	Negative	Negative
High school crime in school neighborhood	Yes vs. no	_	_	_	_	_	_	_
Sex	Female vs. male	Positive	Negative	Positive	_	Negative	Positive	Positive
White non-Hispanic	Yes vs. no	Positive	Positive	Positive	_	_	_	Positive
Household income	\$25,000 to \$49,999 vs. less than \$25,000	_		_	_	_	_	_
Household income	\$50,000 to \$74,999 vs. less than \$25,000	_	Negative	_	_	_	_	_
Household income	\$75,000 and over vs. less than \$25,000	Negative	Negative	_	_	Negative	Negative	_
Participate in activity , sports, spirit, academic, student government	Yes vs. no	Positive	_	Positive	_	_	_	Positive
School locale	Suburb vs. city	_	_	_	_	_	_	_
School locale	Town vs. city		_	_	Negative	_	_	_
School locale	Rural vs. city	_	_	_	_	_	_	_
School level	Primary vs. middle	_	_	_	_	_	_	_

Variable label	Effect: groups compared in odds ratio estimate	Logistic any bullying	Logistic physical bullying	Logistic emotional bullying	Logistic hate words	Logistic physical fight	Multinomial bullied identity vs. not bullied	Multinomial bullied not identity vs. not bullied
School level	High vs. middle	Negative	Negative	Negative	Negative	Negative	Negative	Negative
School level	Other vs. middle	_	Negative	_	_	Negative	_	_
School enrollment size	300-599 vs. less than 300	_	_	_	_	_	_	_
School enrollment size	600-999 vs. less than 300	_	_	_	_	_	_	_
School enrollment size	1,000-1,499 vs. less than 300	Negative	_	Negative	_	_	_	Negative
School enrollment size	1,500-1,999 vs. less than 300	Negative	_	Negative	_	Negative	_	Negative
School enrollment size	2,000 or more vs. less than 300	Negative	_	Negative	_	_	_	Negative
Student to full-time- equivalent teacher ratio	13 to less than 16 vs. less than 13 students	_	_	_	_	_	_	_
Student to full-time- equivalent teacher ratio	16 to less than 20 vs. less than 13 students	_	_	_	_	_	_	_
Student to full-time- equivalent teacher ratio	20 or more vs. less than 13 students	_	_	_	_	_	_	_
Percent of combined American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander	VS.	_	_	_	Positive	_	Positive	_

Variable label	Effect: groups compared in odds ratio estimate	Logistic any bullying	Logistic physical bullying	Logistic emotional bullying	Logistic hate words	Logistic physical fight	Multinomial bullied identity vs. not bullied	Multinomial bullied not identity vs. not bullied
Percent of combined American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander	20 to less than 50 percent vs. less than 5 percent	_	_	Positive	_	_	Positive	_
Percent of combined American Indian/Alaska Native, Asian, Black/African American, Hispanic/Latino, Native Hawaiian/Other Pacific Islander	50 percent or more vs. less than 5 percent	_	_	_	_	_	_	_
School region	Midwest vs. northeast	_	_	_	_	_	_	_
School region	South vs. northeast	_		_	_	_	_	_
School region	West vs. northeast	_	_	_	_	_	_	_
2014-15 or 2016-17	2015 vs. 2017	_	_	_	_	_	_	_
2014-15 or 2018-19	2015 vs. 2019	_	_	_	_	_	_	_

Source: GAO analysis of the Department of Education's School Crime Supplement to the Department of Justice's National Crime Victimization Survey, school years 2014-15, 2016-17, and 2018-19. | GAO-22-104341

Note: Cells marked "Positive" indicate instances where we found school characteristics were associated with a significantly higher likelihood of experiencing the given hostile behavior. Cells marked "Negative" indicate a significantly lower likelihood of experiencing the given hostile behavior. Cells marked as "—" indicate no association between the given school characteristic and the likelihood of experiencing the given hostile behavior. Significance is indicated by a p value of less than 0.05.

Regression Analysis of the School Survey on Crime and Safety

We conducted generalized linear regressions using the same universe of approximately 4,800 U.S. school principals and other administrators sampled from Education's School Survey on Crime and Safety (SSOCS) for school years 2015-16 and 2017-18 as our descriptive analysis of the SSOCS data.¹ Because one regression outcome could only be calculated using SSOCS 2017-18 data, that regression model was limited to the sample of approximately 2,700 schools from that year. Because the data come from a nationally representative survey, these data use sampling weights to allow for inferences to be made about the larger population of schools from which the sample units were drawn. For each year, SSOCS covers a population of over 84,000 schools. In addition to incorporating sample weights, the data contain replicate weights which were used in variance estimation to account for the sample design.

All regression models are subject to limitations and for this model, the limitations included:

- Data analyzed for these regression analyses were by school rather than by student. Consequently, they are not able to describe the association between our independent variables and a student's experience of incidents of hostile behaviors, such as bullying or crime and violence, while controlling for characteristics of an individual student such as gender, race or ethnicity, or grade level. Instead, the school-level nature of the SSOCS data limited this particular analysis of the associations between school characteristics and school practices and programs to whether there was an increase, decrease, or no effect on measure of hostile behaviors, such as bullying and incidents of crime and violence, controlling for other characteristics of the entire school's population, such as school type, or percent of students who are male.
- Some variables which may be related to school practices and hostile behaviors are not available in the data. For example, in this context, it could be a school's average student household income adjusted for family size that could be related to students' exposure to adverse incidents in schools, such as bullying.
- Results of our analyses are associational and do not imply a causal relationship because, for example, SSOCS data are observational in nature and were not gathered by a randomized controlled trial, where students would be randomized to attend schools with certain characteristics.

¹We used a Poisson generalized linear regression since the data on incidents of crime and violence represent counts and therefore are not appropriate for a traditional normal linear model. In addition, we used a negative binomial regression instead of a Poisson regression because negative binomial models are appropriate for count analyses with observed over-dispersion (i.e. when the variance of the count variable is much larger than the mean of that variable).

Additionally, SSOCS data are subject to both sampling and nonsampling error. While the analysis has accounted for sampling error, survey data are also affected by non-sampling error which could occur for many reasons, including a failure to sample a segment of the population, inability to obtain information for all respondents in the sample, inability or unwillingness of respondents to provide correct information, mistakes by respondents, and errors made in the collection or processing of data (such as imputation or data quality checks).

For the purposes of our analysis, we created some composite variables (see table 7). Table 8 lists the variables we included in our regression model. We conducted a separate regression for each of the hostile behaviors listed as an outcome variable.

Table 7: Created Variables Used in the Regression Analysis of the Department of Education's School Survey on Crime and Safety (SSOCS), School Years 2015-2016 and 2017-2018

GAO category	Variables from SSOCS	Recoded value(s)	
School type	Type of school (C0564):	Regular public school	
	Regular public school	Magnet school (exclusively or partially)	
	Charter school	Charter or other school	
	 Has a magnet program for part of the school 		
	 Exclusively a magnet school 		
	Other (specify)		
Net transfers	Transferred to (C0570)	Transferred to (minus) Transferred from	
	 Transferred from (C0572) 	(continuous)	
Disorder	Student racial ethnic tensions (C0374)	Regular (if at least one occurs daily or	
	 Student verbal abuse of teachers (C0380) 	weekly)	
	 Widespread disorder in classrooms (C0382) 	Rare (if else at least one occurs monthly or	
	 Student acts of disrespect for teachers (C0384) 	occasionally)	
	Gang activities (C0386)	Never (if all never occur)	

GAO category	Variables from SSOCS	Recoded value(s)
Total security practices	During the school year, was it a practice of your school to do the following?	Count of number of security measures in
	 Require visitors to sign or check in and wear badges (C0110) 	place
	 Control access to school buildings during school hours (e.g., locked or monitored doors, loading docks) (C0112) 	
	 Control access to school grounds during school hours (e.g., locked or monitored gates) (C0114) 	
	 Require metal detector checks on students every day (C0116) 	
	 Perform one or more random metal detector checks on students (C0120) 	
	 Equip classrooms with locks so that doors can be locked from the inside (C0121) 	
	 Close the campus for most or all students during lunch (C0122) 	
	 Perform one or more random sweeps (e.g., locker checks, dog sniffs) for contraband (e.g., drugs or weapons) (C0125) 	
	 Require drug testing for students participating in athletics or other extracurricular activities (C0129) 	
	 Require students to wear uniforms (C0134) 	
	Enforce a strict dress code (C0136)	
	 Provide school lockers to students (C0138) 	
	 Require clear book bags or ban book bags on school grounds (C0140) 	
	 Have "panic button(s)" or silent alarm(s) that directly connect to law enforcement in the event of an incident (C0139) 	
	 Provide an electronic notification system that automatically notifies parents in case of a school-wide emergency (C0141) 	
	 Provide a structured anonymous threat reporting system (e.g., online submission, telephone hotline, or written submission via drop box) (C0143) 	
	 Require students to wear badges or picture IDs (C0142) 	
	 Require faculty and staff to wear badges or picture IDs (C0144) 	
	 Use one or more security cameras to monitor the school (C0146) 	
	 Provide two-way radios to any staff (C0150) 	
	 Prohibit non-academic use of cell phones or smartphones during school hours (C0153) 	

GAO category	Variables from SSOCS	Recoded value(s)
Total school activities	 During the school year, did your school have any activities that included the following components for students? 	Count of number of school activities in place
	 Prevention curriculum, instruction, or training for students (e.g., conflict resolution, anti-bullying, dating violence prevention) (C0174) 	
	 Social emotional learning for students (e.g., social skills, anger management, mindfulness) (C0183) 	
	 Behavioral or behavior modification intervention for students (including the use of positive reinforcements) (C0176) 	
	 Individual mentoring/tutoring/coaching of students by adults (C0181) 	
	 Student involvement in peer mediation (C0175) 	
	 Student court to address student conduct problems or minor offenses (C0177) 	
	 Student involvement in restorative circles (e.g., "peace circles," "talking circles," "conflict circles") (C0179) 	
	 Programs to promote a sense of community/social integration among students (C0186) 	
School prevention program	 During the school year, did your school have any activities that included the following components for students? 	Yes (if at least one program is in place) No (if no programs are in place)
	 Prevention curriculum, instruction, or training for students (e.g., conflict resolution, anti-bullying, dating violence prevention) (C0174) 	(in the programme and in places)
	 Social emotional learning (SEL) for students (e.g., social skills, anger management, mindfulness) (C0183) 	
	 Behavioral or behavior modification intervention for students (including the use of positive reinforcements) (C0176) 	
	 Individual mentoring/tutoring/coaching of students by adults (C0181) 	
	 Programs to promote a sense of community/social integration among students (C0186) 	
Student involvement program	 During the school year, did your school have any activities that included the following components for students? 	Yes (if at least one program is in place) No (if no programs are in place)
	 Student involvement in peer mediation (C0175) 	(ii iio programo are iii piace)
	 Student court to address student conduct problems or minor offenses (C0177) 	
	 Student involvement in restorative circles (e.g., "peace circles," "talking circles," "conflict circles") (C0179) 	

GAO category	Variables from SSOCS	Recoded value(s)
Inclusive student groups	 During the school year, did your school have any recognized student groups with the following purposes? 	Yes (if at least one program is in place) No (if no programs are in place)
	 Acceptance of sexual orientation and gender identity of students (e.g., Gay-Straight Alliance) (C0604) 	no (ii no programo aro in piaco)
	 Acceptance of students with disabilities (e.g., Best Buddies) (C0606) 	
	 Acceptance of cultural diversity (e.g., Cultural Awareness Club) (C0608) 	
Parental involvement	Which of the following does your school do to involve or help parents?	Yes (if at least one occurs)
	 Have a formal process to obtain parental input on policies related to school crime and discipline (C0190) 	No (if none occur)
	 Provide training or technical assistance to parents in dealing with students' problem behavior (C0192) 	
Total parent and community involvement activities	 During the school year, were any of the following community and outside groups involved in your school's efforts to promote safe, disciplined, and drug- free schools? 	Count of number of community involvement activities in place
	 Parent groups (C0204) 	
	Social service agencies (C0206)	
	Mental health agencies (C0212)	
	 Civic organizations/service clubs (C0214) 	
	 Private corporations/businesses (C0216) 	
	 Religious organizations (C0218) 	
Justice involvement	 During the school year, were any of the following community and outside groups involved in your school's efforts to promote safe, disciplined, and drug- free schools? 	Yes (if at least one occurs) No (if none occur)
	Juvenile justice agencies (C0208)	
	Law enforcement agencies (C0210)	
Sworn Law Enforcement Office (SLEO) participation	 Did these SLEOs (including School Resource Officers) participate in the following activities at your school? 	Yes (if at least one occurs) No (if none occur)
, ,, ,	Security enforcement and patrol (C0630)	140 (Il fioric docur)
	Maintaining student discipline (C0632)	
	 Identifying problems in the school and proactively seeking solutions to those problems (C0636) 	
	 Recording or reporting discipline problems to school authorities (C0644) 	
Additional security	 Aside from SLEOs (including School Resource Officers), how many additional security guards or security personnel were present at your school at least once a week? (C0232, C0234) 	Yes (if reported a value greater than 0 for at least one)
	5 (OOLOL) OOLO !/	No (if reported a value of 0 for both)

Page 72 GAO-22-104341 K-12 Education

GAO category	Variables from SSOCS	Recoded value(s)
Mental health services (for SSOCS 2018 only)	 During the 2017–18 school year, did your school provide diagnostic mental health assessments (e.g., psychological/psychiatric diagnostics assessments) to evaluate students for mental health disorders? (C0663, for SSOCS 2017-18 only) 	Yes (if at least one occurs) No (if none occur)
	 During the 2017–18 school year, did your school provide treatment (e.g., psychotherapy, medication) to students for mental health disorders? (C0667, for SSOCS 2017-18 only) 	
Mental health services (for SSOCS 2016 only)	Diagnostic assessment at school by school-employed mental health professional (C0662, for SSOCS 2015-16 only)	Yes (if at least one occurs) No (if none occur)
,	 Diagnostic assessment at school by school-funded mental health professional (C0664, for SSOCS 2015-16 only) 	No (il fioric occur)
	 Diagnostic assessment outside of school by school-funded mental health professional (C0666, for SSOCS 2015-16 only) 	
	 Treatment at school by school-employed mental health professional (C0668, for SSOCS 2015-16 only) 	
	 Treatment at school by school-funded mental health professional (C0670, for SSOCS 2015-16 only) 	
	 Treatment outside of school by school-funded mental health professional (C0672, for SSOCS 2015-16 only) 	

GAO category	Variables from SSOCS	Recoded value(s)
Total staff training measures	 During the school year, did your school or school district provide any of the following for classroom teachers or aides? 	Count of number of staff training measures in place
	 Training in classroom management for teachers (C0266) 	·
	 Training in school-wide discipline policies and practices related to violence (C0268) 	
	 Training in school-wide discipline policies and practices related to cyberbullying (C0265) 	
	 Training in school-wide discipline policies and practices related to bullying other than cyberbullying (C0267) 	
	 Training in school-wide discipline policies and practices related to alcohol and/or drug use (C0269) 	
	 Training in safety procedures (e.g., how to handle emergencies) (C0270) 	
	 Training in recognizing early warning signs of students likely to exhibit violent behavior (C0272) 	
	 Training in recognizing signs of self-harm or suicidal tendencies (C0278, for SSOCS 2017-18 only) 	
	 Training in intervention and referral strategies for students displaying signs of mental health disorders (e.g., depression, mood disorders, ADHD) (C0271) 	
	 Training in recognizing physical, social, and verbal bullying behaviors (C0273) 	
	 Training in recognizing signs of students using/abusing alcohol and/or drugs (C0274) 	
	 Training in positive behavioral intervention strategies (C0276) 	
	 Training in crisis prevention and intervention (C0277) 	
Total exclusionary disciplinary measures	During the school year, did your school allow for the use of the following disciplinary actions? If "yes," were the actions used this school year?	Count of number of disciplinary measures i place
	 Removal with no continuing school services for at least the remainder of the school year (C0390) 	
	 Removal with school-provided tutoring/home instruction for at least the remainder of the school year (C0394) 	
	 Transfer to a specialized school for disciplinary reasons (C0398) 	
	 Transfer to another regular school for disciplinary reasons (C0402) 	
	 Out-of-school suspension or removal for less than the remainder of the school year (C0406,C0410) 	
	 In-school suspension for less than the remainder of the school year (C0414,C0418) 	

Page 74 GAO-22-104341 K-12 Education

GAO category	Variables from SSOCS	Recoded value(s)
Total other disciplinary measures	 During the school year, did your school allow for the use of the following disciplinary actions? If "yes," were the actions used this school year? 	Count of number of disciplinary measures in place
	 Referral to a school counselor (C0422) 	
	 Assignment to a program (during school hours) designed to reduce disciplinary problems (C0426) 	
	 Assignment to a program (outside of school hours) designed to reduce disciplinary problems (C0430) 	
	 Loss of school bus privileges due to misbehavior (C0434) 	
	 Corporal punishment (C0438) 	
	 Placement on school probation with consequences if another incident occurs (C0442) 	
	 Detention and/or Saturday school (C0446) 	
	 Loss of student privileges (C0450) 	
	 Requirement of participation in community service (C0454) 	
Total crime and violence	Rape or attempted rape (C0310)	Count of number of incidents
incidents	Sexual assault other than rape (C0314)	
	 Robbery, with and without weapon (C0318 + C0322) 	
	 Physical attack or fight, with and without weapon (C0326 + C0330) 	
	 Threats of physical attack, with and without weapon (C0334 + C0338) 	
	Theft/larceny (C0342)	
	Hate crimes (C0690)	
	 Possession of weapons, firearms and knives (C0346 + C0350) 	
Bullying, sexual harassment	, • Student bullying (C0376)	Regularly (if at least one occurs daily, at
and cyberbullying	Student sexual harassment (C0378)	least once a week, or at least once a month)
	Cyberbullying among students (C0389)	Rarely (if else at least one occurs on occasion)
		Never (if none occur)
Bullying based on identity	Student harassment based on sexual orientation (C0381)	Regularly (if at least one occurs daily, at
(for SSOCS 2017-18 only)	 Student harassment based on gender identity (C0383) 	least once a week, or at least once a month)
	Student harassment based on religion (C0385)	Rarely (if else at least one occurs on
	Student harassment based on disability (C0387)	occasion) Never (if none occur)

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety, school years 2015-16 and 2017-18. | GAO-22-104341

Table 8: Variables Included in Our Regression Models Using the Department of Education's School Survey on Crime and Safety (SSOCS), School Years 2016-2017 and 2017-2018

Control/Independent variables

School characteristics (continuous): total enrollment (C0522); percent eligible for free or reduced lunch (C0524); percent English language learner (C0526); percent special education students (C0528); percent male (C0530); percent below the 15th percentile on standardized tests (C0532); percent likely to go to college after high school (C0534); average daily attendance (C0568); net transfers; school year

School characteristics (categorical): Crime level in the area where your school is located (C0560; low, moderate, high; students come from areas with very different levels of crime); school type (public school, magnet (exclusively or partially), charter or other school); disorder (regularly, rarely, never)

School security practices (continuous): total security practices

School security practices (categorical, yes/no): require visitors to sign or check in and wear badges (C0110); Control access to school buildings during school hours (e.g., locked or monitored doors, loading docks) (C0112); Perform one or more random metal detector checks on students (C0120); Perform one or more random sweeps (e.g., locker checks, dog sniffs) for contraband (e.g., drugs or weapons) (C0125); Provide a structured anonymous threat reporting system (e.g., online submission, telephone hotline, or written submission via drop box) (C0143); Require students to wear badges or picture IDs (C0142); Prohibit non-academic use of cell phones or smartphones during school hours (C0153)

School activities (continuous): total school activities

School activities (categorical, yes/no): school prevention program; student involvement program; inclusive student groups

Parent and community involvement (categorical, yes/no): parental involvement; justice involvement; SLEO participation; additional security

Parent and community involvement (continuous): total parent and community involvement activities

Parent and community involvement (continuous): total parent and community involvement activities

Staff training and practices (continuous): total staff training measures

Staff training and practices (categorical, yes/no): mental health services

Disciplinary actions (continuous): total exclusionary disciplinary measures; total other disciplinary measures					
Outcome/Dependent variables	Model specification				
Frequency of crime and violence (continuous, count)	Poisson regression				
Bullying, sexual harassment, and cyberbullying (categorical)					
 Never occurring vs. rarely occurring vs. frequently occurring Frequently occurring bullying vs. infrequently (rarely or never) occurring bullying Frequently occurring bullying vs. infrequently (rarely or never) occurring bullying 	Multinomial logistic regression Logistic regression				
Bullying based on identity (categorical) (for SSOCS 2017-18 only) Never occurring vs. rarely occurring vs. frequently occurring Any bullying occurring (frequent or rarely) vs. never or no bullying occurring	Multinomial logistic regression Logistic regression				

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety 2015-16 and 2017-18. | GAO-22-104341

Given the limitations of our model as described above, we present the results of our regression models in tables 9 and 10, by describing the direction of the associations. Positive means that a particular variable was significantly associated with an increase in the bullying, sexual harassment, or cyberbullying rate or odds at the 0.05 level and negative indicates a decrease in the rate or odds, while holding all other variables in the model constant. Insignificant indicates the variable is not significantly associated with the given bullying, sexual harassment, or cyberbullying action at the 0.05 level. For categorical variables in these tables, we provided the comparison school characteristic in brackets. For example, the results in these tables should be interpreted as a school that reports disorder occurring is more likely to report discipline problems occurring because the association is positive.

Table 9: Associations of Multinomial Logistic Regression Model Variables based on the Department of Education's School Survey on Crime and Safety (SSOCS), School Years 2015-2016 and 2017-2018

			Model type, outcome				
Variable	Effect of Variable	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (regularly vs. never)	Frequency of bullying, sexual harassment, or cyberbullying (rarely vs. never)	Frequency of bullying, sexual harassment, or cyberbullying (regularly vs. never)		
Additional security	Yes vs. no	_	_	Positive	Positive		
Require visitors to sign or check in and wear badges	Yes vs. no	_	_	_	_		
Control access to school buildings during school hours	Yes vs. no	_	_	_	_		
Perform one or more random metal detector checks on students	Yes vs. no	_	_	_	_		
Perform one or more random sweeps (e.g., locker checks, dog sniffs) for contraband	Yes vs. no	_	_	_	Positive		
Require students to wear badges or picture IDs	Yes vs. no	_	_	_	_		
Provide a structured anonymous threat reporting system	Yes vs. no	_	_	_	_		
Prohibit non-academic use of cell phones or smartphones during school hours	Yes vs. no	_	_	_	_		
Total student enrollment	For one unit increase	_	_	_	_		
Percent eligible for free or reduced lunch	For one unit increase	_	_	_	_		
Percent English language learner students	For one unit increase	_	_	_	_		

			Model type, outcome				
Variable	Effect of Variable	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (rarely vs. never)		
Percent 'Special education students'	For one unit increase	_	_	_	_		
Percent male students	For one unit increase	_	_	_	_		
Percent students below the 15th percentile on standardized tests	For one unit increase	_	_	_	_		
Percent students likely to go to college after high school	For one unit increase	_	_	_	_		
Crime level in the area where school is located	Low level of crime vs High level of crime	_	_	_	_		
Crime level in the area where school is located	Moderate level of crime vs High level of crime	_	_	_	_		
Crime level in the area where school is located	Students come from areas with very different levels of crime vs High level of crime	_	_	_	_		
School average daily attendance	For one unit increase	_	_	_	_		
Total parent and community involvement activities	For one unit increase	_	Positive	_	_		
Disorder	Rarely vs. Never	Positive	_	Positive	Positive		
Disorder	Regularly vs. Never	Positive	_	_	_		
Total exclusionary disciplinary measures	For one unit increase	_	_	_	_		
Inclusive student groups	Yes vs. no	_	-		-		
Justice Involvement	Yes vs. no		_	_	_		

		Model type, outcome				
Variable	Effect of Variable	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (rarely vs. never)	Frequency of bullying based on identity (rarely vs. never)	
Mental health services	Yes vs. no	_	_	_	_	
Net transfers	For one unit increase	_	_	_	_	
Total other disciplinary measures	For one unit increase	Positive	Positive	_	_	
Parental involvement	Yes vs. no	_	_	_	_	
School prevention program	Yes vs. no	_	_	_	_	
Total school activities	For one unit increase	_	_	_	_	
School type	Magnet program (exclusive or partial) vs. Charter or Other school	_	_	_	_	
School type	Regular Public school vs. Charter or Other school	_	_	_	_	
Total security practices	For one unit increase	_	_	_	_	
SLEO Participation	Yes vs. no	_	_	_	_	
Total staff training measures	For one unit increase	_	_	_	_	
Student involvement program	Yes vs. no	_	_	_	_	
SSOCS School Year	2017-2018 vs. 2015-2016	_	_	_	_	

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety, school years 2015-16 and 2017-18. | GAO-22-104341

Note: Cells marked "positive" indicate instances where we found school characteristics were associated with a significantly higher likelihood of experiencing the given hostile behavior. Cells marked "negative" indicate a significantly lower likelihood of experiencing the given hostile behavior. Cells marked as "—" indicate no association between the given school characteristic and the likelihood of experiencing the given hostile behavior. Significance is indicated by a p value of less than 0.05.

Table 10: Associations of Poisson and Binary Logistic Regression Model Variables for the Department of Education's School Survey on Crime and Safety (SSOCS), School Years 2015-2016 and 2017-2018

Variable		Model Type, Outcome		
	Effect of Variable	Poisson regression: Count of incidents of crime and violence	Logistic regression: Bullying and cyberbullying at schools (Frequent vs. Infrequent Bullying)	Logistic regression: Bullying based on identity at schools (Any bullying vs. Never Bullying) SSOCS18 only
Additional security	Yes vs. no	_	_	_
Require visitors to sign or check in and wear badges	Yes vs. no	_	_	_
Control access to school buildings during school hours	Yes vs. no	_	_	_
Perform one or more random metal detector checks on students	Yes vs. no	_	Negative	_
Perform one or more random sweeps (e.g., locker checks, dog sniffs) for contraband	Yes vs. no	_	Positive	_
Require students to wear badges or picture IDs	Yes vs. no	_	_	_
Provide a structured anonymous threat reporting system	Yes vs. no	_	_	_
Prohibit non-academic use of cell phones or smartphones during school hours	Yes vs. no	_	_	_
Total student enrollment	For one unit increase	_	_	_
Percent eligible for free or reduced lunch	For one unit increase	_	_	_
Percent English language learner students	For one unit increase	_	_	_
Percent 'Special education students'	For one unit increase	_	_	_
Percent male students	For one unit increase	_	_	

Variable	Model Type, Outcome				
	Effect of Variable	Poisson regression: Count of incidents of crime and violence	Poisson regression: Count of incidents of crime and violence	Poisson regression: Count of incidents of crime and violence	
Percent students below the 15th percentile on standardized tests	For one unit increase	_	_	_	
Percent students likely to go to college after high school	For one unit increase	_	_	_	
Crime level in the area where school is located	Low level of crime vs. high level of crime	Negative	_	_	
Crime level in the area where school is located	Moderate level of crime vs. high level of crime	_	_	_	
Crime level in the area where school is located	Students come from areas with very different levels of crime vs. high level of crime	_	_	_	
School average daily attendance	For one unit increase	_	_	_	
Total parent and community nvolvement activities	For one unit increase	_	_	_	
Disorder	Rarely vs. never	Positive	Positive	Positive	
Disorder	Regularly vs. never	Positive	Positive	Positive	
Total exclusionary disciplinary neasures	For one unit increase	_	_	_	
nclusive student groups	Yes vs. no	_	_	_	
lustice Involvement	Yes vs. no	_	_	_	
Mental health services	Yes vs. no	Positive	_	_	
Net transfers	For one unit increase	_	_	_	
Total other disciplinary measures	For one unit increase	_	Positive	Positive	

Variable	Model Type, Outcome			
	Effect of Variable	Poisson regression: Count of incidents of crime and violence	Poisson regression: Count of incidents of crime and violence	Poisson regression: Count of incidents of crime and violence
Parental involvement	Yes vs. no	_	_	_
School prevention program	Yes vs. no	_	_	_
Total school activities	For one unit increase	_	_	_
School type	Magnet program (exclusive or partial) vs. Charter or Other school	_	_	_
School type	Public school vs. charter or other school	Positive	_	_
Total security practices	For one unit increase	_	_	_
SLEO Participation	Yes vs. no	Positive	_	_
Total staff training measures	For one unit increase	_	_	_
Student involvement program	Yes vs. no	_	_	_
SSOCS school year	2017-18 vs. 2015-16	_	_	_

Source: GAO analysis of the Department of Education's School Survey on Crime and Safety for school years 2015-16 and 2017-18. | GAO-22-104341

Note: Cells marked "positive" indicate instances where we found school characteristics were associated with a significantly higher likelihood of experiencing the given hostile behavior. Cells marked "negative" indicate a significantly lower likelihood of experiencing the given hostile behavior. Cells marked as "—" indicate no association between the given school characteristic and the likelihood of experiencing the given hostile behavior. Significance is indicated by a p value of less than 0.05.

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Jacqueline M. Nowicki, Director, (617) 788-0580 or nowickij@gao.gov

Staff Acknowledgments

In addition to the contact named above, Sherri Doughty (Assistant Director), Lara Laufer (Analyst in Charge), Manuel Valverde (Analyst in Charge), Christina Bixby, Elizabeth Calderon, Justin Dunleavy, Holly Dye, Sarah Gilliland, Jessica Mausner, Jean McSween, John Mingus, Mimi Nguyen, Almeta Spencer, Frances Tirado, Tania Uruchima, and Sonya Vartivarian made key contributions to this report.

GAO's Mission	The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.
Obtaining Copies of GAO Reports and Testimony	The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its website newly released reports, testimony, and correspondence. You can also subscribe to GAO's email updates to receive notification of newly posted products.
Order by Phone	The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, https://www.gao.gov/ordering.htm.
	Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.
	Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.
Connect with GAO	Connect with GAO on Facebook, Flickr, Twitter, and YouTube. Subscribe to our RSS Feeds or Email Updates. Listen to our Podcasts. Visit GAO on the web at https://www.gao.gov.
To Report Fraud,	Contact FraudNet:
Waste, and Abuse in	Website: https://www.gao.gov/about/what-gao-does/fraudnet
Federal Programs	Automated answering system: (800) 424-5454 or (202) 512-7700
Congressional Relations	A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548
Public Affairs	Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800 U.S. Government Accountability Office, 441 G Street NW, Room 7149 Washington, DC 20548
Strategic Planning and External Liaison	Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707 U.S. Government Accountability Office, 441 G Street NW, Room 7814, Washington, DC 20548

