NCJRS
NATIONAL CRIMINAL JUSTICE REFERENCE SERVICE

OFFICE OF JUSTICE PROGRAMS
BJA BJS NIJ OJJDP OVC SMART

The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

Document Title:	**School Climate Enhancement and Bullying Prevention in Southern Illinois, Final Summary Report**
Author(s):	**Mary Louise Cashel, Ph.D., Daryl G. Kroner, Ph.D.**
Document Number:	**255064**
Date Received:	**July 2020**
Award Number:	**2015-CK-BX-0011**

This resource has not been published by the U.S. Department of Justice. This resource is being made publically available through the Office of Justice Programs' National Criminal Justice Reference Service.

Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

School Climate Enhancement and Bullying Prevention in Southern Illinois

Final Summary Report

Prepared by:

Mary Louise Cashel, Ph.D. &

Daryl G. Kroner, Ph.D.

Southern Illinois University Carbondale

January 2020

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

I. Purpose

The purpose of our project was to assess the school climate and safety needs of predominantly rural schools in five counties of Southern Illinois, and the effectiveness of a low-cost, component based, bullying prevention intervention. We selected the components based on meta-analytic reviews of bullying interventions (Ferguson et al., 2007; Merrell, 2008; Farrington & Ttofi, 2009; Ttofi and Farrington, 2011), specifically those that targeted classroom management strategies, playground supervision and school-wide discipline initiatives. We also assessed the implementation of an anonymous, web-based tool for reporting bullying and other school safety threats. The interventions we chose included: 1) an Administrator Academy on "Safe Schools/Bullying Prevention," sponsored by the Illinois Principals Association; 2) a teacher training workshop based on the toolkit, "Creating a Safe and Respectful Environment in our Nations Classrooms" developed by the National Center for Safe and Supportive Learning Environments (NCSSLE; Diamanti, Duffey & Fisher, 2015); and 3) "Systematic Supervision," a DVD facilitated training program distributed by Iris Ed and developed by Smith & Sprague (2011) at the University of Oregon Institute on Violence and Destructive Behavior. We additionally provided all participating schools with a web-based anonymous reporting tool that students could use to report bullying experiences (or observations) and school safety threats.

II. Participants

School superintendents, principals, teachers and students from 45 schools within 24 districts in Southern Illinois participated in our project. These schools were located in Jackson, Perry, Union, Alexander and Pulaski counties. All districts were classified as either Rural (Fringe/Distant; n = 10) or Town (Fringe/Distant, n = 11) according to the National Center for Education Statistics (NCES). The exception was a single school that was classified as City

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

(Small). The sample included 20 school superintendents, and over 35 principals, 650 teachers/staff, and 5000 students who participated each year.

III. Project Design

Districts were randomly assigned to receive all of the selected interventions in either Year 1 (Wave 1) or Year 2 (Wave 2) of the project. For all districts, baseline data were collected in the form of school climate surveys completed by teachers and students (Grades 4-12) in spring 2016, and playground/lunchroom observations conducted by graduate assistants in fall of 2016. Follow-up surveys were collected in the spring of 2017 and for the final post-intervention period in spring of 2018. In our original design, we anticipated baseline data and two years of post-intervention survey data for Wave 1 schools. For Wave 2 schools, we planned two years of baseline and then one year of post-intervention survey data. Follow-up behavioral observations were conducted for all schools in spring 2017, fall 2017, and spring 2018.

The intended project design was modified in response to the needs and preferences of the schools. A number of schools requested reassignment from Wave 1 to Wave 2 of the project, and vice versa. Many districts in Wave 1 also delayed scheduling their teacher and playground trainings until just before (or in a few cases after) the Spring 2017 survey and playground observation data collection. Due to scheduling issues, only four districts from Wave 1 completed all planned intervention components in Year 1, and they did so within weeks of the Spring 2017 survey collection. At the end of the project, six districts completed either the playground trainings or the teacher trainings, not both (partial implementation). Two districts did not complete any of the trainings (no implementation).

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

IV. Methods

Students, teachers and staff completed the school climate survey each spring of Year 1, Year 2 and Year 3 of the project. The survey was originally developed by the Ontario Ministry of Education. There are two student versions (one for Grades 4-6, and one for Grades 7-12) and a teacher version, which each address six sections: learning at school; learning about others; feeling welcome and included; feeling safe; bullying; and general feelings about school policies. With regard to bullying, direct experiences of bullying (students), observations of bullying (students and teachers), and engagement in bullying (students) are queried for many specific forms (physical, verbal, social, electronic, and others). We selected this survey instrument because of 1) the comprehensiveness, 2) the parallel versions for younger students, older students, teachers, and 3) its cost effectiveness. In Year 1, the printed version of the survey was administered in the classrooms to all students and teachers on days and at times designated by the principals. Graduate assistants read the survey aloud to students with reading difficulties. In Years 2 and 3, at the request of the schools, the survey was administered online via Qualtrics. Students completed it on computers in the school computer labs, or in the classrooms using iPads, or Chrome books on days and at times determined by the principal. Students with reading difficulties listened to an audio version played with headphones. Teachers completed the survey online at times they independently chose. Sample sizes by group for each year of our project were as follows:

Students:	Year 1 = 5484	Year 2 = 7133	Year 3= 5943	Total = 18,561
Teachers:	Year 1 = 657	Year 2 = 779	Year 3 = 793	Total = 2229

The Administrator Academy on Safe Schools and Bullying Prevention was sponsored by the Illinois Principals Association and conducted by their consultant, Larry Newman. It was a

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

day long (7-hour) workshop that addressed best policies and practices for improving school climate, and was held on 6/20/16 for Wave 1 schools, and on 5/31/17 for Wave 2 schools. A total of 33 school principals and superintendents participated and received seven continuing education credits.

We utilized a train-the-trainers approach for implementing the NCSSLE workshop, "Creating a Safe and Supportive Environment in our Nation's Classrooms." It was developed by the Safe and Supportive Schools Technical Assistance (TA) Center, under funding provided by the U.S. Department of Education (ED) Office of Safe and Healthy Students (OSHS). It is composed of two, 2-1/2 hour modules. The first module is designed to define bullying, identify strategies for addressing it, and teach de-escalating techniques. The second module focuses on school climate more broadly and addresses methods for creating a positive, supportive classroom environment.

Teams of up to three teachers per school district were invited to participate in a 3-day training. Over the first two days of the training they participated in the NCSSLE workshop, as it was originally developed according to the trainer's guide (2 modules for a total of 5 hours). The Principal Investigator (PI) for this project conducted the workshop. The teacher teams also watched the movie, *Bully* (Hirsch, 2011), a documentary on peer-to-peer bullying in schools across the United States. The teams then received all the NCSSLE workshop materials (e.g., Trainer's Manual, PowerPoint slides, and handouts). On the final day of the training the teachers worked with their fellow team members to evaluate the NCSSLE curriculum, modify and/or adapt it as they believed would best meet the needs of their respective schools. The teacher training was held August, 1-3, 2016 for Wave 1 schools, and July 31 – August 2, 2017, for Wave 2 schools. A total of 69 teachers and school social workers were trained by the PI to present the

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

NCSSLE Workshop for teachers and staff in their respective districts. They received Professional Development Hour (PDH) credits in addition to stipends for their time and extra work efforts. A total of 17 teams successfully conducted workshops for their respective school districts. A total of 1369+ teachers participated in the team-led district workshops. Each team completed a fidelity checklist in which they indicated which components and corresponding activities of the NCSSLE workshop they included and discussed. Two teams implemented Module 1 only, omitting all of Module 2.

The PI conducted training in Systematic Supervision (Smith & Sprague, 2011) for playground and school monitoring using the DVD facilitated program distributed by Iris Ed. This program teaches the following skills: establishing clear and consistent rules; maintaining close proximity; scanning the area for potential problems; intervening when problems occur using a 2-minute procedure; and collecting and analyzing data for enhancing communication among staff and for strategic planning. These trainings were conducted at each school at times designated by the school administrator during either Wave 1 or Wave 2. A total of 667 teachers and playground monitoring staff participated in the trainings. Two schools requested repeat trainings after final data collection.

We developed a playground and lunchroom observation instrument for this project. This is a 30-item measure, composed of two scales: Playground Monitoring (18 items) and Lunchroom Monitoring (12 items). The items were derived based on a review of best practices for playground safety, specific skills described in Systematic Supervision, and some items were adapted from the Playground and Lunchroom Climate Questionnaire (Leff, Power, Costigan, & Manz, 2003). Our graduate students established interrater reliability ($\kappa = 0.5$ to 1 with an

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

average $\kappa = 0.79$) on the observation form. They subsequently conducted a total of 440 playground and lunchroom pre and post-intervention observations across the schools.

The anonymous web-based reporting tool was developed by our technology coordinator. It is a MySQL database with a Google Docs platform. Each school had its own unique database and web link to ensure confidentiality. It was implemented by nine school districts that posted links to the URL on their school websites. A total of 42 anonymous reports were submitted across all schools. Our purpose for this project was to assess whether or not school administrators would implement this school resource and whether or not students would use it. We did not ask school administrators to assess the credibility of reports or to share decisions on how they chose to use the information.

We collected school policy handbooks from all schools for the 2015-2016, 2016-2017, and 2017-2018 academic years. We developed a coding system for discipline and bullying policies.

During the final six months of our project, we asked all administrators (principals and superintendents) to complete an administrator survey and to participate in an exit interview. The original survey was developed by the National Center for Education Statistics; it was used in the National Education Longitudinal Study of 1988 and in follow-up studies in 1990, 1992, 1994 and 2000. We selected Section VII, which specifically assesses school climate. It includes questions pertaining to staff and teacher relationships, student behavior and conduct issues, disciplinary policies and procedures. During the exit interviews, we queried changes in policy that occurred over the course of this project.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

V. Data Analysis

We derived scale scores from the school climate surveys measuring student perceptions of school climate, school safety, frequency of bullying experiences, observed bullying incidents, and engagement in bullying. Parallel scale scores were derived from the teacher surveys measuring perceptions of school climate, school safety, and observations of bullying incidents.

The Perceptions of School Climate scale (Climate) was composed of either 16 or 18 items (for Grades 4-6 and Grades 7-12, respectively) rated on a four-point Likert scale ranging from 1 = Often to 4 = Never. The items assessed the frequency with which they experienced or perceived: general comfort in the school; acceptance among peers and teachers; availability of assistance when needed; opportunities to learn about diverse groups across the curriculum; and respect for diversity. The Perceptions of School Safety scale (Safety) was composed of 9 or 13 items rated on a four-point Likert scale ranging from 1 = Not safe to 4 = Very Safe. It assessed the degree to which student feels safe in locations across the campus, including: classroom, bus, hallways, school grounds, gym, lunchroom, playground, bathrooms, library, computer room, locker room, and parking lot. We assessed the frequency of direct bullying experiences (Bullied), observed bullying incidents (Witness) and engagement in bullying behaviors (Perpetrate). Each scale was composed of 10 items rated on a Likert scale ranging from 1 = Not once/Not at all, to 4 = Many times a week. Students were asked how often each of the following forms of bullying occurred: physical, verbal, social, electronic (cyberbullying), gender, race, religion, disability, SES, interest-based. Parallel scale scores corresponding to Climate, Safety, and Witness were calculated for the teacher report surveys. Cronbach alpha coefficients for all scales were high ($\alpha \geq .85$).

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Regarding the student survey data, across schools, student reported frequencies of bullying experiences that are comparable to rates yielded by studies of youth in metropolitan areas. Approximately 30% of students in Grades 4-6, on average, reported incidents of physical bullying as occurring at least 1 or 2 time per week, with greater percentages (30-50%) reporting those rates of verbal and social bullying. Relatively few (<15%) of these students, on average, reported experiencing electronic bullying. Similar percentages of youth in Grades 7-12 reported experiencing verbal, social and electronic bullying as often as 1 or 2 times per week. Fewer (approximately 15%) reported experiencing physical bullying. See Figures 1- 10. Generally small percentages of students (<10-15% on average) acknowledged engaging in bullying behaviors. Among those who did, considerable percentages were classified as bully-victims because they also reported experiencing bullying at least 1 or 2 times per week. (See Tables 1-2).

We conducted multivariate analyses of variance (MANOVA), in which District and Year were entered as the independent factors and scale scores from the youth surveys (Climate, Safety, Bullying, Witness, Perpetrate) were entered as the dependent variables. The MANOVA was significant, with main effects for District, Year and District by Year interactions for all scales (see Table 3). For the collective sample, there were significant reductions in mean scores from Year 1 to Year 3, indicating more positive perceptions of school climate and safety, and fewer observations of bullying. However, there was significant variability across districts. To better understand these differences, we compared schools that completed all intervention training components with those that completed some and those that did not implement any. The MANOVA yielded significant main effects for Year, Intervention Level and Intervention Level by Year interactions (see Table 5). Multivariate tests for Year 1 indicated there were no

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

significant differences between Intervention groups in Year 1. However, at the end of the project the districts that completed all components of training had significantly lower (better) scores than the other two groups on the scales assessing perceptions of school climate, school safety and observations of bullying, than students in both the Partial and No implementation districts. The MANOVA for Year 3 scores by Intervention was significant (Wilk's Lambda = .974, $F(2, 10{,}494) = 14.010$, $p < .001$), as were the univariate tests for all scales (see Table Xiii). They had also had significantly lower scores than the No Implementation group on the scales assessing bullying experiences and perpetration. The mean scale scores for Intervention groups across years are provided in Table 6.

We also evaluated the extent to which student perceptions varied by rurality. The MANOVA in which Rural code and Year were entered as independent factors was significant with significant main effects for Rural Code and Year, and a Rural Code by Year interaction. However, there was no clear pattern of scores that reflected differences based on how far the schools were located from townships (fringe, distant or remote).

Multivariate analyses were conducted with the teacher survey data, replicating the procedures above. For District and Year, there was a main effect for District (Wilk's Lambda = .828, $F = 4.525$, $df = 75, 5217$, $p < .001$), but not for Year, nor were there any District by Year interactions. For the collective sample, the mean scores for teacher perceptions of school safety and observations of bullying were similar in Year 1 and Year 3, but scores for teacher perceptions of school climate were higher (worse), at least for some schools. Multivariate analyses of teacher scales scores by districts at the Intervention Level yielded essentially the same pattern of results. Teachers across schools also rated themselves as moderately well to well prepared to handle bullying.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Multilevel modeling analyses were conducted to assess the relationships between gender and outcome variables of School Climate, School Safety, and School Bullying and according to whether the school had an anonymous reporting procedure in place. The cross-level term allowed the anonymous condition to modify the effect of gender on the three outcome variables (School Climate, School Safety, and School Bullying). For all three outcomes, the residual variance was well above zero, suggesting a multilevel effect.

For each of the three models (School Climate, School Safety, and School Bullying), a fixed effect (i.e., gender conditioned by anonymous condition) and random effect models (i.e., gender conditioned by anonymous condition) were calculated. Both the fixed and random effects models were statistically significant for all three outcome variables (School Climate, School Safety, and School Bullying). Thus, gender, by itself was related to the outcome variables, and whether or not there was anonymous reporting also influenced the gender and outcome relationship. Follow-up multivariate analyses indicated that collectively students who identified as female or Other had significantly higher (worse) scores for perceptions of safety and observations of bullying than male students. Students who identified as Other had significantly higher (worse) scores for perceptions of school climate, experiencing and engaging in bullying than male and female students. At Year 3, scale scores for students who identified as Other remained significantly higher (worse) than youth who identified as either male or female; scores for male and female students were no longer significantly different from one another (see Tables 7-8).

Finally, a series of regression analyses were conducted in which each of the student survey scale scores for Year 3 were entered as dependent variables and the following variables were entered as predictors: the size of the school (defined by student enrollment), percentages of

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

low income students; percentages of minority students; perceptions of teacher and principal interest and willingness to intervene; the presence or absence of antidiscrimination policies (coded as yes or no); and the implementation of the anonymous reporting tool (coded as yes or no). All five of the regression analyses were significant (see Table 9). Student perceptions of teacher and principal involvement significantly predicted scores for school climate, safety, experiences and observations of bullying. The presence of antidiscrimination policies were also significant predictors of school climate and observations of bullying. School enrollment and percentages of low-income students were significant predictors of school safety. Percentage of low-income students was also significantly related to school climate. Finally, implementation of the anonymous reporting tool was a significant predictor of student observations of bullying, demonstrating a negative relationship.

VI. Summary of Findings

We observed that bullying is a significant issue for rural schools in Southern Illinois, with rates comparable to those reported in national studies. Rates of electronic or cyberbullying, although significant, were lower than other traditional forms of bullying, and generally co-occurred with direct physical, verbal or social bullying. This suggests that interventions to address traditional forms of bullying within the school may additionally demonstrate some degree of effectiveness for prevention of cyberbullying. Given that a significant percentage of those who acknowledged engaging in bullying behaviors reported their own victimization experiences, many students may require interventions distinct from those intended exclusively for victims and those intended for aggressors.

We have results suggesting that our low-cost, component-based intervention focused on administrators, teachers and other support staff yielded positive outcomes and it was generally

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

well received across the schools. There were moderate to high correlations among scores for perceptions of school climate, school safety and bullying as rated by both students and teachers. This provides further evidence to suggest that interventions to address bullying can impact overall perceptions of school safety, and that school climate as a whole is an integral component of both. Notably, there was moderate student-teacher agreement in ratings, lending even greater credence to these findings (see Table 10).

We were surprised by the low response rate among schools agreeing to implement the web-based anonymous reporting tool. The reasons for declining varied across school administrators. Many asserted their "open-door" policies and relations among students and staff were sufficiently strong. However, substantial percentages of youth, as many as 50% depending on grade level, across schools indicated they never report bullying they either directly experience or observe. Moreover, there were significant differences in outcome among schools that chose to adopt the anonymous reporting tool. A few schools reported concerns related to the liability of receiving anonymously submitted information (e.g., responsibility for taking action without the ability to fully investigate or verify the validity of the report). We suspect this may have been a factor for many of the schools, whether or not they disclosed it.

VII. Implications for U.S. Criminal Justice Policy and Practice

Safety is a significant concern among rural schools and specifically schools in Southern Illinois. Interventions to enhance school climate and prevent bullying can improve student and teacher perceptions of school safety. Improving disciplinary procedures, implementing antidiscrimination policies, strengthening relationships among students and teachers, and developing strategies for monitoring youth in unstructured settings are key components.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Students needs the ability to disclose or report school safety threats without the fear of repercussions. School administrators need the ability to obtain such information to make effective disciplinary and safety planning decisions. Federal legislation may be in order to offer protection to schools that allow anonymous reporting. Differential accountability may be necessary for acting on information obtained in an anonymous versus source-identified manner.

Limitations & Future Directions

This project was initially based on a randomized design in which districts were assigned to intervention conditions. The design was changed to retain school participation and thus introduced potential third variable effects. All data analysis was based on mean scores obtained for districts and schools each year; student and teacher data was collected anonymously and surveys across the years were not linked to individual participants. This decision was made based on the assumption that fewer students and teacher would agree to participate if they had to identify themselves and due to Human Subjects Committee concerns pertaining to mandated reporting requirements.

Future research should assess how best to implement anonymous reporting systems, how to encourage students to use these tools, and how administrators should evaluate and use anonymous information. Finally, although our project demonstrated many positive effects, at the conclusion, youth who identified as Other gendered (e.g., non-binary or transgender) remained at higher risk for bullying and harassment. We have provided empirical evidence to demonstrate this a highly significant problem for Other gendered youth in rural school settings. Continued efforts to address these problems are clearly warranted.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

References

Diamanti, K., Duffey, T., & Fisher, D. (2015). Creating a safe and respectful environment in our nation's classrooms. Washington, DC: National Center on Safe Supportive Learning Environments

Farrington, D. P., & Ttofi, M. M. (2009). *School-based programs to reduce bullying and victimization* (Campbell Systematic Reviews No. 6). Oslo, Norway: Campbell Corporation.

Ferguson, C J., Miguel, C. S. Kilburn, J. C., & Sanchez, P. (2007). The effectiveness of school-based anti-bullying programs: A meta-analytic review. *Criminal Justice Review*, *32*, 401-414.

Leff, S. S., Power, T. J., Costigan, T. E., & Manz, P. H. (2003). Assessing the climate of the playground and lunchroom: Implications for bullying prevention programming. *School Psychology Review, 32*(3), 418-430.

Hirsch, L. (Producer & Director). (2011). Bully [Motion Picture: Documentary/Drama]. USA: Cinereach.

Merrell, K. W., Gueldner, B. A., Ross, S. W., & Isava, D. M. (2008). How effective are school bullying intervention programs? A meta-analysis of intervention research. *School Psychology Quarterly*, *23*, 26-42.

Ttofi, M. M. & Farrington, D. P. (2011). Effectiveness of school-based programs to reduce bullying: A systematic meta-analytic review. *Journal of Experimental Criminology, 7*, 27-56.

Smith, S. G. & Sprague, J. (2011). Systematic supervision: Creating a safe and positive playground and other common areas [Video]. USA: Iris Ed.

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

APPENDIX

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Tables and Figures

Table 1.

PERCENT BULLY-VICTIMS AMONG THOSE WHO REPORTED BEING BULLIED BY GRADE

Grade	Physical	Social	Electronic
4	25%	25%	21%
5	31%	31%	35%
6	26%	32%	39%

Table 2.

PERCENT BULLY-VICTIMS AMONG THOSE WHO REPORTED BEING BULLIED BY GRADE

Grade	Physical	Social	Electronic
7	22%	28%	28%
8	28%	22%	33%
9	29%	34%	34%
10	22%	22%	31%
11	36%	30%	26%
12	31%	16%	16%

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 3.

MANOVA Survey Scale Scores District by Year

Independent Variable	Dependent Variable	df	F	Sig.	Partial Eta Squared
District	Climate	24	35.747	0.000	0.054
	Safety	24	34.559	0.000	0.053
	Bullied	24	6.913	0.000	0.011
	Witness	24	15.242	0.000	0.024
	Perpetrate	24	7.924	0.000	0.013
Year	Climate	2	6.864	0.001	0.001
	Safety	2	4.509	0.011	0.001
	Bullied	2	0.525	0.591	0.000
	Witness	2	7.888	0.000	0.001
	Perpetrate	2	0.204	0.816	0.000
District by Year	Climate	41	5.308	0.000	0.014
	Safety	41	4.024	0.000	0.011
	Bullied	41	2.066	0.000	0.006
	Witness	41	2.104	0.000	0.006
	Perpetrate	41	2.626	0.000	0.007

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 4.

MANOVA Mean Survey Scale Scores by Year and Intervention Level

Independent Variable	Dependent Variable	df	F	Sig.	Partial Eta Squared
Year	Climate	2/14969	16.298	0.000	0.002
	Safety	2/14969	3.792	0.023	0.001
	Bullied	2/14969	3.486	0.031	0.000
	Witness	2/14969	2.798	0.061	0.000
	Perpetrate	2/14969	5.588	0.004	0.001
Intervention Level	Climate	2/14969	43.772	0.000	0.006
	Safety	2/14969	68.368	0.000	0.009
	Bullied	2/14969	9.274	0.000	0.001
	Witness	2/14969	21.759	0.000	0.003
	Perpetrate	2/14969	7.581	0.001	0.001
Year * InterLevel	Climate	4/14969	7.453	0.000	0.002
	Safety	4/14969	3.734	0.005	0.001
	Bullied	4/14969	3.212	0.012	0.001
	Witness	4/14969	2.055	0.084	0.001
	Perpetrate	4/14969	2.798	0.025	0.001

Table 5.

MANOVA Year 3 Survey Scale scores by Intervention Level

Independent Variable	Dependent Variable	df	F	Sig.	Partial Eta Squared
Intervention Level	Climate	2/5251	52.571	0.000	0.020
	Safety	2/5251	40.303	0.000	0.015
	Bullied	2/5251	8.818	0.000	0.003
	Witness	2/5251	17.890	0.000	0.007
	Perpetrate	2/5251	10.761	0.000	0.004

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 6.

Mean Student Survey Scale Scores by Year and District Intervention Level

Dependent Variable	Year	Intervention Level	Mean	Std. Error
Climate	1	0	30.211	0.857
		1	30.988	0.215
		2	29.919	0.175
	2	0	33.142	0.527
		1	31.574	0.192
		2	30.887	0.168
	3	0	35.369	0.607
		1	31.944	0.207
		2	30.163	0.159
Safety	1	0	20.550	0.777
		1	20.351	0.195
		2	19.551	0.159
	2	0	21.740	0.478
		1	20.838	0.175
		2	18.917	0.152
	3	0	20.866	0.551
		1	20.120	0.187
		2	18.303	0.144
Bullied	1	0	11.560	0.449
		1	12.080	0.113
		2	12.073	0.092
	2	0	12.507	0.277
		1	12.568	0.101
		2	12.014	0.088
	3	0	12.770	0.319
		1	12.404	0.108
		2	11.941	0.083
Witness	1	0	14.606	0.694
		1	15.104	0.175
		2	14.733	0.142
	2	0	15.507	0.427
		1	15.502	0.156
		2	14.549	0.136
	3	0	15.272	0.492
		1	14.849	0.167
		2	13.780	0.129
Perpetrate	1	0	10.771	0.398
		1	10.731	0.100
		2	10.769	0.082
	2	0	11.438	0.245
		1	11.411	0.089
		2	11.021	0.078
	3	0	11.829	0.282
		1	11.140	0.096
		2	10.794	0.074

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 7

MANOVA Student Survey Scale Scores by Gender and Year

Independent Variable	Dependent Variable	df	F	Sig.	Partial Eta Squared
Gender	Climate	2/14881	96.942	0.000	0.013
	Safety	2/14881	116.137	0.000	0.015
	Bullied	2/14881	159.449	0.000	0.021
	Witness	2/14881	131.294	0.000	0.017
	Perpetrate	2/14881	79.153	0.000	0.011
Year	Climate	2/14881	0.821	0.440	0.000
	Safety	2/14881	4.521	0.011	0.001
	Bullied	2/14881	5.363	0.005	0.001
	Witness	2/14881	4.017	0.018	0.001
	Perpetrate	2/14881	19.034	0.000	0.003
Gender * Year	Climate	4/14881	0.379	0.824	0.000
	Safety	4/14881	1.101	0.354	0.000
	Bullied	4/14881	2.035	0.087	0.001
	Witness	4/14881	0.764	0.548	0.000
	Perpetrate	4/14881	6.695	0.000	0.002

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 8.

Mean Scale Scores by Gender and Year

Scale	Gender	Year	Mean	Std. Deviation	N
Climate	1	1	29.7117	8.93935	2088
		2	30.8507	8.66001	2605
		3	30.5021	8.62396	2627
	2	1	30.7541	9.14524	2273
		2	31.5562	9.26498	2605
		3	31.3709	8.91627	2564
	3	1	40.9750	8.10662	40
		2	41.3830	9.76808	47
		3	40.0732	10.09304	41
Safety	1	1	19.2854	8.20841	2088
		2	19.0495	8.05489	2605
		3	18.3399	7.36461	2627
	2	1	20.2860	8.32949	2273
		2	20.4622	8.60142	2605
		3	19.6872	7.71576	2564
	3	1	28.6500	9.70210	40
		2	29.6809	11.71232	47
		3	26.1220	11.82200	41
Bullied	1	1	11.8506	4.53583	2088
		2	12.0338	4.99927	2605
		3	11.9943	4.44064	2627
	2	1	12.1531	4.30345	2273
		2	12.3324	4.91260	2605
		3	12.1946	4.20699	2564
	3	1	18.0000	7.90326	40
		2	20.9149	10.63593	47
		3	19.0732	8.44213	41
Witness	1	1	14.2706	7.06422	2088
		2	14.3225	7.30825	2605
		3	13.5135	6.31209	2627
	2	1	15.2776	7.39283	2273
		2	15.5083	7.86598	2605
		3	14.8358	6.89981	2564
	3	1	23.1250	9.91809	40
		2	24.1702	11.96974	47
		3	21.2927	10.60482	41
Perpetrate	1	1	10.8625	4.24972	2088
		2	11.4015	5.11834	2605
		3	11.0514	4.05644	2627
	2	1	10.6120	3.28675	2273
		2	10.9002	3.97757	2605
		3	10.8050	3.35740	2564
	3	1	12.8750	5.55710	40
		2	17.6170	11.49396	47
		3	15.1220	9.05592	41

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Table 9.

Regression Analyses

Independent Variables	Dependent Variables				
Beta	**Climate**	**Safety**	**Bullied**	**Witness**	**Perpetrate**
School Size	0.003	**0.123****	0.052	0.042	**0.058***
Percent Low Income	**0.048****	**.078*****	0.030	0.013	0.043
Percent Minority	0.027	0.035	-0.028	0.030	0.047
Perceived Teacher Involvement	**.220*****	**.245*****	**.198*****	**.222*****	-0.010
Perceived Principal Involvement	**.220*****	**.227*****	**.120****	**.247*****	**.212****
Antidiscrimination Policies	**.200*****	0.042	**.134*****	**.121*****	**.093****
Anonymous Reporting	-0.004	0.029	-0.014	-0.056*	-0.052
F	213.016	58.081	31.836	63.506	15.220
p	<.001	<.001	<.001	<.001	<.001
R	0.521	0.481	0.377	0.502	0.272
R^2	0.271	0.231	0.142	0.252	0.074

Table 10.

Correlations Among Youth Reported Scales

Scale	*Safety*	*Bullied*	*Witnessed*	*Perpetrated*
Climate	**0.943**	**0.75**	**.898**	**0.764**

N = 39 p < .001

Correlations Among Youth and Teacher Report Scales

Scale	*Teacher - Climate*	*Teacher- Safety*	*Teacher- Bullying Problems*
Climate	0.255	0.301	**0.467**
Safety	0.293	0.314	**0.493**
Bullied	0.001	0.329	**0.407**
Witness	0.226	**0.442**	**0.62**
Perpetrate	0.002	0.371	0.295

N = 24 p <.05

(Note: N refers to number of schools).

This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Figure 1.

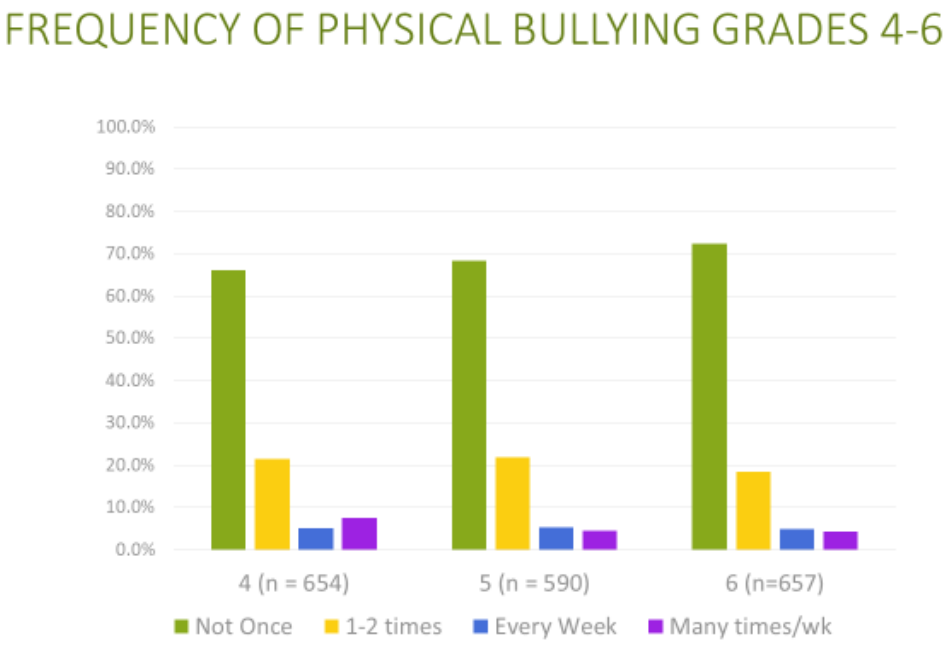
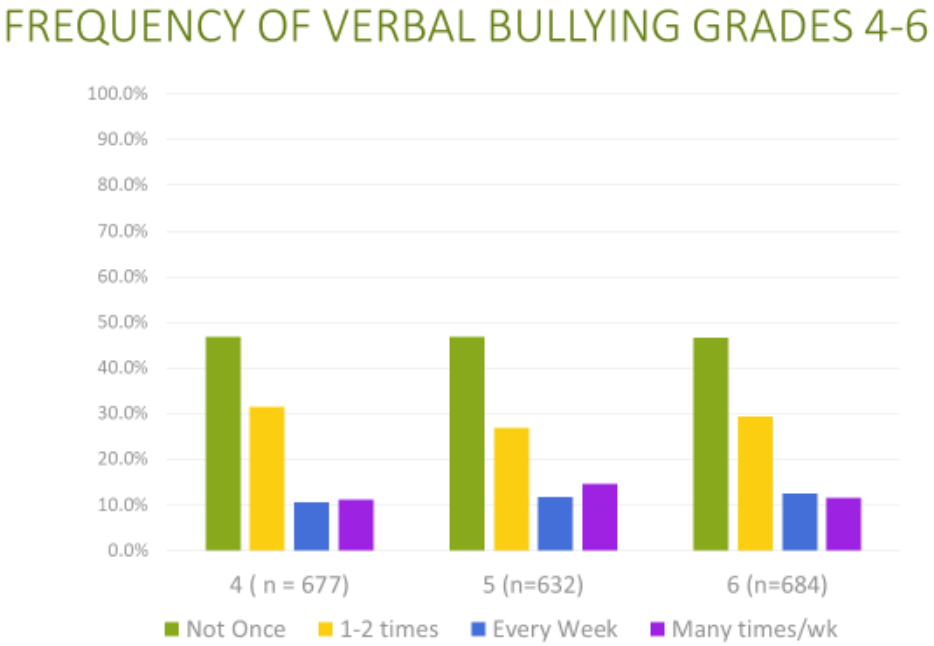


Figure 2.



This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Figure 3.

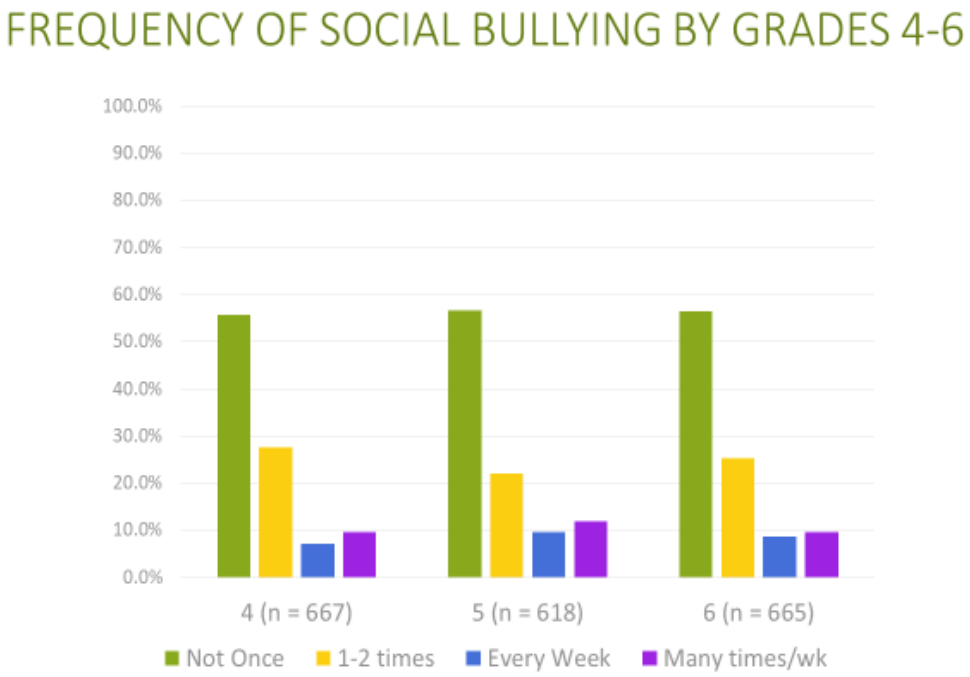
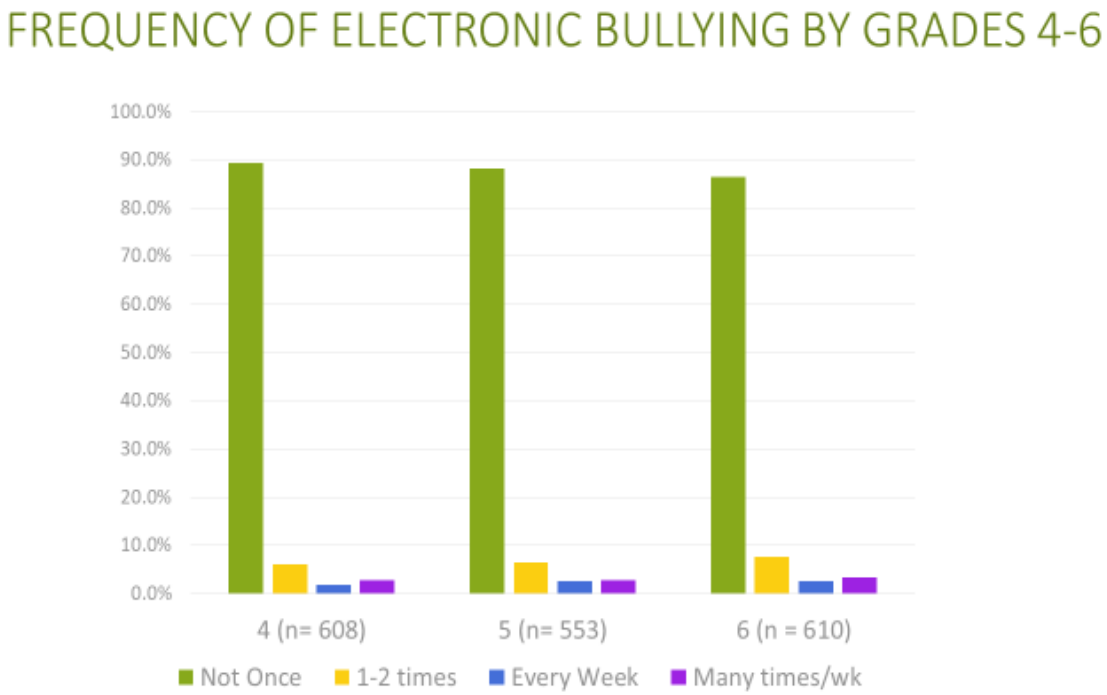


Figure 4.



This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Figure 5.

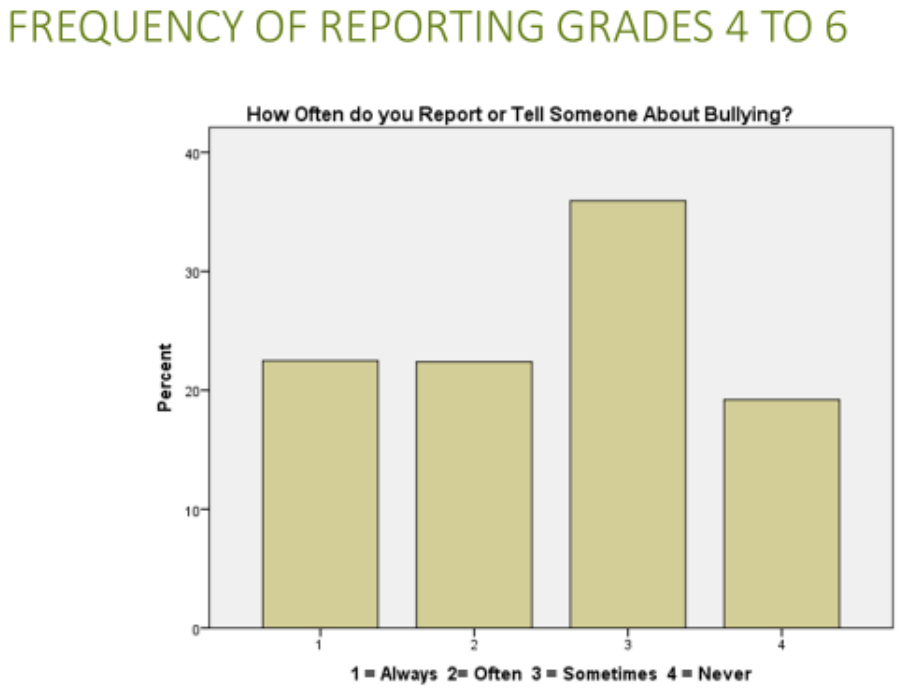
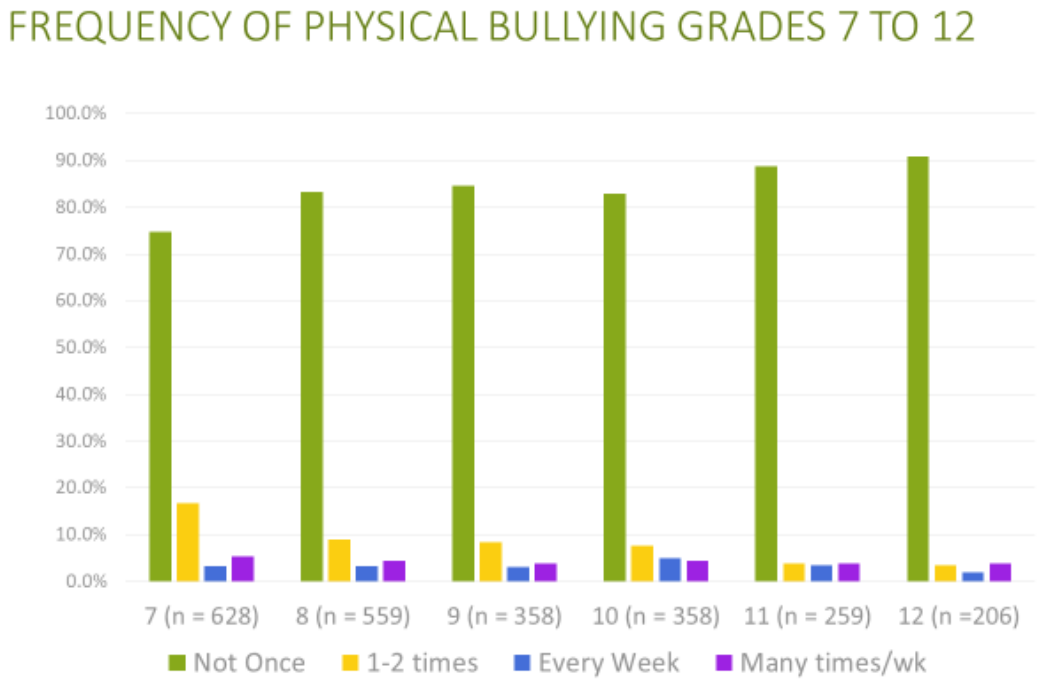


Figure 6.



This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Figure 7.

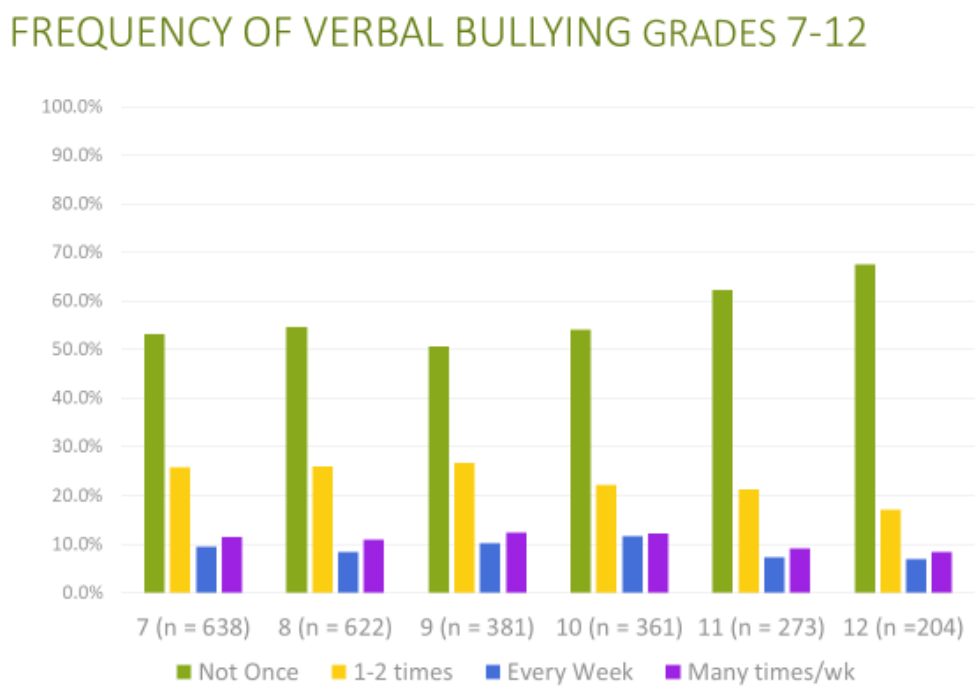
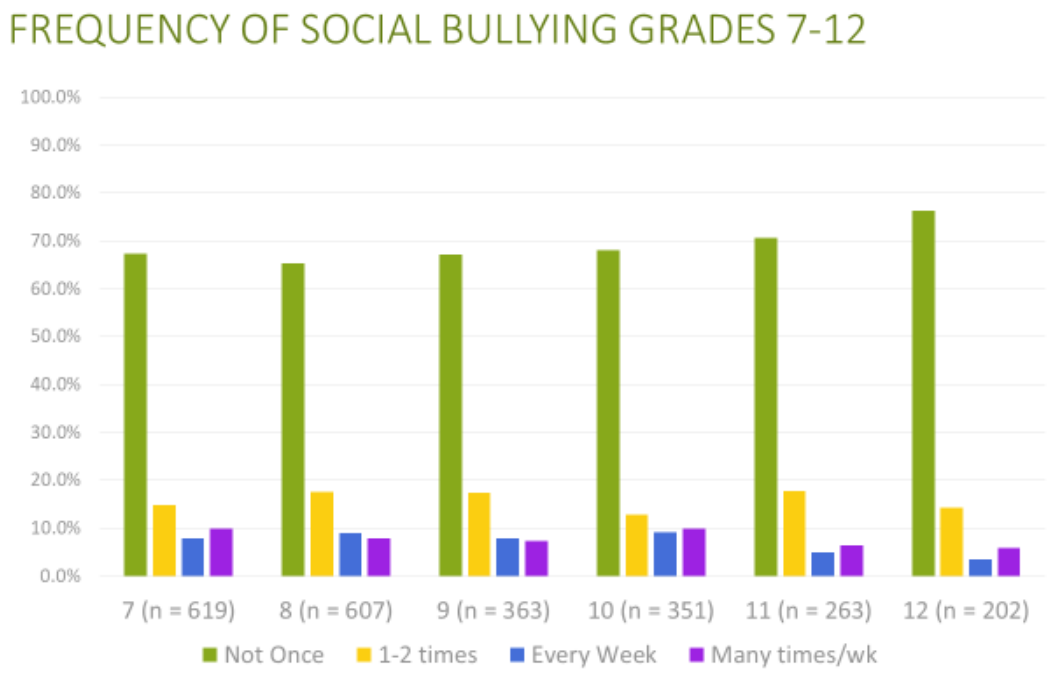


Figure 8.



This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.

Figure 9.

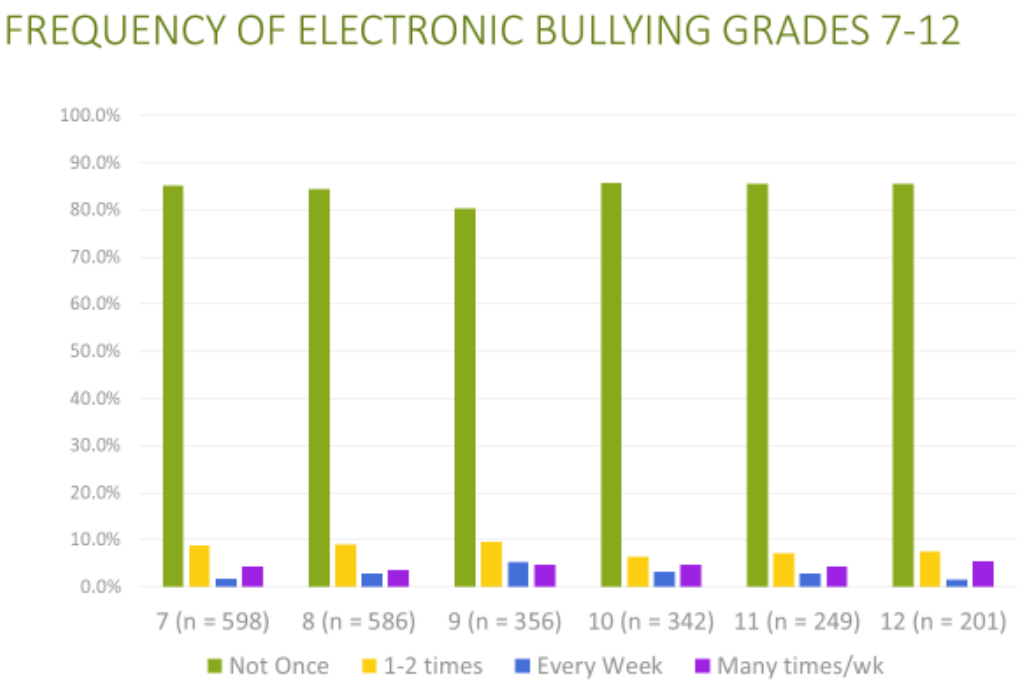
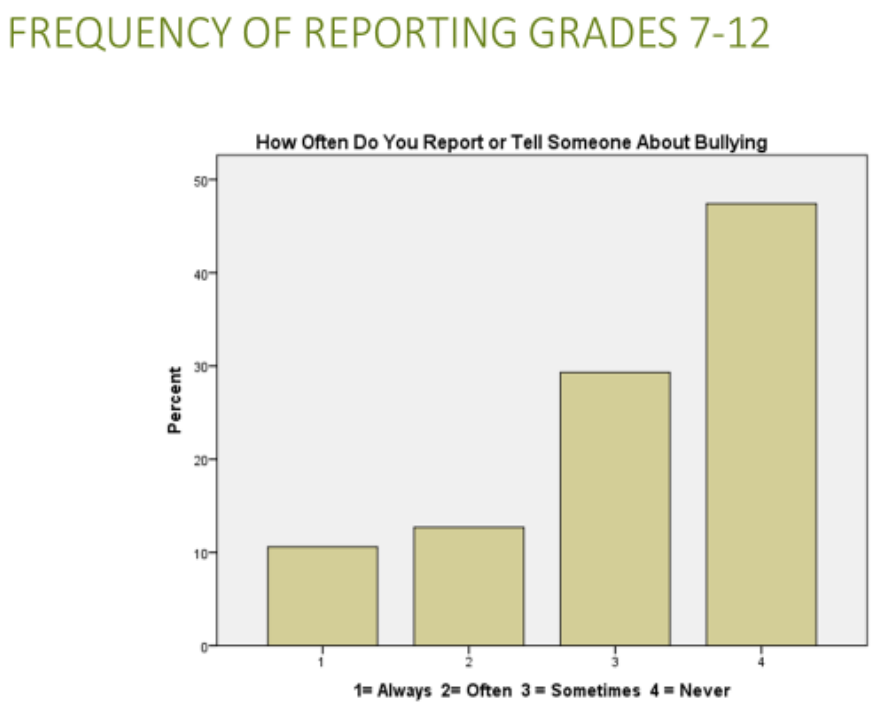


Figure 10.



This resource was prepared by the author(s) using Federal funds provided by the U.S. Department of Justice. Opinions or points of view expressed are those of the author(s) and do not necessarily reflect the official position or policies of the U.S. Department of Justice.