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Addressing Violence Against Educators: What Do Teachers Say Works?

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Abstract

School personnel safety and well-being have received increased attention via national outlets; however, research is limited. The current investigation is the first to examine the reported use and perceived effectiveness of commonly used school-based intervention approaches for addressing school violence, specifically violence against teachers in U.S. schools. A sample of 4,471 prekindergarten–12th grade teachers was asked to rate the use and perceived effectiveness of common school-based approaches, namely exclusionary discipline (e.g., suspensions), school hardening (e.g., metal detectors, school police), prevention (e.g., school climate improvement, social–emotional learning, classroom management), and crisis intervention practices (e.g., de-escalation, physical restraint) to address verbal/threatening, physical, and property violence against teachers. Findings revealed that teachers rated prevention practices as most effective in reducing violence against teachers. The use of exclusionary discipline and crisis intervention practices at school was positively associated with all three forms of violence. Ratings of the effectiveness of specific practices were associated with lower likelihoods of verbal/threatening (i.e., hardening, prevention), physical (i.e., exclusionary discipline, hardening, prevention), and property (i.e., hardening) violence. Implications for school practice, research, and policy are presented.

Keywords

teacher; educator; school; violence; intervention

Extant research has documented that educators are the targets of school violence (Longobardi et al., 2019). State-level studies have reported that nearly 10% of teachers experience physical victimization and about 40% experience acts of nonphysical victimization such as verbal abuse (Gerberich et al., 2011; Tiesman et al., 2013). Similarly, national and international studies have found high levels of violence against teachers, especially when violence encompasses a broad range of aggressive acts (e.g., verbal aggression, intimidation, threats; Khoury-Kassabri et al., 2009; Longobardi et al., 2019; McMahon et al., 2022b). A recent national study also found that 14% and 33% of teachers experienced physical and verbal and threatening violence, respectively, from students (McMahon et al., 2022b). However, victimization rates are higher when violence is examined across multiple perpetrators (e.g., students, parents, colleagues) and many types of violence (11 forms of violence)—indeed, 80% of teachers experienced at least one form of violence in the current or past year in a study conducted by McMahon et al. (2014).

High rates of violence against teachers have raised concerns due to its association with other serious consequences for teacher well-being, such as burnout (e.g., Chang, 2009; Gerberich et al., 2011). For decades, school violence has been associated with lower teacher job satisfaction, retention, early exiting of the profession, and lost instructional time (e.g., Shores et al., 1993; Walker et al., 2003–2004; Won & Chang, 2020). Likewise, higher rates of classroom disruption and lower teacher safety are related to lower student academic engagement and academic achievement and greater mental health issues (Burns et al., 2021; Lacoë, 2020). However, studies have primarily focused on documenting the prevalence or the consequences of violence against teachers (e.g., Longobardi et al., 2019). Few studies have developed and validated interventions and practices to mitigate this violence (Heinze et al., 2022). Also, research has yet to assess teachers' perceptions of the use *and* effectiveness of common school intervention approaches that may address this problem.

School-Based Approaches for Violence Against Teachers

A theoretical and empirical foundation is needed to inform the development of school-based interventions targeting violence against teachers, which has received limited scientific inquiry (Heinze et al., 2022). However, schools often respond to violent incidents using practices with limited or no empirical support (e.g., school suspensions; American Psychological Association Zero Tolerance Task Force, 2008). A recent review of school-based interventions designed to address violence against teachers found only six studies, most of which were methodologically limited (Heinze et al., 2022). Four of the six studies did not include a control group design, and most relied on retrospective teacher reports. The studies did not necessarily focus on violence against teachers but on perceptions of safety and possible antecedents (e.g., self-efficacy) associated with the implementation of school-based interventions.

Despite a dearth of research examining interventions targeting violence against teachers, schools nonetheless respond to school violence when it occurs. These responses often include exclusionary discipline, school hardening, prevention, and crisis intervention (Mayer et al., 2021). The scientific support for such approaches is mixed as research has shown some practices to be harmful (e.g., American Psychological Association Zero

Tolerance Task Force, 2008). In contrast, other proactive relational approaches have shown positive benefits to curtailing school violence (e.g., prevention strategies, school climate improvement; Bradshaw et al., 2021). Thus, schools may use ineffective or even harmful practices, and research is needed that examines the connection between commonly used school safety approaches and violence against teachers to inform the development of school-based interventions.

Exclusionary Discipline Practices

Exclusionary discipline practices often stem from a predetermined set of policies, commonly referred to as zero-tolerance policies, that dictate the disciplinary consequences of student infractions (e.g., classroom removal, school suspension, expulsion; Skiba et al., 2022). These policies are often graduated (i.e., consequences are increasingly punitive in tandem with the severity of the infraction). For example, physically attacking a teacher would likely result in school suspension days as compared to verbally aggressive behavior, which may result in classroom removal. Moreover, research has also identified a range of factors associated with exclusionary discipline including sociodemographic factors (e.g., disability, poverty; Hassoun Ayoub et al., 2019; Krezmien et al., 2006; Martinez et al., 2016) and school-level factors (e.g., student–teacher ratio, racial/ethnic concentration). Additionally, extant research has documented racial bias as contributing to exclusionary practices (e.g., Skiba et al., 2022). For example, African American boys are more likely than their non-Hispanic White counterparts to be disciplined for subjective offenses (e.g., disrespect, excessive noise; Skiba et al., 2002), suggesting that staff interpretations of behavior may play a role in these disparities.

Research has consistently documented that exclusionary discipline practices are ineffective in ensuring school safety (American Psychological Association Zero Tolerance Task Force, 2008; Skiba et al., 2022). In addition, these practices are associated with adverse academic outcomes (Skiba & Rausch, 2006) and juvenile justice system contact (e.g., Hassoun Ayoub et al., 2019). Despite these negative consequences, exclusionary discipline practices continue to be widely used and garner teacher support (Huang & Cornell, 2021). For example, during the 2019–2020 school year, 24% of public schools in the United States reported taking serious disciplinary action (e.g., suspension, school removal) for engaging in a physical fight or attack, and 20% and 10% of schools, respectively, reported taking serious disciplinary action for infractions related to drugs and weapons (Irwin et al., 2022).

School Hardening Practices

School or target hardening refers to the technique of making a school or an area more difficult to attack through practices such as cameras, metal detectors, clear backpacks, fortified glass, school police, and security systems. In the 2017–2018 school year, 48% of public schools nationally had at least one school resource officer and 83.5% used security cameras (Diliberti et al., 2019). In addition, 4.9% and 2.1% of schools, respectively, conducted random or daily metal detector checks.

The use of school hardening approaches is often legislatively mandated. For example, according to Kelley et al. (2022), many states require schools to contact law enforcement

when someone within the school community is assaulted, physically harmed, or threatened. The growth of school policing has also been linked to criminalizing student behavior (Javdani, 2019) and often results in using zero-tolerance responses and exclusionary discipline. Although school hardening may be necessary in some cases, evidence suggests that using these approaches does not increase school safety. Despite their intention to minimize schools as targets of violence, these practices frame students as threats and negatively impact the school environment (Espelage et al., 2023; Schrek & Miller, 2003; Warnick & Kapa, 2019). Furthermore, Turanovic et al. (2020) conducted a meta-analysis on school violence and found no association between school hardening practices and school violence. However, the association between school hardening practices and violence against teachers has not been examined.

School-Based Prevention

School-based prevention as a school safety approach addresses school violence by targeting features of the broader school environment (e.g., policies), mitigating risk exposure, and strengthening coping mechanisms (e.g., Arango et al., 2018). Such prevention practices can be implemented as multitiered school-wide approaches and often take the form of therapeutic (e.g., counseling), educational (e.g., social-emotional learning), or organizational (e.g., creating a positive school climate; Nickerson & Martens, 2008) strategies. For example, school-based prevention can include structured interventions that model and reinforce positive behaviors or that target social-emotional competencies (e.g., emotional regulation), which can effectively address student problem behaviors (Taylor et al., 2017).

At the organizational level, school-based prevention approaches often target school climate, which is broadly defined as the pattern of student, school personnel, and parent experiences and reflect norms, goals, values, interpersonal relationships, teaching and learning practices, and organizational structures (e.g., Astor et al., 2018; Bradshaw et al., 2021; Thapa et al., 2013). School climate improvement practices can encompass a range of practices, including structured school-wide interventions (e.g., Positive Behavioral Interventions and Supports) and relational practices such as engaging and motivating students and creating more inclusive environments for students from diverse backgrounds. Prevention practices can also be classroom based, such as classroom management practices that foster supportive learning environments by implementing activities that target teacher-student relations and rules that regulate student behavior (Korpershoek et al., 2016). Indeed, a meta-analysis of over 100 studies (Marzano et al., 2003) shows that teachers with high-quality relationships with students have 31% fewer behavioral problems in their classrooms than teachers who do not.

Crisis Intervention Practices

Crisis intervention can include the use of physical restraint, de-escalation, threat assessments, and conflict resolution. These practices are commonly implemented when danger occurs or is imminent in schools. Moreover, these interventions often include intrusive practices, such as the use of physical restraint applied by school personnel to control a physically aggressive student (Couvillon et al., 2019). Similarly, de-escalation

practices can stop student aggression from escalating into violence by implementing nonprovocative verbal and nonverbal communication techniques that can distract or minimize triggers (Price et al., 2015).

Whereas some crisis intervention practices (e.g., physical restraint, de-escalation) help to mitigate situations in which danger is imminent, they are not necessarily designed to resolve conflict when it occurs. Toward this end, restorative justice practices often consist of conflict resolution practices (e.g., mediation, response circles) to address harm that has occurred (e.g., fighting between two students). Specifically, restorative practices address harm by convening the individuals involved in such incidents (e.g., a fight; Martinez, Villegas, et al., 2022). Additionally, such convenings can include others in the school community, such as individuals who witnessed the incident (e.g., classmates) and persons who can provide support (e.g., a trusted coach or teacher, a friend). Finally, school threat assessments are used when a crisis occurs or is imminent, which can prevent or offset crises from further escalating within the school (Cornell, 2020). For example, a student may display physically aggressive behavior, which can prompt the implementation of school assessments and interventions to reduce future risk to the individual student, peers, or school personnel (Louvar Reeves & Brock, 2018).

The Present Study

Research examining violence against teachers has primarily focused on prevalence, predictors, and consequences. This is the first study, to our knowledge, to examine educators' perceptions of the use and effectiveness of common school approaches to addressing educator victimization in pre-K–12 schools. We believe understanding educators' experiences with common school approaches for addressing school violence/safety is a critical first step in advancing knowledge of real-world school intervention implementation and future design and evaluation of promising approaches via efficacy trials.

Such research is currently needed for two reasons. First, research on teachers' experiences with violence and perceived use and effectiveness of common school practices offers insights into the types of practices and approaches that can mitigate violence against teachers. While many school-based interventions currently exist that target school violence, they are not designed to address violence directed against teachers, further underscoring the need to advance and develop a theoretical foundation. Second, research is needed that can inform how existing school practices may further aggravate violence against teachers.

The present study examined the association between violence against teachers and four commonly used intervention approaches to school violence: exclusionary discipline, school hardening, prevention, and crisis intervention practices. Conceptually, these approaches reflect different orientations and goals related to school safety. We addressed the following research questions:

1. What common school-based approaches do pre-k-12th grade teachers report are used by their school to address violence against teachers in their schools?

2. What common school-based approaches do pre-K–12th grade teachers rate as effective in addressing violence against teachers in their schools?
3. Do schools' *use* of school-based approaches, as reported by teachers, predict violence against teachers, specifically verbal/threatening violence, physical violence, and/or property violence?
4. Do teachers' reported *effectiveness* of school-based approaches predict violence against teachers—specifically verbal/threatening violence, physical violence, and/or property violence?

Based on the broader school violence literature, we hypothesized that (a) the use and perceived effectiveness of exclusionary discipline (e.g., suspension) and school hardening approaches (e.g., security cameras, metal detectors) will be positively associated with violence against teachers (e.g., American Psychological Association Zero Tolerance Task Force, 2008; Turanovic et al., 2020) and (b) the use and perceived effectiveness of prevention and crisis intervention approaches will be negatively associated with violence against teachers (e.g., Durlak et al., 2011; Price et al., 2015).

Method

Sample

The analytic sample consisted of 4,471 prekindergarten–12 grade teachers drawn from a larger national study we conducted (McMahon et al., 2022b). The larger sample included 14,966 participants across roles (educators, school psychologists, social workers, administrators, and staff), and this study includes a sample of educators who responded to questions regarding strategy use and effectiveness. Logistic regression analysis requires complete data, and as such, we extracted educator informants who provided responses to variables of interest for this investigation; therefore, there was no missing data in the analytic sample. Participants in the present study included 2,943 general education teachers (65.8%), 741 special education teachers (16.6%), and 787 specialists (e.g., instructional coaches, music specialists, visual arts specialists [17.6%]). Participants primarily self-identified as female ($n = 3,505$, 78.4%) and White ($n = 3,738$, 83.6%). Participants also identified as multiracial ($n = 243$, 5.4%), Black ($n = 236$, 5.3%), Hispanic/Latinx ($n = 201$, 4.5%), and Asian ($n = 53$, 1.2%). Most participants taught in suburban schools ($n = 2,032$, 45.4%), followed by urban ($n = 1,254$, 28%), and rural ($n = 1,185$, 26.5%). Finally, most of the participants taught in high schools ($n = 1,599$, 35.8%), followed by pre-k through sixth grade schools ($n = 1,455$, 32.5%), middle schools ($n = 973$, 21.8%), pre-k through ninth grade schools ($n = 247$, 5.5%), and schools consisting of all grade levels, pre-k or k through 12th grade schools ($n = 197$, 4.4%).

Measures

We designed and disseminated a web-based survey for the national study, in collaboration with several national organizations, including the National Education Association, the American Federation of Teachers, the National Association of School Psychologists, the National Association of School Social Workers, and the School Social Work Association of America. Participants completed demographic information and specific study measures via

the online survey. The survey took about 30 min to complete. The survey was completed during the COVID-19 lockdown (2020–2021).

The psychometric properties of the measures discussed next were assessed via both exploratory factor analysis (EFA) with maximum likelihood estimation and direct oblimin rotation and confirmatory factor analysis (CFA), also with maximum likelihood estimation. Item sets were based on theoretical models developed by the research team. EFAs were conducted on a random half of the analytic sample. Results were reviewed and discussed with the research team, and once group consensus was reached, the item sets were entered into CFA taking both EFA results and theory into account. For the CFAs, model fit indices including comparative fit index (CFI), root-mean-square error of approximation (RMSEA), and standardized root-mean-square residual (SRMR) were consulted to determine the goodness of fit. Values of $CFI < .95$, $RMSEA < .05$, and $SRMR < .08$ were considered indicators of good model fit, with values close to these thresholds being considered acceptable model fit (Hu & Bentler, 1999; Jackson et al., 2009).

School Violence Prevention Strategy Use and Effectiveness Scales

The School Violence Prevention Strategy Use and Effectiveness Scales (McMahon et al., 2022a) assess teachers' use and perceived effectiveness of common practices to prevent violence and promote school safety. Participants separately rated the use and effectiveness of 21 school-based practices (see below for separate descriptions and psychometric information). The individual items were theorized to represent four domains: *exclusionary discipline* (three items; e.g., expulsion or out-of-school suspension, in-school suspension), *school hardening* (five items; e.g., metal detectors, security cameras), *prevention* (seven items; e.g., using evidence-based methods of instruction, engaging and motivating students), and *crisis intervention* (six items, e.g., physical restraint, restorative justice practices such as student mediation or circles to address harm).

For the School Violence Prevention Strategy Use Scale, the 21 items representing common school safety approaches were rated as *used* (coded as 1) or *not used* at their school (coded as 0). The four-factor scale yielded an adequate fit to the data (e.g., $CFI = .92$, $RMSEA = .07$, $SRMR = .05$) and all items significantly loaded on their respective factors. Factors were significantly and positively correlated with one another. The individual items were summed to create a total score reflecting the number of practices used within the four school safety domains.

For the School Violence Prevention Strategy Effectiveness Scale, participants were asked to “please indicate your school’s effectiveness in using the following strategies to promote school safety.” The 21 items representing common school safety approaches were rated on a 5-point Likert-type scale (0 = *not at all effective*, 1 = *slightly effective*, 2 = *moderately effective*, 3 = *very effective*, 4 = *extremely effective*) and, as before, were theorized to reflect exclusionary discipline ($\alpha = .67$; $\omega = .73$), school hardening ($\alpha = .90$; $\omega = .90$), prevention ($\alpha = .90$; $\omega = .90$), and crisis intervention ($\alpha = .89$; $\omega = .90$).

The results of an EFA affirmed the theoretical factor structure of the scale, which was then entered into a CFA. The structural validity of the four-factor scale was affirmed as the model

yielded an acceptable fit to the data (e.g., CFI = .91, RMSEA = .08, SRMR = .07). All items loaded appreciably onto their respective factors, and the four factors all positively correlated with one another. Based on the 5-point response options, mean scores were computed, reflecting composite ratings across the respective four school safety domains.

Educator Victimization Scale

The Educator Victimization Scale (McMahon et al., 2022a) includes three subscales: Verbal/threatening (eight items; $\alpha = .81$; $\omega = .85$), Physical (three items; $\alpha = .85$; $\omega = .87$), and Property (two items; $\alpha = .74$; $\omega = .81$) violence. Participants were asked to rate how often they experienced each type of violent behavior from a student (e.g., “I was physically attacked [e.g., bitten, scratched, hit.]”) in the past 12 months. This study focuses only on teacher respondents and student offenders. Response options were on a 6-point Likert-type scale (0 = *never*, 1 = *once*, 2 = *a few times*, 3 = *monthly*, 4 = *weekly*, 5 = *daily*). EFA affirmed the theoretical factor structure of the scale. CFA was then carried out on the item sets as a three-factor measure of teacher-directed violence, which yielded an acceptable fit to the data (e.g., CFI = .90, RMSEA = .11, SRMR = .08). All items significantly loaded on their respective factors, and the three factors were significantly correlated with one another. Responses were then dichotomized to represent whether one of the violence items in each set occurred at least once (coded as 1) or not (coded as 0), summed based on the theoretical factor structure, and again dichotomized to represent whether respondents experienced each violence type (e.g., verbal/threatening, physical, or property) at least once (coded as 1) or not (coded as 0). This procedure was adopted to be in line with other studies examining teacher victimization (Reddy et al., 2023), as well as examining the presence or absence of victimization behaviors that occur at low frequencies (e.g., physical assault).

Procedure

Following institutional review board procedures approved at the University of North Carolina at Chapel Hill, online survey data were collected, coded, and analyzed by the research team. School participants were contacted via school emails provided by a national marketing firm (MCH Strategic Data) and through national partners distributing the survey link to a portion of their members through varied methods, such as listservs, email, and/or Facebook, from August 2020 to June 2021. MCH gathers teacher contact information by conducting website scans of public education data sources and importing this information into a comprehensive database of 5.4 million school staff nationwide. This information is continuously verified to ensure current contact and school information. MCH periodically contacts individuals within this database to allow them to opt out of the list. Participants were provided a link to the online survey describing the study’s purpose and institutional review board–approved informed consent procedures. Participant data used in this study were deidentified. No incentives were provided to the sample. Extensive data cleaning and quality control checks (e.g., checking for duplicate responses, incomplete responses, and invalid ratings using the same response for all items) were conducted to ensure data quality.

Data Analytic Plan

Using SPSS Version 28, two sets of simultaneous logistic regressions (Peng & So, 2002) were conducted on each of the three dependent variables (verbal/threatening, physical,

and property violence). The first set tested schools' use of the four common school-based violence prevention approaches, and the second tested the perceived effectiveness of these practices. Regression analyses controlled for four teacher characteristics (gender, race, years of experience, and role [i.e., general education, special education, specialists]) and two school characteristics (urbanicity [i.e., rural, suburban, and urban] and school level [i.e., elementary, middle school, etc.]). These covariates were included as they have been linked to violence against teachers in prior studies (Reddy et al., 2018, 2023), and thus, controlling for these variables could offer a more robust understanding of the association between school practices and violence against teachers. Gender (female = 0, male = 1), race (White = 0, Black = 1, Hispanic = 2, Asian = 3, multiracial = 4), role (general education = 0, special education = 1, specialist = 2), urbanicity (rural = 0, suburban = 1, urban = 2), and school level (pre-K–sixth = 0, pre-K–ninth = 1, middle school = 2, high school = 3, all grades = 4) were all dummy-coded prior to analyses. Predictors included teacher-rated strategy usage and effectiveness of exclusionary discipline, school hardening, prevention, and crisis intervention practices.

Results

Table 1 presents descriptive statistics and correlations between the four common school practice types and violence categories (α was set to .05). Results revealed significant, small relations among specific variables. In general, perceived strategy usage positively correlated with reports of violence ($p < .01$), and perceived strategy effectiveness negatively correlated with reports of violence ($p < .01$). Descriptive analyses were conducted to assess the reported use and perceived effectiveness of the four common intervention approaches. In general, nearly all of the teachers in our sample (99.8%) reported that their school used at least one school safety practice (out of the total 21 practices). By type of approach, 96.9% reported that their school used at least one exclusionary discipline practice, 95.2% reported that their school used at least one school hardening practice, 99.6% reported that their school used at least one prevention practice, and 96.5% reported that their school used at least one crisis intervention practice. Regarding perceptions of effectiveness, prevention practices were rated as the most effective ($M = 3.67$, $SD = .85$), followed by crisis intervention ($M = 3.34$, $SD = .97$), school hardening ($M = 3.31$, $SD = 1.06$), and exclusionary discipline ($M = 2.70$, $SD = .72$) practices.

Strategy Usage and Effectiveness

As shown in Tables 2 and 3, simultaneous logistic regression models were separately carried out to test the relation between school *usage* of violence prevention practices and perceived *effectiveness* of practices on the odds of reporting at least one instance of verbal/threatening, physical, and property violence. Teacher and school characteristics served as covariates in both models. Assumptions of logistic regression were met. Specifically, dependent variables (reports of at least one instance of violence across three types) were binary, observations were independent and cross sectional, and the sample size was sufficiently large ($N = 4,471$). Likewise, multicollinearity does not appear to be a concern as none of the correlation coefficients between variables were higher than .50 (Senaviratna & Cooray, 2019).

Strategy Usage—For school use of strategies, exclusionary discipline and crisis intervention practices were positively related to the odds of reporting at least one instance of the three types of violence, respectively. Specifically, greater use of exclusionary discipline practices increased the odds of educators experiencing verbal/threatening, physical, and property violence (i.e., $OR = 1.14, p < .01$ to $OR = 1.21, p < .001$). Likewise, greater use of crisis intervention practices slightly increased the odds of teacher verbal/threatening, physical, and property violence (i.e., $OR = 1.05, p < .05$ to $OR = 1.07, p < .01$). Use of school hardening (verbal/threatening: $OR = 1.03, p > .05$; physical: $OR = 1.00, p > .05$; property: $OR = 1.04, p > .05$) and prevention (verbal/threatening: $OR = .97, p > .05$; physical: $OR = 1.05, p > .05$; property: $OR = 1.00, p > .05$) practices were not associated with violence against teachers.

Strategy Effectiveness—Perceptions of the effectiveness of exclusionary discipline practices were significantly and negatively associated with verbal/threatening violence against teachers ($OR = .88, p < .01$). The more that teachers perceived exclusionary discipline practices as effective, the odds of them experiencing at least one instance of verbal/threatening violence decreased. Perceptions of the effectiveness of exclusionary discipline practices were not a significant predictor of physical violence ($OR = .96, p > .05$) or property violence ($OR = .95, p > .05$).

Effectiveness perceptions of school hardening practices were significantly and negatively associated with verbal/threatening ($OR = .83, p < .001$), physical ($OR = .78, p < .001$), and property violence ($OR = .77, p < .001$). The more that school hardening practices were viewed as effective the less likely that educators reported at least one instance of verbal/threatening violence, physical violence, and property violence.

Effectiveness perceptions of school-based prevention practices were related to violence against teachers, with significant and negative associations found for verbal/threatening ($OR = .78, p < .001$) and physical violence ($OR = .80, p < .001$). The more participants perceived prevention practices as effective, the odds of them reporting at least one instance of verbal/threatening or physical violence decreased. Prevention practices were not a significant predictor of property violence ($OR = .88, p > .05$).

Finally, effectiveness perceptions of crisis intervention practices were associated with violence against teachers, with a significant and positive relation being found for physical violence ($OR = 1.12, p < .05$). The more participants perceived crisis intervention practices as effective, the odds of them experiencing at least one instance of physical violence increased. Crisis intervention practices did not significantly predict verbal or threatening violence ($OR = .93, p > .05$) or property violence ($OR = .97, p > .05$).

Discussion

Studies examining school-based interventions that can potentially address violence against teachers remain scant. This study tested the association between the school use and perceived effectiveness of four common approaches to school violence (exclusionary discipline, school hardening, prevention, and crisis intervention) and violence against

teachers. This study is foundational for future work aiming to better understand the effectiveness of school-based interventions to prevent or address violence against teachers. Overall, our findings provide guidance to practitioners and policymakers seeking ways to address this national problem.

Exclusionary Discipline Practices

Findings concerning exclusionary discipline practices were mixed. We found that schools' *use* of exclusionary discipline practices (e.g., expulsion or out-of-school suspension, in-school suspension), as reported by teachers, was associated with a higher likelihood of experiencing verbal/threatening, physical, and property violence. Additionally, the perceived *effectiveness* of exclusionary discipline practices was associated with less verbal/threatening violence but was not associated with physical or property violence.

One possible explanation concerning these positive associations is that exclusionary practices, such as suspensions, may evoke aggression from students toward teachers, especially among students who have been exposed to adverse and traumatic experiences. For example, previous qualitative work has found that verbal and physical aggression often occurs when disciplining a student (McMahon, Davis, et al., 2020; McMahon, Peist, et al., 2020) and that students who are suspended are exposed to trauma in many forms such as community violence, racism, and aggression from law enforcement (Sanders et al., 2022). Thus, some disciplinary responses from educators may increase student stress and anxiety and result in hostility from students. Moreover, the negative association between the perceived effectiveness of exclusionary discipline practices and verbal/threatening violence appears to be inconsistent with the broader literature on exclusionary discipline, which has widely documented these strategies as ineffective in ensuring school safety. However, the usage of exclusionary discipline strategies was positively related to the odds of experiencing violence. Given that students often believe that they are unfairly suspended (Quin & Hemphill, 2014), future work can examine if such disciplinary practices are implemented in a procedurally just fashion. Procedural justice, which typically consists of four dimensions (i.e., respect, voice, understanding, and neutrality), is theorized to promote compliance (e.g., Martinez, Swaner, et al., 2022). It may be possible that the "effective" use of exclusionary discipline practices contains some of these characteristics. Ultimately, it should be noted that it is difficult to assess the directionality of the associations found in this study given that it is cross sectional. It may be that when violence occurs at higher rates, schools are more likely to rely on exclusionary discipline practices.

Nevertheless, many teachers in this study still viewed exclusionary discipline practices as effective, which resonates with Huang and Cornell (2021), who found that teachers endorsed exclusionary discipline practices despite feeling unsafe. Overall, these findings shed light on the potential disconnect between the practices teachers view as effectively promoting school safety and practices that are indeed effective.

School Hardening Practices

Schools' use of hardening practices (e.g., security officers, clear backpacks) was not associated with violence against teachers, which is consistent with previous school violence

research (Turanovic et al., 2020). However, contrary to our hypothesis, teachers' perceptions of the effectiveness of school hardening practices were associated with a lower likelihood of experiencing verbal/threatening, property, and physical violence. At a glance, these findings deviate from previous work indicating that school hardening practices do not mitigate violence among students (e.g., Turanovic et al., 2020). Many schools have security cameras, metal detectors, and school police officers, and schools' active or effective use of surveillance may result in less violence against teachers, though perhaps not for students (Turanovic et al., 2020). This possibility resonates with prior work showing that teachers working in schools with school police or security officers report feeling physically safe but also report that students do not feel safe (Wood & Hampton, 2021). This trend is important for promoting the overall school climate via the implementation of empirically validated interventions that bolster healthy and positive school experiences for both school personnel and students. Additionally, future work examining school violence prevention practices and violence against teachers should leverage the perspectives of multiple informants to identify variations in how violence prevention practices are perceived.

Furthermore, the measure of school hardening in this study included items concerning school security and working with law enforcement. School security officers may be viewed as effective because they intervene in school discipline, especially when offenses are serious. As a result, teachers may be less likely to become directly involved in disciplinary matters and school crises (e.g., fights), which can otherwise place them at risk of violence. Nevertheless, these possibilities remain equivocal, and more work is needed to better understand how teachers operationalize effectiveness and how specific hardening practices are linked to violence against teachers.

Prevention Practices

Schools' use of prevention practices was not associated with violence against teachers. However, we found that the perceived effectiveness of prevention practices (e.g., social-emotional learning approaches, creating a positive school environment) was negatively associated with verbal/threatening and physical violence (but not property violence). Thus, the mere use of prevention practices within schools may be insufficient. Instead, school-based prevention practices need to be implemented effectively. Although this study does not focus on how these practices were implemented, these findings are consistent with prior work indicating that many schools do not implement evidence-based programs with fidelity (Ringwalt et al., 2009). Similarly, Durlak et al.'s (2011) meta-analysis of 213 universal school-based interventions found that school-based interventions that were implemented with fidelity yielded favorable outcomes across a broader range of areas as compared to interventions in which there were implementation challenges. Measures of program implementation will be necessary components of future evaluations when assessing the impact of school-based interventions on violence against teachers.

Crisis Intervention Practices

Finally, contrary to our hypothesis, we found that schools' use of crisis intervention practices (e.g., physical restraint, de-escalation, restorative justice practices to resolve conflict) was associated with a higher likelihood of experiencing verbal/threatening,

physical, and property violence, though the effects were relatively small and should be interpreted with caution. Additionally, the perceived effectiveness of crisis intervention practices was associated with more physical violence, but not verbal/threatening and property violence. These findings are not immediately intuitive. However, it is necessary to recognize that crisis intervention practices, such as the ones included in our scale, are often used when physical violence occurs. For example, educators often intervene in physical altercations between students by using physical restraint or de-escalation practices but may then become violence targets. Alternatively, schools that have high levels of violence may be more likely to rely on such crisis intervention practices, which underscores the need to address the larger social–ecological context contributing to violence in communities and schools.

Our findings also showed that the perceived effectiveness of crisis intervention practices was not associated with verbal/threatening violence or property violence. It is possible that whereas the use of crisis intervention practices can potentially escalate some crises, these practices may not escalate violence if used effectively. For example, de-escalation relies on nonprovocative verbal and nonverbal practices, but such practices may escalate violence if teachers are not well trained or do not use these practices properly (Price et al., 2015). As one example, verbal de-escalation strategies are not recommended once violence begins as it can inadvertently escalate aggression (Deitch, 2014). Nonetheless, these possibilities should be examined in future work as directionality cannot be determined in this study.

Limitations

Although this study addresses a significant gap in the school safety literature by examining teachers' perceived use of common school safety approaches and the effectiveness of these approaches, it is not without limitations. First, the data analyzed here are cross sectional, and therefore no causal inferences can be drawn about the relations between school safety practices and violence against educators. Second, the Cronbach's α for exclusionary discipline was, while acceptable, rather low (.67). We retained the factor for theoretical reasons, in line with other studies using this construct (Reddy et al., 2023). Third, while all U.S. states are represented in this data set, the sample is not truly nationally representative, as the likelihood of responding may have been influenced by teacher safety and well-being. Fourth, this study utilized teacher self-reports of the use and effectiveness of their school's safety practices, neglecting to include other methods and sources, in a logistic regression approach. This leaves open the possibility of measurement error in the findings. Fifth, this study did not account for how the school safety approaches in question were implemented. We acknowledge that school implementation of safety approaches may vary. For example, social–emotional learning programming can be integrated into the academic curriculum in one school at all grade levels, but at another school, it could be situated only in elective health classes. Thus, the type, dosage, and fidelity of school implementation approaches may prevent violence against teachers and bolster well-being and connections in schools. Last, the extent to which teachers were aware of or have influence over the implementation of specific school practices varies. For example, school practices such as suspensions may be initiated by teachers, but school administrators often have the final decision as to whether

a student will be suspended. In contrast, teachers may have direct control over prevention practices such as motivating and engaging students.

Implications for Practice

One result emerging from this study and supported by previous research is that exclusionary discipline practices are not effective. Overall, our results indicate that the use of exclusionary discipline practices is related to increased occurrences of violence, mirroring the results of previous studies (e.g., Skiba et al., 2022), although the effective use of these strategies was associated with less verbal and threatening violence. Schools will likely continue to use exclusionary practices to address violence directed against educators, especially serious physical forms of violence. However, schools can minimize their reliance on these strategies by integrating alternatives to suspensions such as implementing universal prevention strategies designed to reduce risk factors and enhance student coping skills. Conflict resolution programming, such as peer mediation, can also be implemented to address harm when it occurs. Moreover, given the extensive media coverage and public discussion of recent school shootings, it is likely that parents, students, and educators may continue to call for the use of exclusionary discipline practices, which can place pressure on school administrators and policymakers to implement exclusionary and punitive policies and practices. School leaders and policymakers are advised to become more versed in school safety best practices to effectively prevent and reduce violence.

Finally, schools can benefit from more guidance on how to effectively implement violence prevention and intervention approaches such as school-based prevention and crisis intervention practices in schools to promote school personnel and student well-being. Likewise, the implementation of school and classroom safety and wellness practices may benefit from job-embedded, data-driven coaching for school leaders and educators. Data-driven coaching, a promising approach, uses data to identify needs and resources, set goals, create/select plans to meet needs, monitor plan implementation, and evaluate implementation fidelity and goal progress. Research has found certain coaching models have positive effects on educator practices and student academic and behavior outcomes (Kraft et al., 2018; Reddy et al., in press). Thus, the application of coaching models for improving educator and school personnel implementation of research-based practices and safety warrants investigation.

Implications for Research

It is critical that research continues to identify how best to prevent and address violence against teachers and overall wellness. Future research in this area must include longitudinal studies that measure school safety approaches through methodologies beyond self-report assessments. Longitudinal studies that assess school safety practices and rates of school violence simultaneously would provide the data necessary to draw conclusions about the effectiveness of practices. Mixed-method studies may facilitate understanding findings that are more complex, as well as provide a voice to teachers' experiences. In addition, although our study drew from a large, national sample of teachers, we were not able to examine multiple teacher perspectives within a given school to enable a multilevel modeling approach—this type of research is needed. Further, we used counts of strategy usage and

an assessment of effectiveness; schools may vary widely on how much they use given practices, warranting future inquiry. It would be beneficial to explore levels of teacher victimization via teachers logging their school victimization and wellness experiences on daily, weekly, and monthly bases. Also, research could explore possible interactions, such as school safety approach by school community setting (e.g., urban), to better understand how the effectiveness of some practices may be context specific. The technology could also be leveraged to improve school personnel and student reports and the precision of tracking the types and reach of various practices to address school violence.

Conclusion

This study examines the reported use and perceived effectiveness of commonly used school-based intervention approaches for addressing school violence and how they relate to teacher's safety and well-being. Teachers in this investigation provide valuable insights into their victimization experiences, the implementation of school safety practices, and the effectiveness of such approaches. These findings provide a first step toward developing and validating approaches that better address the safety and well-being needs of teachers, as well as other school stakeholders.

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Impact and Implications

Violence against K–12 educators is an understudied but burgeoning topic within school safety research. This study examined the perceived use and effectiveness of four common school safety approaches with a national sample of teachers. The implications of this work extend to school practitioners, policymakers, and researchers seeking to advance school safety interventions.

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Table 1
Descriptive Statistics and Correlations of Usage and Effectiveness Ratings Between School Practices and Teacher Victimization

Variable	1	2	3	4	5	6	7	M (SD)
1. Exclusionary discipline	—	.20**	.04*	.05**	-.08**	-.06**	-.07**	2.70 (.72)
2. School hardening	.28**	—	.41**	.42**	-.17**	-.15**	-.18**	3.31 (1.06)
3. Prevention	.15**	.09**	—	.79**	-.17**	-.04**	-.10**	3.34 (.97)
4. Crisis intervention	.23**	.16**	.47**	—	-.18**	-.05**	-.10**	3.67 (.85)
5. Verbal/threatening violence	.11**	.07**	.03	.07**	—	.37**	.47**	—
6. Physical violence	.02	-.07**	.09**	.10**	.37**	—	.46**	—
7. Property violence	.04**	.00	.04**	.06**	.47**	.46**	—	—
M (SD)	2.55 (.76)	2.54 (1.08)	6.59 (.92)	4.47 (1.70)	—	—	—	—

Note. Below the diagonal represents usage ratings between school safety practices and teacher victimization. Above the diagonal represents effectiveness ratings between school safety practices and teacher victimization. Means and standard deviations in the row represent descriptive statistics for usage ratings. Means and standard deviations in the column represent descriptive statistics for effectiveness ratings. Numbers in columns match the numbered construct in the rows (i.e., 1 = exclusionary discipline, 2 = school hardening, etc.).

* $p < .05$.

** $p < .01$.

Table 2

Logistic Regression Results of Strategy Usage Predicting Teacher Violence

Predictors (reference categories)	Teacher violence					
	Verbal/threatening		Physical		Property	
	OR	95% CI	OR	95% CI	OR	95% CI
Teacher characteristics ^a						
Gender (female)						
Male	.82*	[.70, .97]	.82*	[.70, .97]	.63***	[.54, .73]
Race (White)						
Black	.57***	[.43, .76]	.43***	[.32, .59]	.44***	[.33, .58]
Hispanic	.82	[.60, 1.12]	.66*	[.48, .90]	.53***	[.39, .71]
Asian	.70	[.39, 1.25]	.96	[.54, 1.70]	.72	[-.41, 1.28]
Multiracial	.79	[.60, 1.05]	.85	[.65, 1.13]	.68**	[.52, .89]
Years of teaching experience	.98***	[.97, .98]	.99*	[.99, 1.00]	.99***	[.98, .99]
Primary role (general education)						
Special education	1.16	[.97, 1.40]	2.33***	[1.95, 2.77]	.85	[.71, 1.02]
Specialist	.99	[.83, 1.17]	1.14	[.96, 1.35]	.74***	[.62, .88]
School characteristics ^a						
Urbanicity (rural)						
Suburban	1.01	[.86, 1.18]	1.11	[.95, 1.29]	1.19*	[1.02, 1.39]
Urban	1.55***	[1.29, 1.86]	1.69***	[1.41, 2.01]	1.63***	[1.36, 1.94]
School level (pre-K–sixth)						
Pre-K–ninth	.86	[.65, 1.14]	.44***	[.33, .59]	.49***	[.37, .65]
Middle school	2.13***	[1.75, 2.59]	.51***	[.43, .61]	.98	[.81, 1.19]
High school	1.68***	[1.41, 2.00]	.28***	[.24, .34]	.65***	[.55, .78]
All grades	.87	[.64, 1.19]	.40***	[.29, .55]	.60*	[.44, .82]
Perceived strategy usage						
Exclusionary discipline	1.21***	[1.11, 1.33]	1.17***	[1.07, 1.28]	1.14**	[1.04, 1.25]

Predictors (reference categories)	Teacher violence					
	Verbal/threatening		Physical		Property	
	OR	95% CI	OR	95% CI	OR	95% CI
School hardening	1.03	[.96, 1.10]	1.00	[.94, 1.07]	1.04	[.98, 1.12]
Prevention	.97	[.89, 1.04]	1.05	[.97, 1.14]	1.00	[.92, 1.08]
Crisis intervention	1.07 ^{**}	[1.03, 1.12]	1.06 ^{**}	[1.01, 1.11]	1.05 [*]	[1.01, 1.10]

Note. OR = odds ratio; CI = confidence interval.

^aTeacher and school characteristics serve as control variables.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 3
 Logistic Regression Results of Strategy Effectiveness Predicting Teacher Violence

Predictors (reference categories)	Teacher Violence					
	Verbal/threatening		Physical		Property	
	OR	95% CI	OR	95% CI	OR	95% CI
Teacher characteristics ^a						
Gender (female)						
Male	.80*	[.67, .95]	.80*	[.68, .95]	.63***	[.53, .74]
Race (White)						
Black	.69*	[.51, .94]	.48***	[.35, .66]	.49***	[.37, .66]
Hispanic	.80	[.57, 1.12]	.67*	[.48, .95]	.54***	[.39, .75]
Asian	.64	[.34, 1.19]	1.21	[.65, 2.23]	.71	[.38, 1.32]
Multiracial	.82	[.61, 1.10]	.86	[.64, 1.15]	.67**	[.51, .90]
Years of teaching experience	.98***	[.98, .99]	1.00	[.99, 1.00]	.99**	[.98, 1.00]
Primary role (general education)						
Special education	1.18	[.97, 1.44]	2.47***	[2.05, 2.98]	.86	[.71, 1.04]
Specialist	1.03	[.86, 1.25]	1.22*	[1.02, 1.47]	.76**	[.63, .91]
School characteristics ^a						
Urbanicity (rural)						
Suburban	1.02	[.86, 1.21]	1.13	[.96, 1.33]	1.21*	[1.02, 1.43]
Urban	1.52***	[1.25, 1.86]	1.67***	[1.39, 2.01]	1.61***	[1.33, 1.95]
School level (pre-K–sixth)						
Pre-K–ninth	.89	[.65, 1.23]	.43***	[.31, .59]	.50***	[.36, .69]
Middle school	2.12***	[1.73, 2.61]	.50***	[.41, .60]	.96	[.78, 1.18]
High school	1.65***	[1.38, 1.97]	.28***	[.23, .33]	.63***	[.52, .75]
All grades	.94	[.66, 1.32]	.45***	[.32, .64]	.66*	[.46, .93]
Perceived strategy effectiveness						
Exclusionary discipline	.88**	[.79, .97]	.96	[.32, .64]	.95	[.86, 1.05]

Predictors (reference categories)	Teacher Violence					
	Verbal/threatening			Physical		
	OR	95% CI	95% CI	OR	95% CI	95% CI
School hardening	.83***	[.77, .90]	.78***	[.87, 1.05]	.77***	[.72, .84]
Prevention	.78***	[.67, .90]	.80***	[.70, .91]	.88	[.76, 1.01]
Crisis intervention	.93	[.83, 1.05]	1.12*	[1.00, 1.26]	.97	[.86, 1.09]

Note. OR = odds ratio; CI = confidence interval.

^aTeacher and school characteristics serve as control variables.

* $p < .05$.

** $p < .01$.

*** $p < .001$.