Violence at School*

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Abstract

This paper estimates the impact of violence perpetrated by peers and school staff on student victims. Leveraging unique administrative data from Chile that links reports of school violence to individual educational records, we address longstanding data limitations that have constrained empirical research on this issue. Using a matched difference-in-differences design, we find that exposure to school violence has persistent negative effects: absenteeism increases by 46–64%, grade retention rates double, and both grades and test scores decline significantly, with impacts lasting up to four years. In the longer term, victims are substantially less likely to graduate from high school or enroll in university, with violence perpetrated by adults having more severe consequences than peer violence. Complementary survey evidence reveals that reported incidents are associated with increased perceptions of violence and discrimination, as well as decreases in school belonging and teacher expectations. While these psychological and perceptual effects tend to fade after one year, the adverse educational consequences persist, underscoring how brief traumatic experiences can lead to long-lasting educational disadvantages.

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1 Introduction

School violence is a widespread and highly prevalent phenomenon that affects a significant proportion of children across educational settings globally. It includes a wide range of behaviors, from peer conflicts to staff-perpetrated abuse, such as physical violence, psychological harm, cyberbullying, and sexual harassment. Global survey data underscore just how common the problem is: around one-third of students report having been bullied at least once in the past month (32%), having participated in physical fights (36%), or having experienced physical attacks in the past year (32.4%) (UNESCO, 2019). These high rates of exposure suggest that for many children, schools represent a primary setting of violence exposure compared to other forms of violence such as domestic violence or neighborhood violence.[1] Moreover, as children spend a substantial portion of their time at school, violence in this context may be particularly disruptive for their cognitive and social growth.

Despite its relevance, causal evidence on the effects of school violence on individual victims remains limited. While studies suggest that victimized students experience worse learning outcomes,[2] as well as poorer labor market performance, mental health, and higher crime rates later in life,[3] the existing literature relies on cross-sectional data from surveys and continues to face methodological and data-related challenges. Estimating causal effects remains difficult for several reasons. One challenge is identifying victims, as survey-based measures tend to capture a broad range of experiences and perceptions.[4] This issue is particularly salient in the case of staff-perpetrated violence, which is often underreported in student surveys and has been studied primarily through corporal punishment. A second challenge lies in accounting for pre-existing differences between victims and non-victims, which may confound observed outcome differences—a problem that, aside from Eriksen et al. (2014) and Hasnat and Fakir (2023), most studies do not address with clear identification strategies. Finally, studies relying on school- or classroom-level measures may not fully capture the consequences for directly affected students, potentially leading to underestimates of the individual-level impact on victims.

In this study, we use comprehensive administrative data from Chile to examine the short-, medium-, and long-term effects of reported violent incidents perpetrated by students or school staff on victims. Since 2012, the *Superintendencia de Educación* has operated a formal system that allows students and parents to report incidents of school violence. We analyze 7,100 reports of adult abuse and 10,795 reports of student abuse, which mainly capture psychological abuse from teachers (corporal punishment is prohibited in Chile) and instances of physical and psychological bullying from students. These formal reports capture significant events, as they represent cases serious enough to prompt official complaints. This centralized system offers a unique research opportunity, as we are not aware of other countries that maintain comparable nationwide

[1] For example, in the United States, 20.8% of students report experiencing violence at school, compared to only 8.4% who report violence exclusively at home (Margolin and Gordis, 2009), though the nature and potential impacts of violence may vary considerably across these different contexts.

[2] See Naz et al. (2011); Maiti (2021); Kumar et al. (2022); Baker-Henningham et al. (2009) for the effects of corporal punishment on educational outcomes and Delprato et al. (2017); Eriksen et al. (2014); Ammermueller (2012); Murillo and Román (2011); Brown and Taylor (2008); Baker-Henningham et al. (2009) for the effects of bullying on academic achievement.

[3] See Hasnat and Fakir (2023); Brimblecombe et al. (2018); Wolke et al. (2013); Brown and Taylor (2008) for the long-term impacts of school violence.

[4] Existing studies acknowledge these challenges and adopt various approaches to measuring violence exposure. Several rely on student self-reports (Delprato et al., 2017; Ammermueller, 2012; Murillo and Román, 2011; Hasnat and Fakir, 2023), others use teacher or parent reports (Eriksen et al., 2014; Brown and Taylor, 2008; Brimblecombe et al., 2018), or a combination of sources (Wolke et al., 2013).

databases at the victim level. Our analysis links reported incidents to detailed educational records and survey data on students' experiences of violence and psychological measures. To our knowledge, this makes our study the first to use administrative data to analyze the impact of school violence on individual victims, and the first to analyze the causal impact of psychological violence by adult staff.

We employ a matched difference-in-differences (DiD) design with individual fixed effects to estimate the causal effects of reporting a violent incident. This approach compares the trajectory of academic outcomes before and after the incident between victims of school violence and students with similar pre-incident outcome trends. Despite the non-random nature of reporting decisions, we find that victims follow very similar educational trajectories to the average student prior to the incident, validating our event-study approach. This pattern is consistent with our qualitative reading of complaint narratives, which suggest that formal reports typically reflect moments when violence has recently escalated or newly emerged, rather than instances of chronic, ongoing abuse that students or parents chose to report at a later stage.

To provide evidence of how pivotal the reporting moment is for victims' academic trajectories, we first examine the relationship between the timing of the report and students' school attendance outcomes at the monthly and academic year levels. While attendance patterns show that absenteeism is slightly higher for victims compared to their control matches throughout the year of the report, there is a dramatic spike during the reporting month, with absenteeism increasing by 10 percentage points (p.p.) for victims of adult-perpetrated violence and 15 p.p. for victims of peer-perpetrated violence, with such differences persisting for the remainder of the academic year. The causal estimates on yearly attendance outcomes is consistent with the monthly-level evidence: compared to their control matches two years before the report, victims experience higher annual absenteeism (5 to 7 p.p.) during the year of the incident, representing increases of 46-64% from baseline levels, and higher dropout rates (around 1 p.p.) in the following academic year, with both effects statistically significant. Moreover, the differences in yearly attendance rates remain statistically significant for four years, the entire subsequent period observed in the data.

The causal estimates further show that the reported violent incidents reduce victims' academic performance and that such negative effects persist over time. During the year of the incident, victims experience a doubling of grade retention rates (3–5 p.p.increase) and a GPA reduction between 0.12 and 0.16 standard deviations (σ) compared to their control matches. Victims are also more likely to transfer to lower-performing schools after the incident. All effects are statistically significant and persist over the four-year observation period, with victims of adult-perpetrated abuse exhibiting stronger and more sustained negative effects across all measures.

The long-term effects of reported violent incidents are substantial and align closely with the short- and medium-term impacts. Because long-term outcomes can be observed only once, we adopt a matching strategy—rather than a matched DiD—which has stronger identifying assumptions. Nonetheless, this approach still compares victims with control students who exhibited similar outcome trends prior to the incident. The results indicate that being a victim of adult or peer abuse reduces the high school graduation rate by 11% (9 p.p.) and 7% (6 p.p.), respectively, and decreases the likelihood of on-time graduation by 16% (12 p.p.) and 12% (9 p.p.). All estimates are statistically significant. Victimization also lowers the probability of taking the national university entrance exam by 5 and 2 p.p., and negatively affects test scores. In the longer run, victims are less likely to attend university and to enroll in selective programs, underscoring the lasting adverse effects of school violence on educational attainment.

We find that these negative effects are generally consistent across different student characteristics, with some variation by gender and type of violence. The findings for victims of adult violence are similar for boys and girls, but the effects of peer violence are slightly more pronounced among female victims, particularly in the longer term. While there is no consistent evidence that physical or psychological violence has more severe consequences than the other, cyberbullying emerges as a particularly harmful form of violence, showing larger effects on academic outcomes than other types.

After estimating the main effects of reported violent incidents on victims' academic outcomes, we link victims and their matched controls from the main analysis to nationwide student-level survey data to validate our identification strategy and investigate potential mechanisms. Since the survey is administered to rotating cohorts rather than the full student population each year, most students are observed only once, either before or after the incident. We therefore implement an alternative DiD approach that compares survey responses of victims and their matched controls relative to the timing of the incident. While we cannot include student fixed effects, we include match-by-period fixed effects, allowing us to assess differences in perceptions of school safety and emotional well-being between victims and their matched controls before and after the incident. The results provide key insights into the nature of the violence experienced and its psychological consequences. Notably, the estimated impacts on educational outcomes closely mirror those from the main analysis, and we likewise find negative effects on standardized test scores collected within the survey.

We use the survey data to validate our empirical strategy by showing that the year of the report coincides with a substantial but temporary shock in students' perception of victimization. Victims of student violence show clear increases in perceived peer-perpetrated physical, verbal, social, and virtual violence during the incident year, with effect sizes between 0.45 and 0.71σ, and higher levels of perceived discrimination (0.275σ). In contrast, victims of adult-perpetrated violence show only modest increases (0.040 to 0.187σ), which is expected since these measures capture peer rather than adult violence. Notably, these differences dissipate in the following years, with smaller and statistically insignificant differences between victims and their matched controls one to three years after the incident. This pattern of large but temporary effect is consistent with the reports capturing substantial but temporary violence shocks.

The survey data also allow us to explore the role that different psychological factors play in the relationship between exposure to violence and educational outcomes. We examine the mediating role of three psychological factors: (1) sense of school belonging (Baumeister and Leary, 1995; Walton and Cohen, 2011), (2) academic self-concept (Brunner et al., 2010; Arens et al., 2021), and (3) teachers' expectations (Rosenthal and Jacobson, 1969; Jussim and Harber, 2005). The results suggest that school violence operates primarily through the deterioration of the student–school relationship rather than academic self-concept. Two key mechanisms emerge: diminished sense of belonging among all victims (0.34σ), and lower perceived teachers' expectations among victims of adult-perpetrated violence (0.18σ). Both effects occur during the incident year and recover afterward.

Overall, our findings suggest that violence at school has a scarring effect: even short-term exposure can lead to persistent educational disadvantages that do not naturally diminish over time. Notably, our survey evidence indicates that exposure to violence is not permanent—victims could have remained subjected to ongoing bullying indefinitely, but this is not what we observe. Instead, victimization measures decline in the years following the reported incident, likely due to a combination of factors including school transfers and potential institutional responses by schools to address the violence. Despite this decline in

ongoing victimization and despite the recovery of relational disruptions, our results show that negative effects on school attendance and academic performance persist, with consequences that extend into the long term. These findings highlight the cumulative harm caused by school violence, as a temporary but serious episode can have lasting consequences that endure well beyond the period of active victimization.

This study contributes to the broader literature on the consequences of violence exposure during childhood and adolescence, with its primary contribution being the identification of the causal effects of school violence—one of the most common forms of violence during this life stage—on victims' educational outcomes at the individual level. While prior research has examined the effects of domestic violence (Wolfe et al., 2003; Currie and Tekin, 2006; Bhuller et al., 2023), neighborhood crime (Aizer, 2007), and drug trafficking (Sviatschi, 2022) on child development, school settings represent a distinct and particularly important context. Schools are central to children's cognitive and social formation, and violent events in these environments may be especially disruptive.

The lack of existing causal evidence on individual-level impacts of school violence stems from two main challenges: difficulties in identifying victims in available data and the absence of high-frequency educational records that support rigorous causal analysis. These challenges are compounded by the fact that studies relying on school- or classroom-level measures substantially underestimate the individual-level impact on victims—our own analysis shows that while direct victims experience large negative effects, the impacts on their classmates are much smaller, representing only 4% of the victim effect size for absenteeism and 8–17% for academic performance measures.

Consequently, there is very little research estimating the causal effects of being a victim of violence by teachers or peers in school settings. Instead, existing studies have analyzed the effects of external shocks affecting schools at the community level, such as drug-related conflicts in school neighborhoods (Monteiro and Rocha, 2017), police killings occurring near students' residences (Ang, 2020), or extreme events within schools like shootings (Beland and Kim, 2016; Cabral et al., 2021). Alternatively, they have evaluated anti-violence intervention programs aimed at reducing peer violence (Karmaliani et al., 2020; Paluck et al., 2016), addressing staff-perpetrated violence (Devries et al., 2015; Amaral et al., 2024), or promoting the reporting of violent incidents (Gutierrez et al., 2024; Smarrelli, 2023). While some intervention studies provide suggestive evidence that reducing violence might improve educational outcomes, they primarily focus on measuring intervention effectiveness rather than establishing the direct causal relationship between victimization and educational outcomes. More broadly, evidence on other types of violence, such as domestic violence, shows that exposure can generate negative externalities for classmates (Carrell and Hoekstra, 2010; Carrell et al., 2018), underscoring the importance of studying both direct victimization effects and spillovers within schools.

Our study addresses this gap by directly measuring the causal relationship between school violence and educational outcomes. Most closely related to our work is Eriksen et al. (2014), which uses an instrumental variable approach based on classroom-level variation in peer characteristics. However, this study relies on stronger identification assumptions and can only examine impacts on GPA. We contribute a more robust identification strategy using high-frequency administrative data and a matched DiD approach, similar to recent work that uses this methodology to measure the effects of workplace violence (Adams-Prassl et al., 2024). This approach allows us to examine a comprehensive range of short-, medium-, and long-term outcomes. Moreover, we are able to estimate the causal effects of both peer-perpetrated and staff-perpetrated violence, with the latter being particularly understudied despite representing a significant portion of school

violence cases. Our results also show that compared to direct victims, the effects on peers are substantially lower. While these modest peer effects could aggregate to meaningful impacts at the classroom or school level, and may partly reflect unreported or indirect victimization among classmates, the evidence suggests that the largest consequences fall on direct victims.

Our findings have important implications for public policy. First, we provide crucial evidence that school violence has scarring effects on educational outcomes. Although the incidents represent large but seemingly temporary shocks—as indicated by the return of self-reported victimization and sense of belonging to baseline levels in the year following the report—the negative impacts on educational outcomes persist into the medium and long term. This pattern suggests that early exposure to violence can result in lasting academic consequences, underscoring the critical importance of prevention. From a policy perspective, our findings indicate that strategies aimed at preventing violence from occurring initially may yield greater benefits than those focused solely on addressing violence after it has occurred. Moreover, the persistence of educational disadvantages even after violence ends demonstrates that stopping the abuse alone is not enough; victims need additional academic and psychological interventions to address the enduring negative impacts on their educational trajectories.

Second, we distinguish between violence perpetrated by peers and by school staff, demonstrating that staff-perpetrated violence is especially detrimental to student outcomes. Evidence on staff-to-student violence is particularly limited, with most studies focusing primarily on corporal punishment. To the best of our knowledge, no prior research has examined the causal effects of staff violence in contexts where corporal punishment is prohibited and incidents primarily involve psychological abuse. We find that the impacts of such psychological abuse by staff are even more severe than those of peer bullying, despite the latter receiving considerably more academic and policy attention. This finding also connects to the broader literature on teacher effects beyond test scores (Jackson, 2018), highlighting staff violence itself as a mechanism through which teachers can shape students' long-run outcomes. Overall, the results suggest that preventing and reducing staff-perpetrated violence is likely to yield higher returns than addressing peer violence.

Third, we explore additional dimensions of heterogeneity in the effects of violence, including differences by gender and type of violence. Our results show that although the types of violence experienced differ systematically by gender, the negative educational impacts are similar in magnitude and persistence for male and female victims. We also find evidence that both psychological and physical violence are equally detrimental to students' academic trajectories. These findings inform targeted policy interventions by demonstrating that all forms of school violence require serious attention, regardless of whether they involve physical or psychological abuse, and that protection and support mechanisms should be designed to address the needs of all victims effectively.

The remainder of this paper is organized as follows. Section 2 provides background on the context of the study. Section 3 describes the data and presents descriptive evidence. Section 4 outlines our main empirical strategies. Section 5 presents the results and Section 6 concludes.

2 School Violence Reports in Chile

2.1 The Process of Reporting School Violence

The Chilean education system provides a unique setting for studying school violence. Since 2012, when the government established the Superintendency of Education, all incidents of school violence can be formally reported to a centralized agency. The creation of the Superintendency was part of a broader reform aimed at introducing accountability into Chile's voucher system, which had operated with limited oversight since 1981. This institution serves two key functions: ensuring schools' compliance with educational regulations and proper use of public resources, while also providing a channel for students, parents, and school staff to report irregularities, including incidents of violence.

Our analysis draws on administrative data comprising all reports filed with the Superintendency of Education between 2014 and 2019. During this period, the Superintendency received 73,424 reports, with 73% relating to school climate issues. Within these climate-related complaints, we focus specifically on student mistreatment reports, which represent 59% of school climate cases. These mistreatment reports include incidents of physical and psychological violence perpetrated by both students and school staff against students.

Figure 1 illustrates the reporting process, which begins when a complaint is filed either online (42%) or in person (58%) at the Superintendency of Education. For in-person reporting, the Superintendency maintains 16 regional offices across the country, with one office located in each of Chile's administrative regions. Most reports (83%) are submitted by students' guardians, while students themselves file 8%, and the remainder come from teachers or other school staff.

Once filed, the Superintendency contacts both the school principal and may reach out to the victim for additional information. When schools are contacted, they must undertake the task of preparing a report demonstrating the existence of appropriate educational protocols and documenting all actions taken to comply with these protocols. The Superintendency then determines whether the incident potentially violates educational regulations, with 79% of cases being dismissed at this stage. Of the remaining 21% that proceed to formal investigation, cases deemed less severe are granted a remediation period, while more serious violations are referred to the legal department for potential sanctions. Ultimately, only 7% of all reports result in formal sanctions, which take the form of either a warning (41%) or a monetary fine (59%) to the school.

The Superintendency's primary role is to verify that schools have established protocols for managing school climate issues and that these protocols are properly followed when incidents occur. Therefore, a lack of sanctions does not necessarily indicate an absence of violence—rather, it may simply reflect that the school followed their established protocols appropriately. In fact, even in 79% of cases that are dismissed early in the process, the dismissal indicates compliance with the protocol rather than the absence of a violent incident. Consequently, in this study, we analyze all reports regardless of whether they resulted in sanctions, as all cases represent situations where students or their guardians felt compelled to formally report violence, even if the Superintendency determines that school's response met regulatory requirements. While we recognize that these reported incidents likely under-represent the true prevalence of school violence—as many less-severe cases may go unreported—they represent the most severe inci-

dents that prompted formal complaints, providing a critical opportunity to understand the causal effects of serious school violence on victims' educational outcomes.

2.2 Nature of Reported School Violence

In this section, we present the results of a qualitative and descriptive analysis of school violence reports. While our main quantitative analysis focused on reports filed between 2014 and 2019, deliberately examining the pre-pandemic period to analyze effects unaffected by COVID-19 disruptions, here we examine a subset of more recent complaints submitted online between 2021 and 2023. Unlike earlier reports, these online complaints were systematically classified by the person filing the complaint, who specified the type of violence (physical, psychological, or both), frequency of incidents (isolated or recurrent), and whether they involved cyberbullying. Although this timeframe differs from our main causal analysis, this dataset provides valuable insights into the patterns and characteristics of the reported cases of school violence.

Table 1 reports summary statistics of the type and frequency of violence by whether the perpetrator is an adult or another student and by the victim's gender. There are notable differences in the nature of violence depending on the perpetrator. Physical violence appeared far less frequently in reports of adult-perpetrated abuse, with fewer than 30% of these cases involving physical aggression. Among students who reported adult-perpetrated abuse, boys were more likely than girls to describe experiences of physical violence. In contrast, student-perpetrated abuse was more often physical, with 82% of boys and 64% of girls reporting physical aggression.

Recurrent violence was a common theme across reports. Among cases involving adult-perpetrated abuse, half of the reports described incidents occurring more than once a week. Student-perpetrated abuse appeared even more persistent, with over 70% of cases involving repeated incidents at least weekly. The presence of cyberbullying also varied considerably. In cases of adult-perpetrated abuse, cyberbullying was mentioned in fewer than 10% of reports. However, it was far more prevalent in student-perpetrated abuse, particularly among girls. While 24% of boys who reported student-perpetrated abuse mentioned cyberbullying, this figure rose to 41% among girls.

Beyond this descriptive analysis, we conducted a qualitative review of 120 complaints from 2021 to 2023 to gain a deeper understanding of the nature of school violence reports. We structured the sample to include equal representation of student-perpetrated and adult-perpetrated abuse, with 60 cases in each category. Within each category, we ensured a balanced distribution of violence types, selecting 20 cases of physical violence, 20 of psychological violence, and 20 involving both. A key insight from this analysis was that physical violence almost always included psychological elements, making strict categorical distinctions less meaningful in practice.

Across our qualitative review, a recurring theme was insufficient or absent institutional intervention and support mechanisms. Many reports indicated that schools either failed to properly implement protocols or ignored reported incidents entirely, as exemplified by statements such as "the school has done nothing."

In adult-perpetrated mistreatment cases, teachers were the most frequently reported perpetrators, followed by school inspectors and administrators. The most common form of abuse involved sustained verbal aggression toward students, often related to academic performance or behavior. The severity of misconduct ranged from isolated negative comments (e.g., a teacher telling a student to "shut up, you blockhead")

to repeated derogatory remarks (teachers who"shout, treat students badly, belittle them, making them feel worthless") to physical aggression (restraining students by the neck or pushing them).

When physical aggression occurred, it typically involved palm and fist strikes, physical struggles, pushing, and forceful restraint. Of particular concern, several cases documented adults using aggression as a means of "regulating" student behavior during emotional outbursts, with students with Special Educational Needs (SEN) disproportionately affected. Some extreme cases involved multiple staff members physically restraining students, as illustrated by one report stating "six staff members grabbed my child."

In our analysis of student-to-student violence cases, most incidents included psychological violence, which typically occurred repeatedly over time. For instance, some reports described situations where students faced "constant verbal aggression and theft of belongings, even experiencing verbal abuse on public transportation." When physical violence was present, it tended to occur as isolated events rather than repeated occurrences.

These incidents predominantly occurred in schoolyards. High severity cases were characterized by physical aggression resulting in injury, serious threats generating considerable fear, or frequent and intense patterns of abuse. Medium-severity cases included repeated instances of humiliating comments or moderate physical contact without serious injury. Low-severity incidents involved isolated cases of mild verbal or physical abuse, such as occasional teasing or minor pushing without intent to harm.

The complaints frequently highlighted discriminatory elements in the abuse. Some cases involved gender-based and sexual orientation-based harassment, with victims being subjected to derogatory terms and slurs. Students with special educational needs were also targeted, often facing repeated aggression aimed at destabilizing them. Physical appearance-based discrimination was another significant factor. Cyberbullying was also reported, primarily occurring through WhatsApp and Instagram.

3 Data and Descriptive Statistics

3.1 Data

This study combines administrative records of violence reports with comprehensive data on educational outcomes. Overall, we use three main datasets.

The first main dataset comprises student mistreatment reports filed with the Superintendency of Education between 2014 and 2019–a period selected to avoid the disruptions to reporting and schooling caused by COVID-19-related closures. These records include detailed information such as the type and date of the incident, characteristics of the victim, resolution status, and the full narrative text of each report. Importantly, the reports also contain the victims' unique national identification numbers, enabling us to link them to educational records.

The second main dataset comprises administrative educational records that provide rich information on student academic trajectories. Specifically, we construct a comprehensive panel dataset spanning 2009 to 2019 with monthly attendance records, enrollment information, grade retention data, GPA, and school characteristics (for these measures, we restrict our analysis to the period up to 2019, as these metrics lost much of their meaning during the pandemic when schools were closed). For long-term outcomes analysis,

we examine high school completion rates, registration and performance in national standardized tests used for college admissions, and higher education enrollment from 2014 to 2023. Our higher education data includes all institutions within Chile's educational system, allowing us to track enrollment in both university and vocational programs. This comprehensive educational dataset allows us to construct detailed academic trajectories for victims both before and after reported incidents.

The third dataset is the *Sistema de Medición de la Calidad de la Educación* (SIMCE) survey from 2013 to 2019. The SIMCE is a comprehensive assessment that evaluates Chile's school curriculum through standardized tests administered to students in grades 2, 4, 6, 8, and 10 during specific years. Beyond measuring student performance across various subjects, the SIMCE also collects valuable data through additional questionnaires of school climate and psychological and social factors that we leverage in our analysis. Although not universally administered, approximately 80% of victims in our sample participated in the SIMCE and completed these questionnaires at least once during their educational trajectory.

From the SIMCE, we use three main sets of variables. The first set relates to students' perceptions of peer-related school violence, collecting information on the frequency of physical, verbal, social, and virtual violence experienced by the student. The second set of variables relates to discrimination, asking students whether they have felt discriminated against for various reasons, including physical features, appearance, personality, gender, and socioeconomic background, among others. Finally, the third set of variables pertains to psychological factors that we study to explore potential mechanisms, including sense of belonging (Baumeister and Leary, 1995; Walton and Cohen, 2011), students' academic self-concept (Marsh, 1990; Brunner et al., 2010), and teachers' expectations (Rosenthal and Jacobson, 1969; Jussim and Harber, 2005). Appendix B provides a detailed description of the variables and specific questions we use.

3.2 Descriptive Statistics

Our study analyzes 18,001 reports of student mistreatment, comprising 7,139 incidents perpetrated by adults and 10,862 by fellow students. The reports span from 2014 to 2019 and include students from 3rd grade through the final year of high school. We exclude reports from students below 3rd grade as they lack the required academic performance variables to implement our matching DiD strategy. We only include reports from students who were enrolled in the reported school during the year of the complaint and who were attending regular primary or secondary education institutions (excluding adult or special education programs) at the time of the report.

The number of reported mistreatment cases has shown an upward trend since 2014, regardless of perpetrator type (as shown in Appendix Figure A.1). The gender composition of reports varies by perpetrator category: student-perpetrated incidents are more frequently reported by female students (56%) than male students (44%), while adult-perpetrated incidents show the opposite pattern, with male students accounting for 56% of reports and female students 44%. Despite these differences, the overall gender distribution remains relatively balanced.

The grade level at which students report mistreatment reveals distinct gender patterns. Male students report incidents most frequently during elementary school (grades 3–5), with a progressive decline through middle school (grades 6–8) and high school. In contrast, female students exhibit a different pattern, with peak reporting occurring during middle school and lower rates in both elementary school and high school

(Appendix Figure A.2).

3.2.1 *Characteristics of Schools with Violence Reports*

Between 2014 and 2019, 46% of schools had no reports of violence, while 40% had at least one report of adult-perpetrated incidents and 43% had at least one report of student-perpetrated incidents. The frequency of reports within individual schools was generally low. Among schools with reports of adult-perpetrated violence, the average number of reports was 2. Reports of student-perpetrated violence were slightly more common, with an average of 2.8 reports per school among those with at least one incident reported. Appendix Figure A.3 presents the distribution of reports across schools during this period using separate histograms for adult- and student-perpetrated incidents.

Table 2 compares the characteristics of schools attended by students who reported incidents versus those attended by students who did not report during this period. We analyzed four victim groups separately: males and females who reported adult-perpetrated violence, and males and females who reported student-perpetrated violence. Overall, students who reported incidents attended schools that were remarkably similar to those attended by non-reporting students. These institutions demonstrated comparable metrics across several dimensions, including average attendance rates, grade point averages (GPAs), grade retention rates, annual student mobility, and average class sizes.

We do observe some modest differences in school type and location. Students who report incidents are slightly more likely to attend voucher schools and less likely to attend public or private institutions. They are also more likely to attend schools in the capital region and less frequently enrolled in rural schools. Despite these differences in administrative characteristics, the schools remain similar in their academic performance on the SIMCE standardized tests, the socioeconomic status of their student populations and the amount of copayment they charge, where the copayment equals the price charged monthly by the school to parents in 2019 USD. In Chile, public schools don't charge families anything and are completely state-funded, voucher schools can charge a copayment (shared financing) to families in addition to receiving state subsidies, and private schools charge full tuition without state subsidies.[5]

3.2.2 *Characteristics of Students Who Report Violence*

Table 3 extends our analysis to the individual level, comparing the characteristics of violence victims to the general student population using the same four victim groups established earlier.

Academic indicators reveal that students who report violence show modestly lower academic performance in the year preceding the incident compared to their peers. These students demonstrate lower attendance rates, decreased GPAs, and higher rates of grade retention and school transfers during the year before filing their report. The academic challenges are particularly pronounced among male students reporting adult-perpetrated violence, who exhibit lower GPAs and higher grade retention rates compared to other reporting groups.

Socioeconomic indicators reveal that students who report violence typically come from households with

[5]We calculated the average score obtained by the school in all SIMCE tests taken between 2012 and 2018 across all grades in which the tests were administered. Monthly copayments are in 2019 USD. Public schools charge 0 USD, voucher schools range from 0-273 USD (averaging 30 USD monthly). We do not have data on private paid schools' fees and assume they charge 500 USD monthly.

higher parental education levels and incomes compared to the general student population. This pattern suggests that reporting behavior may be influenced by socioeconomic factors rather than solely reflecting the prevalence of violence. While a report indicates an incident occurred, it also requires parental initiative to file the complaint.

An interesting pattern emerges in the prevalence of special educational needs (SEN) among students who report experiencing violence. Male students who report adult-perpetrated violence have a SEN rate of 27%, compared to 31% among those reporting student-perpetrated violence—both substantially higher than the 17% observed in the general student population. Among female students who report violence, the SEN rate is 18%. In most cases, these needs involve specific learning disabilities.[6]

Using SIMCE questionnaire data, we analyze violence exposure among reporting students and compare them to their peers (defined as students in the same school and grade). Since SIMCE data is not collected for all students every year, we focus on students who completed the questionnaire in the same year they reported a violence incident. Our analysis covers four types of measures of student-perpetrated violence exposure: physical (being hit or having belongings damaged), verbal (insults, mockery, verbal threats), social (isolation, gossip, public humiliation), and virtual (threats or mockery through digital platforms like Facebook, WhatsApp, or Instagram). Appendix B details how we constructed these measures. Because the structure of the questionnaire varies slightly between years, we standardized all variables by year and grade. This standardization allows us to interpret the resulting coefficients as standard deviations from the population mean.

As shown in the data, students who report violence are significantly more likely to indicate exposure to physical, verbal, social, and virtual violence. This pattern is particularly pronounced among those reporting student-perpetrated incidents, which aligns with the questionnaire's focus on peer-based violence. Notably, the peers of reporting students also show slightly higher-than-average reports of violence exposure,[7] suggesting that students who report violence (whether perpetrated by adults or fellow students) attend classes where violence, as reported by the student body, is more prevalent than average.

In sum, our analysis indicates that reporters tend to be students from slightly higher socioeconomic status backgrounds attending classes with above-average violence rates, and where the reporting students themselves experience substantially more violence than both their immediate peers and the average student across all schools. These reporting students exhibit slightly lower educational outcomes compared to the average student. Additionally, male students who report violence are substantially more likely to be classified as having special educational needs (SEN), with rates approximately twice that of the general student population.

3.2.3 Educational Outcomes Prior to Violence

Individuals who report violence may have experienced victimization for an extended period before filing a report, potentially affecting their educational trajectories over time. This concern may be particularly

[6]SEN classifications identify students who, at some point during the 2016–2023 period, were enrolled in a participating school and received a formal diagnosis under Chile's School Integration Program (PIE). Approximately 60% of establishments offering basic education in Chile have a PIE agreement. This designation only applies to students in public or subsidized private schools participating in PIE, and therefore does not capture students with special needs in non-participating or private institutions.

[7]We explicitly exclude the reporting student when calculating average violence exposure among peers.

relevant for peer violence, where students could be exposed to the same perpetrators over extended periods within their classroom or school environment. In contrast, for adult-perpetrated violence, the exposure duration may be more limited: on average, students have 7 teachers per academic year and are typically exposed to any particular teacher for an average of 1.8 years.[8]

To examine the possibility that pre-existing victimization patterns affect educational trajectories, Figure 2 compares the educational trajectories of victims to those of the general student population, with the latter re-weighted to match victims' grade distribution.[9]

The figure confirms the differences we observed in Table 3, showing that students who report violence tend to perform somewhat below their peers. They have lower attendance rates (approximately 3 p.p), lower GPAs (about 0.1 points), and higher rates of grade retention (approximately 2 p.p) and school changes (approximately 4 p.p). Their high enrollment rates reflect that school enrollment is necessary for reporting.

Despite these differences in levels, we find no evidence of a differentiated trend prior to the reported incident. The academic performance gap remains stable up to two years before the event, suggesting these students consistently perform below their peers rather than experiencing a progressive decline. Still, to be conservative, we establish our baseline period at t-2 to account for the slight increase in the gap observed the year before the incident, which may indicate that students had begun experiencing some violence shortly before formally reporting it.

4 Empirical Strategy

4.1 Effects on Educational Outcomes

Estimating the causal effect of violence on student outcomes presents two key methodological challenges. First, accurately identifying which students have experienced high levels of school violence can be difficult. Second, students who experience violence likely differ systematically from those who do not, making it problematic to attribute observed differences in academic performance directly to violence exposure.

In this paper, we analyze formal reports of school violence, which provide a more reliable measure of experienced violence than simple self-reported statements. Filing these reports involves a formal process that requires time and engagement with administrative procedures, suggesting that incidents that result in formal reports represent significant experiences of violence. To address the selection bias concern and estimate causal effects, we implement a matched difference-in-differences (DiD) design, comparing victims who report school violence to matched control observations (following Adams-Prassl et al., 2024). This approach allows us to compare the evolution of outcomes before and after the incident for treatment and control observations with similar characteristics. By employing a stacked DiD design that compares never-treated to treated individuals, we address recent concerns in the DiD literature (Cengiz et al., 2019). Similarly, to estimate the effect of violence on victims' peers, we compare the evolution of treated peers to

[8]We calculate these figures by analyzing the 2008 first-grade cohort and tracking the complete set of teachers they encountered throughout their academic careers from 2008 to 2019. This analysis allows us to estimate both the average number of teachers students have per year and the average duration of exposure to each particular teacher.

[9]For this analysis, we restrict the sample to students who are at least in 5th grade at the time of the incident to ensure we can observe them up to four years before the event.

that of matched control observations. As we demonstrate in Section 5.6, the matched DiD approach is not crucial for the validity of our main findings, since treated students exhibit educational trajectories similar to the average student before the incident. However, this methodology provides an appropriate framework for constructing a suitable control group, which becomes valuable both for analyzing long-term effects and evaluating psychological measures that cannot be evaluated through a standard DiD approach.

Formally, we identify a victim's three nearest-neighbor matches based on academic history. We restrict the set of treated and control observations to students enrolled in the year of the incident, starting from third grade onwards, who are attending either elementary or secondary education in a regular school. We then implement exact matching based on gender and the grade they are attending in the year of the incident, followed by nearest neighbor matching using academic history. Our matching process includes several school and individual characteristics measured two years before the event, as our baseline period is at t-2. At the individual level, we include variables measured two to four years pre-incident: enrollment status, attendance rates, grade retention, and GPA. For school-level variables, we incorporate measures taken between four and one year before the incident (because school selection decisions occur at the beginning of the academic year): school fees, schools' performance on standardized mathematics and language tests, school type (private/public or voucher), and school transitions.

To prevent contamination in our analysis, we exclude victims' same-year peers as potential controls due to possible spillover effects. However, these students may serve as controls for incidents reported in different years.[10] This matching procedure yields three comparable controls for each victim. Using these matched treatment and control observations, we estimate the following regression model:

$$Y_{isgt} = \sum_{j=-4, j\neq -2}^{4} \delta_{sj} D_{isg,t-j} + \alpha_i + \gamma_{st} + \omega_{sgj} + \epsilon_{isgt} \tag{1}$$

where Y_{isgt} represents the outcome of interest for victim i of gender s in base-grade sample g at time t, with g being the grade in which the violent incident occurs. $D_{ig,t-j}$ is an indicator variable for treatment (school violence) separately for each year j relative to the event. The coefficients δ_{sj} identify the effects of violent incidents on victims of gender s compared to their matched counterfactuals. We set $t-2$ ($j=-2$) as the reference period, meaning all estimates of δ_{sj} are relative to two years before the incident. The specification includes individual fixed effects α_i, gender-year fixed effects γ_{st}, and gender-base-grade-by-time-since-incident fixed effects ω_{sgj}. Standard errors are clustered at the individual level for victim analyses and at the school-grade level when examining effects on peers. We report separate yearly effects δ_{sj} for four years pre- and post-incident. To address potential bias in event study estimates (Goodman-Bacon, 2021; Sun and Abraham, 2021), comparisons occur exclusively between treated and never-treated individuals, effectively implementing a stacked DiD approach as in Cengiz et al. (2019).

A key assumption for causal interpretation is that victims' academic trajectories would have followed trends similar to their matched controls had the violent incident not occurred.

[10] Specifically, peers cannot serve as controls for victims reporting violence in the same year, but they remain eligible as controls for cases occurring in other academic years. Given that a significant percentage of students were peers of someone who reported violence at some point during their academic trajectory, restricting these students from the control pool entirely would unnecessarily limit our potential matches.

4.2 Effects on Long-term Educational Outcomes

For long-term outcomes such as higher education completion and college enrollment, we observe individuals only once rather than in a panel. To estimate these effects, we estimate:

$$Y_{im} = \beta T_{im} + X_{im}\phi + \eta_m + \nu_{im} \tag{2}$$

where Y_{im} represents the outcome of interest for individual i in match m, T_{im} equals one if the individual reported a violent event, X_{im} controls for individual characteristics including parental education and household income, and η_m represents match fixed effects. This specification requires a stronger identifying assumption: treated individuals would have achieved the same long-term outcomes as their matched controls who had similar educational trajectories prior to the event, conditional on socioeconomic characteristics. While this assumption is more demanding than in our main analysis, these estimates provide valuable insight into how short-term effects translate into longer-term outcomes.

4.3 Effects on SIMCE Outcomes

To measure the effects on variables from the SIMCE survey, we use an alternative estimation strategy. As these variables are only available for specific grades and years, we cannot track all individuals longitudinally. In fact, out of 14,244 victims in the SIMCE data, we observe 44% only once, 49.5% twice, and 6.5% three times. For this reason, we cannot estimate equation 1, as there is not enough variation to include an individual fixed effect.

To address this issue, we implement a modified DiD strategy, in which we compare the outcomes of students and their matched counterparts based on the timing relative to the year of the report. Specifically, we estimate the following equation:

$$Y_{imt} = \sum_{j=-4}^{3} \delta_j D_{im,t-j} + \gamma_{mtj} + \varepsilon_{imt} \tag{3}$$

where Y_{imt} denotes the outcome of student i at time t, with m indexing the student's match. The variable $D_{im,t-j}$ is an indicator for treatment (exposure to school violence) in year j relative to the reporting year. All estimations include fixed effects for the combination of match (m), calendar year (t), and years since the report (j), captured by γ_{mtj}. This specification implies that all comparisons are made between victims and their specific control matches within the same calendar year and relative to the years since the report. As the matching is performed within grade and gender, these fixed effects also absorb variation along these two dimensions. The error term is ε_{imt}, and standard errors are clustered at the school level to account for potential correlation of outcomes within schools over time, given the absence of an individual-level panel.

The parameters of interest in equation 3 are the vector δ_j for $j \in \{-4, \ldots, 3\}$, which measure the average difference in SIMCE outcomes between treated students and their respective matches in year j, relative to the year of the report. Consistent with our main design, the omitted (reference) period is two years prior to the report ($j = -2$).

5 Results

5.1 Effects on Educational Outcomes

We first report the short-term effects on victims' school attendance, finding that school violence increases the absenteeism rate during the academic year of the incident. Figure 3 plots the monthly absenteeism rates before and after the incident reports for male (Panel A) and female (Panel B) victims of adult (column 1) and student (column 2) violence. Since monthly attendance records are not available for private school students, this analysis is restricted to students attending public or voucher schools, which represent about 98% of students in our data set.[11]

While absenteeism rates are comparable between victims and their controls up to four months before the report, they begin to rise for affected students three months before the report, with a sharp increase during the month of the incident that persists throughout the academic year. The estimates show absenteeism increases by approximately 10 p.p. for victims of adult violence and 15 p.p. for victims of student violence in the incident month, with elevated rates persisting throughout the remainder of the academic year.

The short-term effects of violence on absenteeism persist over time, affecting medium-term outcomes through lower attendance years after the incident and higher dropout rates. Moreover, victims of violence experience lower academic performance and higher grade retention after the incident, and are more likely to transfer to schools with lower-quality metrics. While both student and adult violence negatively affect outcomes, the impacts are stronger and more persistent for victims of adult abuse across all measures. These patterns are generally similar for male and female victims of adult violence, with no major gender differences. However, for student violence, the effects are slightly more pronounced among female victims, particularly in the longer term. We discuss these results in detail below. In each case, we show the effects of reporting using t-2 as our baseline period. In general, we do not observe significant impacts in t-1, with the exception of absenteeism and GPA where we find a slight deterioration in the year preceding the report, followed by a more pronounced change during the year of the incident.

Figure 4 plots the event-study estimates for school attendance outcomes: absenteeism and dropout rates.[12] While absenteeism increases slightly for victims in the year immediately preceding the event (around 0.5 to 1 p.p.), Panel A shows a dramatic spike during the incident year that persists thereafter. Specifically, students who report adult violence exhibit a 5.1 p.p. increase in absenteeism rate that persists up to four years after the initial report. These effects are the same across male and female victims. Considering baseline absenteeism rates of roughly 11%, these figures indicate an increase of approximately 46% in absenteeism rates. Similarly, victims of student violence face an increase in absenteeism rates of around 7 p.p. during the incident year (representing a 64% increase from baseline), which, while decreasing over time, remains significant four years after the report. Notably, the long-term impact is more pronounced among female than male victims of student violence two to four years after reporting. Panel B of Figure 4 highlights that victims of violence are also at an increased risk of dropping out of school. Three to

[11] Attendance is recorded as 0 if the student is not enrolled in a given month or year.

[12] All figures shows the number of clusters for the male and female regressions. The number of individuals included in each regression equals the number of cases multiplied by 4 (one treated individual and 3 controls for each treated case). The number of clusters may be slightly different from this calculation because an individual can serve as a control for more than one treated case, and we cluster at the individual level.

four years after reporting adult violence, both male and female victims of adult and student violence are approximately 1 p.p. more likely to have left school.

Victims of school violence also experience lower academic performance following the incident. Panels A and B of Figure 5 report the event-study estimates on grade retention[13] and GPA, where GPA values are standardized based on the control group's mean and standard deviation. Grade retention, defined as failing to advance to the next grade level, increases by approximately 4.5 p.p. for victims of adult violence and 3 p.p. for victims of student violence in the year of the incident. With a baseline grade retention rate of 4%, these effects represent a doubling of retention risk. These effects persist in subsequent years, indicating victims face higher retention risks not only in the incident year but also one to two years afterward, with effects diminishing over time but remaining statistically significant. Notably, the medium-term retention effects of student violence are more pronounced among female victims compared to male victims. In terms of GPA, Panel B shows that victims experience a modest decline in academic performance (around 0.05σ) in the year before the incident, followed by a more dramatic drop during the incident year. Victims of adult violence experience a GPA decline of 0.14 to 0.16σ that persists over time. For victims of student violence, GPA decreases during the incident year by roughly 0.10 to 0.12σ but eventually recovers after three years. However, the impact is more severe and persistent for female victims of student abuse, who experience a notably slower recovery compared to male victims.

Victims of school violence are also more likely to transfer to schools with lower-quality metrics. Figure 6 presents event-study estimates on the likelihood of transferring schools and three indicators of school quality: monthly copay in USD (a proxy for price) and average math and reading scores. Panel A reveals that victims of adult abuse exhibit a 32 p.p higher likelihood of transferring schools, while victims of student abuse show a 36 p.p. increase compared to matched controls, with effects persisting at approximately 5 p.p. in subsequent years. Given a baseline school transfer rate of 17%, this 32 p.p. increase implies that more than 50% of victims change schools in the year immediately following the incident.[14] Both victims of student and adult violence transfer to lower quality schools, as reflected in Panels B-D, where the estimates indicate that these students attend schools with lower average math and reading scores and slightly lower monthly copays, although this last result is only significant for victims of adult abuse.[15] The decline in school quality is more pronounced for victims of adult abuse, who transfer to schools with lower performance metrics. Among victims of student abuse, the effect is stronger for women than men, consistent with previous findings.

Table 4 examines the long-term impacts of school violence on educational outcomes. Using a matching strategy that controls for pre-incident educational trajectories and socioeconomic status, we analyze 9,646 reports (54% of the original sample) filed by students who could have completed high school by 2022 based on their grade level at the time of the incident. [16]

The results show significant negative effects of school violence on educational attainment, with impacts consistently more severe for victims of adult abuse compared to peer abuse. Due to the reduced sample size, we pool men and women together to maintain statistical power for this analysis. However, when looking at

[13]Grade retention is recorded as zero if a student is not enrolled.

[14]School transfer is coded as 0 if the student drops out of the educational system.

[15]Both SIMCE scores and copay indicators are missing if the student is not enrolled in any school.

[16]The sample comprises 3,825 victims of adult abuse with three matched controls each (totaling 15,300 observations) and 5,848 victims of student abuse with three matched controls each (totaling 23,392 observations).

effects by gender, we find that the effects of adult abuse are similar for men and women, while the effects of student violence are stronger for women than men, consistent with previous results (see Appendix D). This gender pattern in long-term outcomes aligns with our findings on short and medium-term effects, where female victims of student violence also showed stronger negative impacts. In what follows, we describe these long-term outcomes in detail.

School violence has substantial impacts on educational attainment and post-secondary trajectories. Among matched controls, 75% graduate high school on time, while victims of adult and student abuse show decreased on-time graduation rates by 12 p.p. and 9 p.p., respectively. Overall high school completion rates (82% for controls, meaning graduation at any point in time) decrease by 9 p.p. for victims of adult abuse and 6 p.p. for victims of student violence. This represents a 50% increase in the percentage of individuals who do not graduate from high school in the case of adult abuse, and a 30% increase in the case of student abuse.

In Chile, a standardized test is required for most university admissions and access to financial aid. Among control students, 66% take the test, but participation rates are 5 p.p. lower for victims of adult-perpetrated violence and 2 p.p. lower for victims of peer violence. To estimate the effects on test performance, we impute a percentile rank of zero for students who did not take the exam and analyze the impact on math and language scores. Control students perform, on average, at the 30th percentile. Victims of adult and peer violence score approximately 2 and 3 percentile points lower, respectively.

Table 5 reports effects on standardized test scores rather than percentiles. Since victimization decreases the likelihood of test participation, we also present Lee bounds (Lee, 2009) for both adult- and peer-perpetrated violence. On average, adult violence reduces math and language scores by 0.083σ and 0.006σ, respectively, with only the former being statistically significant. In neither case the upper bound is negative and statistically distinguishable from zero. In contrast, victims of peer violence score 0.10σ lower than their matched controls in both math and language, and the upper bounds for both estimates remain negative and statistically significant.

Regarding tertiary education, 65% of control students ever enroll in post-secondary programs, with 37% ever enrolling in university and 32% in vocational programs.[17] Both types of victims show decreased university attendance: victims of adult abuse are 2 p.p. less likely to enroll in university, while victims of student abuse are 1 p.p. less likely. The probability of attending any post-secondary program decreases by 3 p.p. for adult abuse victims, while student abuse victims maintain similar overall enrollment rates by increasing their participation in vocational programs. Both groups of victims are also less likely to enroll in above-average programs (those whose students score above the mean). Taken together, these patterns suggest lasting impacts on educational trajectories.

5.2 Effects on SIMCE outcomes

To complement the analysis of educational outcomes and estimate mechanisms through violence exposure and psychological measures, we estimate equation 3 on outcomes measured using the SIMCE dataset. For this analysis, we pool together boys and girls, as the sample size decreases compared to the administrative

[17] These percentages do not sum to 65% because some students enroll in both university and vocational programs at different points in time.

dataset. Of the 7,139 individuals who report adult abuse, 77% are included in our SIMCE sample—that is, we observe them and at least one of their matches responding to SIMCE at least once in the same year and grade. Similarly, of the 10,862 individuals who report student abuse, 80% are included in our SIMCE sample under the same criteria. It is important to note that the sample we use to match with the SIMCE surveys is exactly the same sample as in our main outcome analysis and, as indicated in Section 4, none of the SIMCE variables are used in the matching procedure to define the control group.

We first show that the results using the survey sample and the alternative estimation strategy are consistent with the main findings in Section 5.1. Appendix Figure C.1 reports the estimates of equation 3 on the main outcomes using the survey sample. Compared to control matches, treated students experience a slight increase in absenteeism the year before the report and a statistically significant increase of 3.6 and 5.2 p.p. during the year of the incident for adult and student abuse, respectively. They also experience minor decreases in GPA that grow in magnitude during the year of the incident and persist two years after the report. Victims are also between 35.1 and 40.9 p.p. more likely to transfer schools the year following the incident and are 4.8 and 2.5 p.p. more likely to experience grade retention during the year of the report. Overall, these results validate the alternative empirical design, as the estimates are consistent with the findings of the main DiD strategy in the administrative sample.

Figure 7 complements the analysis of administrative educational outcomes by estimating equation 3 on test scores, revealing negative effects of violence on students' academic performance. Panels A and B report the results on math and reading scores, respectively. The effects during the year of the incident are similar for both adult- (column 1) and student-perpetrated (column 2) violence, with impacts between 0.057 to 0.068σ for math and between 0.106 to 0.117σ for reading, with statistically significant at the 95% level for both subjects. Although the negative effects persist afterward, only the effect one year after the incident of adult-perpetrated violence on reading remains statistically significant. Despite the smaller sample size, Panels C and D of Figure 7 show estimates for sciences and social sciences scores, also indicating negative effects. Overall, the results are consistent with the hypothesis that school violence negatively affects students' academic performance.

Next, we use SIMCE complementary questionnaires on student victimization to explore how official reports affect students' self-reports of school violence. Figure 8 presents estimates of equation 3 on students' self-reported frequency of physical, verbal, social, and virtual violence by other students. The results are consistent and intuitive. Victims of adult-perpetrated violence experience a marginally statistically significant increase in reported physical and social violence of 0.131 and 0.187σ, with positive but statistically indistinguishable from zero effects on verbal and virtual violence. In contrast, victims of student-perpetrated violence report large and statistically significant increases, ranging from 0.458 to 0.709σ, during the year of the incident. While there is a slight increase in reported physical and verbal violence in the year prior to the incident, this difference is minor compared to the sharp rise observed during the year of the report.

Notably, the differences in perceived violence between treated students and their control matches are small in the following years, suggesting that the persistent negative effects on educational outcomes are not driven by continued exposure to violence. On the contrary, the results suggest that exposure to violence during a single period can have lasting negative effects on educational outcomes.

We also estimate equation 3 on perceived discrimination and its frequency, as such experiences are likely related to school violence. Figure 9 presents these results, which are consistent with the effects on

victimization measures shown in Figure 8. We find no differences in discrimination for victims of adult-perpetrated violence in the years prior to the report, and only a marginally statistically significant effect of 0.138σ during the incident year. In contrast, victims of peer-perpetrated violence report higher levels of discrimination even one year before the complaint, followed by a larger and statistically significant increase of 0.275σ during the year of the incident. As with the results on self-reported violence, we find no statistically significant differences in discrimination between victims and their matched controls in the years following the incident.

Appendix Figures C.2.i to C.2.iii report the results for each specific category of discrimination. While for adult-perpetrated violence there are effects only for discrimination based on personality and disabilities, student-perpetrated violence is associated with statistically significant differences across various categories during the year of the incident, including personality, physical characteristics, gender, disability status, socioeconomic background, immigration status, religion, and sexual orientation.

Overall, the results in Figures 8 and 9 show that the main differences between victims and their controls in self-reported violence and discrimination emerge during the year of the incident. As most of these variables refer to peer relationships, there are clearly statistically significant effects for victims of student-perpetrated violence, with only marginal impacts for victims of adult-perpetrated violence. These results also suggest that the effects of violence on educational outcomes are persistent. Although differences in violence and discrimination return to pre-incident levels in the years following the report, victims of violence continue to experience a lasting negative effect on their educational outcomes, as shown in Figures 4 to 7 and Appendix Figure C.1.

5.2.1 Psychological Factors

We next explore the role that different psychological factors can play in explaining the main negative effects of school violence on educational outcomes. We consider three main psychological factors: (i) sense of belonging, (ii) students' academic self-concept, and (iii) teachers' expectations. Figures 10 to 12 report the estimates of the alternative DiD model for each of these outcomes, respectively.

The results in Figure 10 show that, compared to their control matches, victims of violence experience a large and statistically significant decrease in their sense of belonging to their schools during the year of the incident–around 0.35σ–with similar effects for both adult- and student-perpetrated cases. Appendix Figures C.3.i to C.3.iii present the effects on the individual components of the index.

Across the different measures, the results are consistent: during the year of the incident, victims are less likely to be happy attending their schools, like their schools less, and are less likely to speak positively about them, feel proud of them, recommend them to a friend, defend their school if someone speaks poorly about it, or feel sad if they had to change schools. Similarly, students report being less likely to feel that their teachers and principal make them feel part of the school community. In general, the figures show no evidence of pre-trend differences in belonging outcomes, and the sharp decline is concentrated precisely during the year of the incident. As with the impacts on the measures of victimization, the results show no persistent effects on belonging: while victims experience a sharp decline during the year of the complaint, the differences return to pre-incident levels in the following years.

The role of other psychological factors and their relationship with the effects of school violence appears

less clear than the findings on students' sense of belonging. Figure 11 presents estimates for four different measures of academic self-concept. Panel A shows a general index capturing the student agreement with various statements about their skills and abilities. Panel B shows estimates on students' average self-reported abilities across different subjects. Panels C and D break down these self-assessments for math and language, respectively. Appendix B provides details on the questions used to construct these indexes, while Appendix Figures C.4.i to C.4.ii show the corresponding estimates for each individual measure.

Overall, the results do not reveal a consistent pattern indicating that victims of school violence experience significant changes in their academic self-concept. For most time periods–whether during or after the year of the incident–we cannot reject the null hypothesis that the differences are statistically indistinguishable from zero. If anything, there is a slight decline in academic self-concept among victims of student-perpetrated violence, beginning one year prior to the reported incident. However, the estimated effect during the year of the complaint is only -0.085σ, a relatively small magnitude compared to the effects observed on measures of victimization and sense of belonging.

The final psychological factor we examine is students' perceptions of their teachers' expectations. Figure 12 presents estimates based on an index constructed from each student's responses to six survey items. These items assess whether the student feels that their teachers tell them they are capable of learning and being a good student, whether they motivate them to study and improve daily, and whether they encourage them to express their opinions and take those opinions into account.

The estimates in Figure 12 show that while the effects of student-perpetrated violence on perceived teacher expectations are not statistically different from zero, adult-perpetrated violence has a negative and statistically significant effect. Specifically, during the year of the incident, the estimated decline is 0.18σ (s.e. 0.049σ). This finding supports an intuitive interpretation: victims of adult violence tend to believe that their teachers have lower expectations of them and are less likely to value their opinions. In contrast, the effect for student-perpetrated violence is smaller and not statistically significant. As with the results for self-reported victimization and sense of belonging, this effect appears to be short-lived, dissipating in the year following the incident. Nevertheless, as previously discussed, the negative effects on educational outcomes remain persistent over time.

5.3 Heterogeneous Effects by Student Characteristics and Violence Type

We also examine whether the impact of school violence varies depending on the grade level, when victimization occurs, and by students' socioeconomic status. There are theoretical reasons to expect varied impacts across different grade levels. First, the nature of violence may differ between educational stages. Second, immediate consequences might depend on grade level—for example, in higher grades where academic stakes are higher, we might observe stronger immediate effects on grades and retention rates. Third, the remaining time in the educational system is significantly different as younger victims will spend more years in the educational system after experiencing violence compared to older students, potentially extending the period over which negative effects can accumulate.

Indeed, our analysis reveals that older students (middle and high school) show more pronounced immediate academic impacts on GPA, grade retention, and absenteeism (Appendix D). However, the pattern for long-term effects is less clear and varies considerably by perpetrator type and educational level. The

results suggest that the effects of adult-perpetrated violence are more severe for elementary school victims, at least regarding standardized test performance and probability of enrolling in tertiary education. Conversely, the effects of peer-perpetrated violence are more pronounced for middle and high school victims, particularly in terms of high school graduation probability.

We also analyze whether effects vary by socioeconomic status. Differences could emerge due to multiple sources: the nature of reported violence may differ across socioeconomic groups; families from varied economic backgrounds might have different resources to respond to violence; and institutional responses may vary significantly across schools serving different populations. We find that students from lower socioeconomic backgrounds experience disproportionately severe consequences in the short term, including more substantial increases in absenteeism and higher dropout rates following violent incidents. The long-term effects present a more nuanced pattern: while high school graduation rates are more negatively affected for lower SES students, the effects on standardized test performance are more severe for higher SES students.

Beyond demographic factors, we analyze whether effects vary by violence characteristics: psychological versus physical violence, frequency of incidents, and presence of cyberbullying. Since detailed violence classifications are only available for online reports filed from 2021 onward, this analysis uses reports from 2021-2023. We find no significant variation in effects based on the physical/psychological nature of violence or the frequency of incidents. However, a striking finding emerges regarding cyberbullying in student-perpetrated cases (a factor rarely present in adult-perpetrated violence). When cyberbullying is involved, the negative impact on academic performance as measured by GPA more than doubles, highlighting the particularly harmful nature of this modern form of peer victimization (see Appendix D).

5.4 School Transfers as a Potential Mechanism: Disentangling the Effects of Violence and Mobility

In Section 5.1, we established that approximately 50% of abuse victims attend a different school in the year following the incident. This high transfer rate raises two important questions that we address in this section. First, we examine to what extent school transfers constitute a mechanism driving the negative effects we observe. Second, we investigate whether the anticipation of transferring schools might influence parents' decisions to file reports in the first place.

Regarding the latter concern, our data suggest that reporting decisions are not systematically driven by pre-existing transfer plans. Reports are homogeneously distributed across months of the year, indicating that parents do not strategically time their reports around the school calendar. This pattern is consistent with parents reporting incidents as they occur rather than coordinating reports with planned school changes. Furthermore, among students who eventually transfer, only 33% withdraw in the same year they file the report [18], while 67% transfer the following year. For those who change schools within a year of filing, an average of 5 months elapses between filing the report and transferring. This temporal gap between reporting and transferring suggests that most school changes are responsive to, rather than anticipatory of, the reporting process.

Having established that reporting patterns are consistent with incident-driven rather than strategically-

[18] 3% withdraw before filling the report, 11% withdraw in the same month they file the report, and 19% withdraw after filing the report but within the same year.

timed behavior, we now turn to examining school transfers as a potential mechanism underlying our main results. This mechanism could operate in two opposing directions. Research has consistently shown that school mobility creates educational disruption and negatively affects short-term academic performance, though these impacts typically diminish over time. However, it is also possible that in this setting, school transfers are actually helping to mitigate the negative effects of violence by removing students from harmful environments.

Figure 13 presents the results from the following regression:[19]

$$Y_{isgt} = \sum_{\substack{j=-4 \\ j\neq -2}}^{4} \eta_{sj} D_{isb,t-j} + \sum_{\substack{j=-4 \\ j\neq -2}}^{4} \zeta_{sj} T_{isb,t-j} + \sum_{\substack{j=-4 \\ j\neq -2}}^{4} \lambda_{sj} T_{isb,t-j} D_{isb,t-j} + \alpha_i + \gamma_{st} + \omega_{sgj} + \epsilon_{isgt} \tag{4}$$

where $T_{ig,t-j}$ is an indicator variable for transferring schools in the year after the event for each year j relative to the event.

The blue dots show outcomes in each period for students who were victims of violence but did not change schools in t+1, compared to control students who also did not change schools in t+1 (η_{sj}). The grey dots show outcomes for control students who changed schools in t+1, compared to control students who did not change schools in t+1 (ζ_{sj}). The red dots show outcomes for treated students who changed schools in t+1, compared to control students who did not change schools (η_{sj}+ζ_{sj}+λ_{sj}).

When examining control students who change schools, we find evidence consistent with previous research indicating that school transfers are disruptive. These students show increased absenteeism, higher grade retention rates, and decreased GPA from period 0 onward. While we cannot interpret these estimates as causal given that school transfer is endogenous (the presence of pre-trends being proof of this), the pattern suggests academic disruption associated with school mobility.

Importantly, our results demonstrate that the negative effects of violence are not primarily driven by school transfers. The blue dots reveal that victims who experienced violence but remained in the same school still exhibit significant increases in absenteeism and grade retention, along with decreased GPA. While the immediate effects on these outcomes are not as pronounced as for students who changed schools, they remain substantial. Furthermore, the effects become remarkably similar between transfer and non-transfer groups 2-4 years after the incident.

The endogeneity of school changes prevents us from definitively determining whether transferring schools ultimately helped or harmed abuse victims. However, our analysis conclusively demonstrates that the negative effects we observe cannot be attributed exclusively to school transfers. Violence itself, independent of subsequent mobility, produces significant and persistent negative educational outcomes.

5.5 Effects on Victims' Classmates

We also examine the extent to which school violence affects victims' classmates. While we are unable to separately identify other victims or perpetrators within these peer groups, we estimate the average impact

[19]The total number of clusters is slightly lower because we exclude individuals and their matches who were treated in 4th year of high school (4to medio) and therefore cannot change schools, as well as individuals who were treated in 2019 for whom we do not observe their outcomes after they transfer.

on all students in the same school and grade following a reported incident. To ensure comparability and causal identification, we apply the same matching procedure and DiD strategy outlined in Section 4.

Overall, the results indicate that the reports of school violence have measurable, though substantially smaller, effects on classmates' educational outcomes. These impacts likely reflect spillover effects, such as disruptions from affected peers or exposure to aggressors, but represent a small fraction of the effect size observed for direct victims and tend to be less persistent over time.

Figure 14 presents event-study estimates for classmates' outcomes. Panel A shows effects on absenteeism, revealing statistically significant increases of 0.2 to 0.3 p.p, equivalent to roughly 4% of the impact observed for victims (see Figure 4). For adult-perpetrated violence, these attendance effects dissipate within three year, whereas for student-perpetrated violence, they persist.

Panel B reports results on grade retention, with short-term effects roughly around 10% of the magnitude seen for direct victims. These effects also tend to be more persistent over time in cases of student-perpetrated violence.

Finally, we find modest negative impacts on academic performance among victims' classmates, again roughly 15% of the effect size observed for direct victims. For adult-perpetrated violence, these effects are statistically significant only during the year of the report and return to baseline levels the following year. In contrast, the effects for classmates of students exposed to peer violence appear to be more persistent over time.

Overall, the evidence highlights the importance of identifying individual victims in order to quantify the negative consequences of school violence on educational outcomes. While reported incidents also affect peers, these effects are considerably smaller and less persistent than those experienced by direct victims. Relying on class- or school-level violence exposure may understate the aggregate educational costs of school violence and the disparities it can generate over time.

5.6 Eliminating Other Possible Explanations

Several aspects of our results strongly suggest a causal relationship between violent incidents and educational outcomes. We observe sudden and substantial shifts in academic performance coinciding with reported violence, with only minimal variations in the year prior and dramatic changes during the incident year. These effects are evident both when comparing victims to themselves before the incident and when comparing them to matched controls. Furthermore, the negative impact on educational outcomes continues for a minimum of four years following the violent event. While we observe some minor variations in performance one year before the incident, these are small compared to the dramatic deterioration that occurs during the incident year itself. This pattern helps eliminate numerous competing explanations for the patterns we observe in the data.

To rule out additional alternative explanations, we conduct several robustness checks detailed in Appendix E. First, we implement a fuzzier matching approach to address potential over-fitting concerns. One might worry that our primary matching strategy creates artificially similar pre-trends between victims and controls. To test this, we employ a fuzzy matching strategy that relies only on grade, gender and the charac-

teristics of schools attended by students in the year before the incident.[20] This alternative approach yields flat pre-trends and results very similar to our main specification, strengthening confidence in our findings.

Second, we implement a placebo test where we artificially set the event time as three years before the actual incident and estimate effects using the same empirical strategy with t-2 as the reference period. We expect this exercise to show no effects during the artificial "event year" or the year preceding it. As expected, we find no significant effects during these placebo periods, further supporting the causal interpretation of our main results.

Third, we address the concern that unobserved school-level shocks might simultaneously affect both the probability of reporting violence and student outcomes. To test for this possibility, we implement an alternative matching strategy using classmates as controls. For each treated student, we identify a match from the same grade and gender within the same school during the incident year, ensuring exposure to identical school-level conditions and policies. While this approach is not our preferred specification due to potential spillover effects on classmates that could lead to underestimated treatment effects, results presented in Appendix Figure E.3 show statistically significant impacts in both the short and medium term, though with somewhat attenuated magnitudes relative to our main estimates.

Finally, we examine treatment effects on siblings to address concerns that unobserved household-level shocks might simultaneously increase the probability of reporting violence and affect student outcomes. Our sibling analysis includes 5,675 siblings from 4,772 reporting students. Results presented in Appendix Figure E.4 show that while siblings experience some effects—which is expected given potential family disruption from the reporting process—these impacts are considerably smaller than those observed for direct victims. We find no significant effects on dropout rates, grade retention, or GPA for siblings, with only modest increases in school transfers (0.13 p.p.) and absenteeism (0.015 p.p.), both substantially smaller than effects for direct victims. The relatively modest effects on siblings, combined with their distinct pattern compared to direct victim effects, provide additional confidence that our main results reflect the causal impact of violence exposure rather than unobserved household-level factors.

6 Conclusion

This study provides compelling causal evidence that school violence has substantial and persistent negative effects on victims. Using unique administrative data from Chile linking violence reports to educational records, we document several key findings. First, experiencing violence leads to immediate deterioration in academic performance, with absenteeism spiking significantly the month a report is filed. Second, these negative effects persist over time, with victims showing elevated dropout rates, increased grade retention, and higher likelihood of transferring to lower-quality schools up to four years after the incident. Third, the impacts are particularly severe for victims of adult-perpetrated violence, who experience stronger and more persistent negative outcomes across all measures.

The long-term educational consequences are substantial. Being a victim of school violence significantly reduces the probability of on-time high school graduation, decreases overall completion rates, and alters post-secondary trajectories —with adult abuse victims showing decreased enrollment rates in higher edu-

[20]The fuzzy matching includes only four school-level variables from the year prior to the incident: monthly copayment fees, average mathematics scores, average reading scores, and school type (private versus public/voucher).

cation and student abuse victims shifting from university to vocational programs.

To complement the findings on educational outcomes, we use nationwide survey data to validate our empirical design and explore potential mechanisms. The results show that the timing of the report aligns with sharp increases in students' perceptions of violence and discrimination at school. We also find that victims of both adult- and peer-perpetrated violence report a diminished sense of belonging, while only victims of adult abuse perceive lower teacher expectations.

Notably, while the effects on perceptions of victimization and psychological well-being are temporary—peaking during the year of the incident—the impacts on educational outcomes persist over time. This pattern suggests that school violence leaves lasting scars and that preventive measures may be more effective than interventions aimed solely at mitigating ongoing violence.

Overall, our findings carry important policy implications. Schools are intended to promote human capital development, yet exposure to violence—whether perpetrated by peers or adults—can profoundly disrupt students' educational trajectories. The persistence of these effects, even after the violence has ceased, highlights the need for more comprehensive support systems and long-term interventions. By quantifying the lasting costs of school violence, our results underscore the urgency of implementing more effective prevention and response strategies to safeguard students' educational opportunities.

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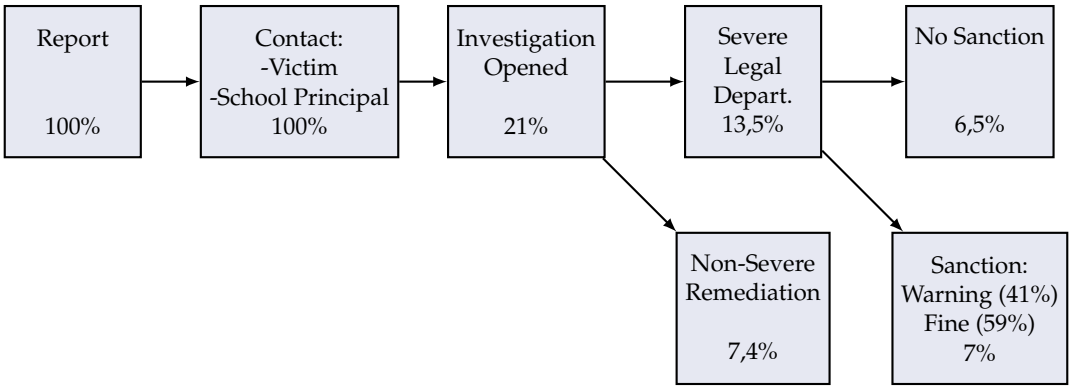
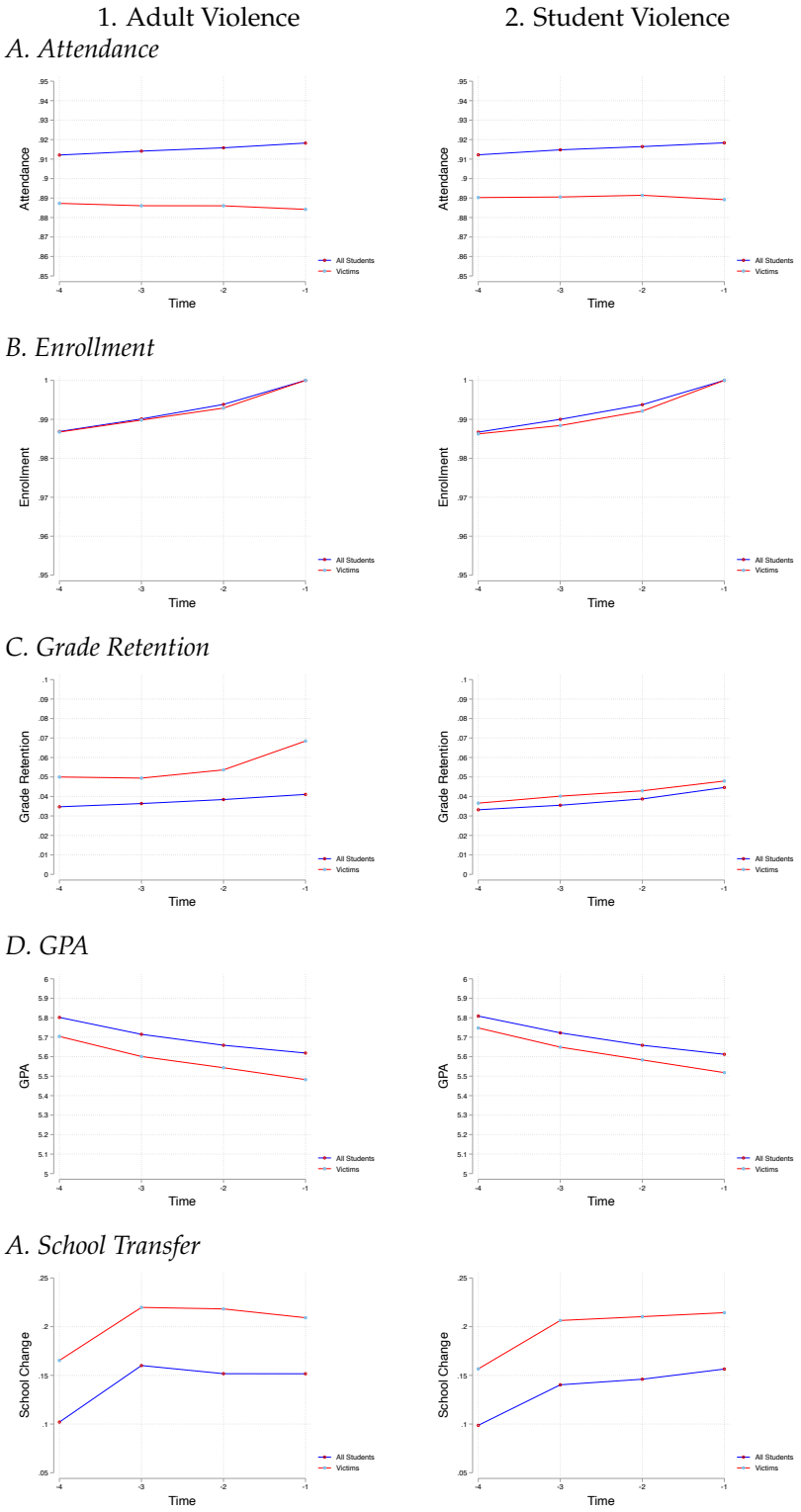
7 Figures and Tables

Figure 1: Reporting Process



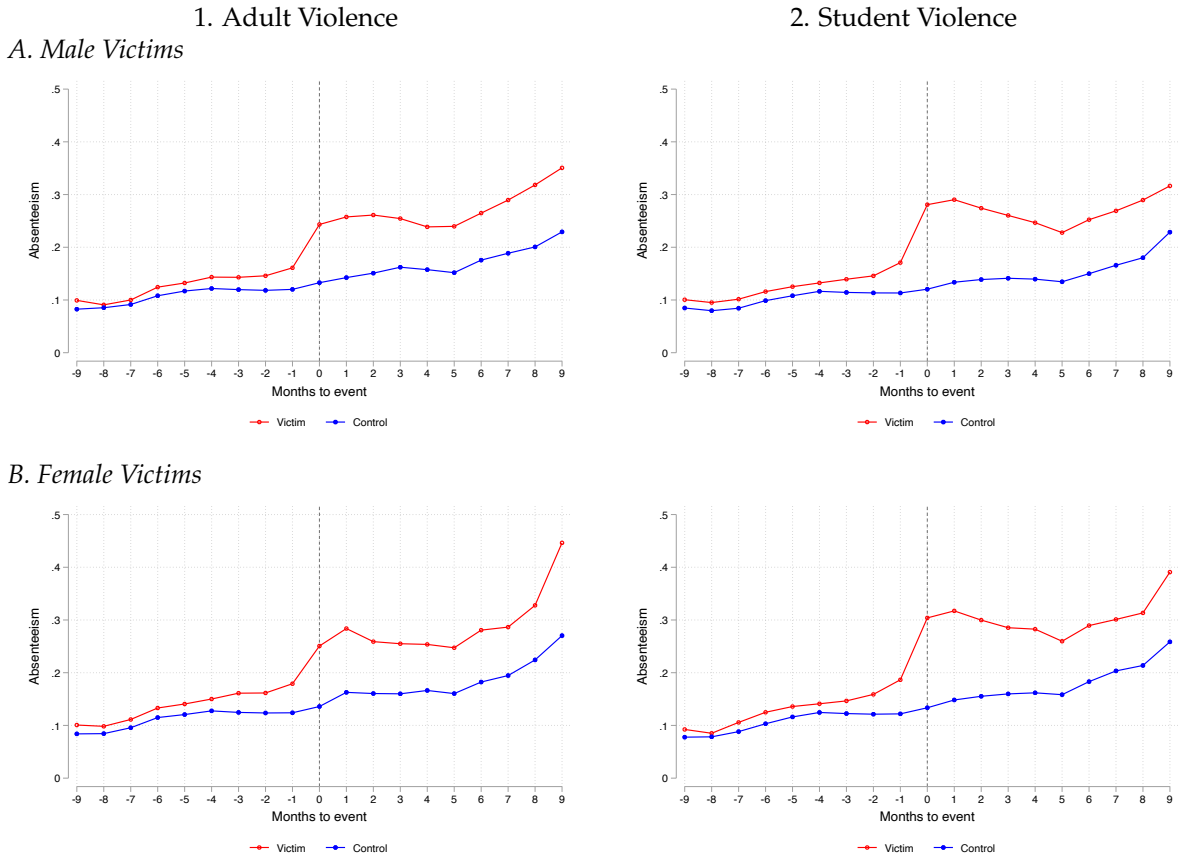
Notes: This flowchart illustrates the processing of school violence complaints by Chile's Superintendency of Education. After initial contact with all parties (100%), 79% of cases are dismissed for protocol compliance, while 21% proceed to formal investigation. Of the investigated cases, 13.5% are reviewed by the severe legal department—6.5% conclude with no sanctions, and 7% result in sanctions (warnings or fines).

Figure 2: Educational Outcomes of Victims vs. All Students Before the Report



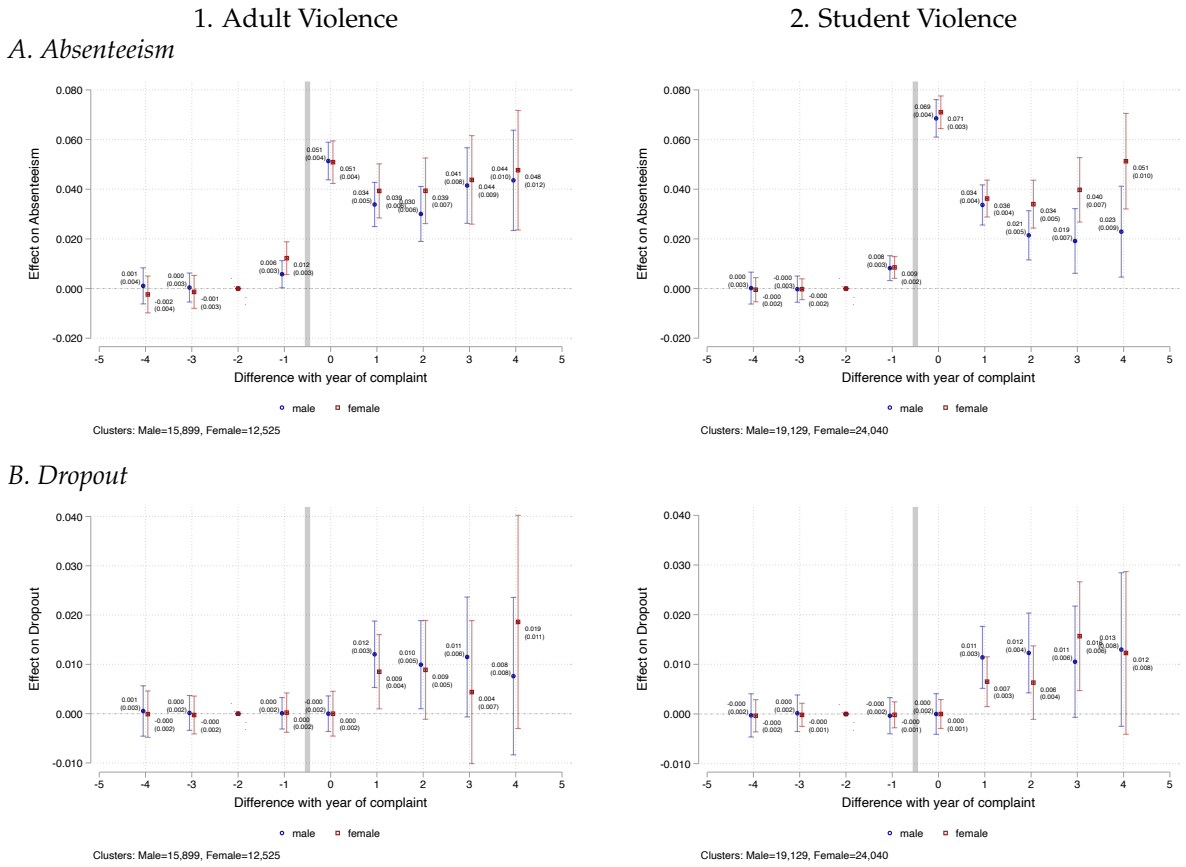
Notes: This figure compares educational outcomes of violence victims (red lines) and the general student population (blue lines) over the four years preceding reported incidents. Column 1 presents outcomes for victims of adult-perpetrated violence, and Column 2 for victims of student-perpetrated violence. Data for all students are reweighted to match the grade distribution of victims.

Figure 3: Trends on Monthly Absenteeism During the Year of the Report



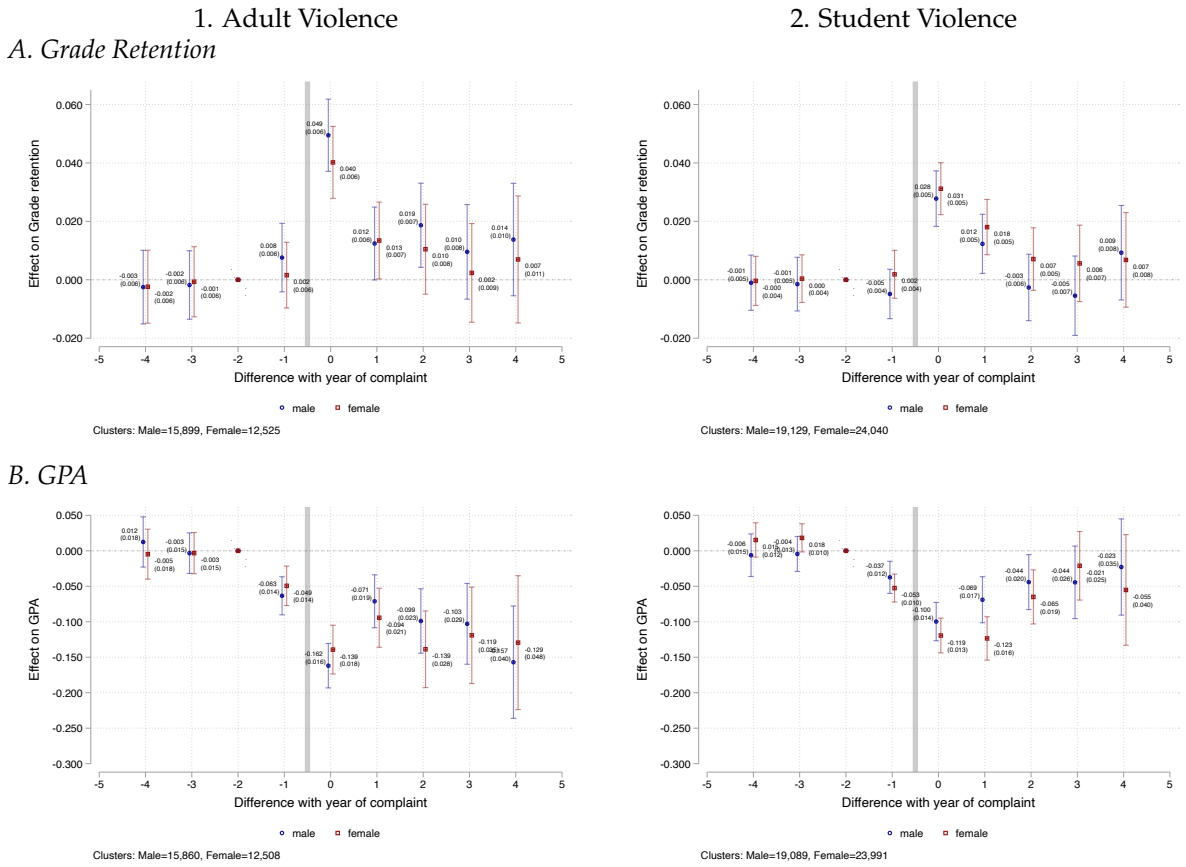
Notes: This figure shows monthly absenteeism patterns for victims (red lines) and matched controls (blue lines) during the year of the report. Column 1 shows results for victims of adult violence; and column 2 for victims of student violence. Panel A presents data for male victims and Panel B for female victims. The vertical dotted line indicates the month of the report.

Figure 4: Event-Study Effects on Victims' School Attendance



Notes: This figure shows event-study estimates of school violence on attendance outcomes for victims of adult violence (column 1) and student violence (column 2), comparing males (blue points) and females (red points). Panel A shows the effects on absenteeism and Panel B on dropout rates. The reference period is two years before the incident (t-2). Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the student level.

Figure 5: Event-Study Effects on Victims' Academic Performance

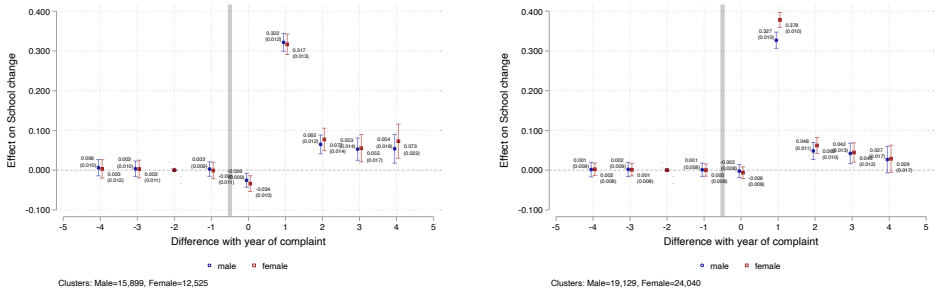


Notes: This figure shows event-study estimates of school violence on academic performance outcomes for victims of adult violence (column 1) and student violence (column 2), comparing males (blue points) and females (red points). Panel A presents effects on grade retention and Panel B shows effects on standardized GPA. The reference period is two years before the incident (t-2). Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the student level.

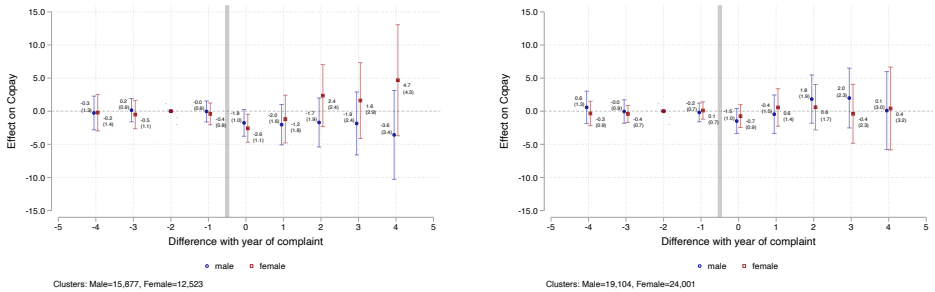
Figure 6: Event-Study Effects on Victims' Schools Characteristics

1. Adult Violence | 2. Student Violence

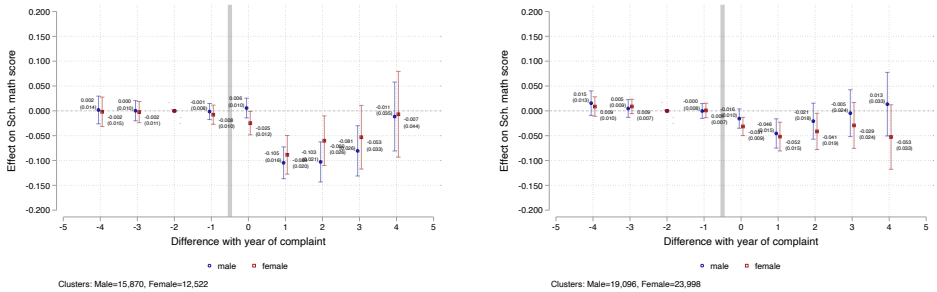
A. School Transfer



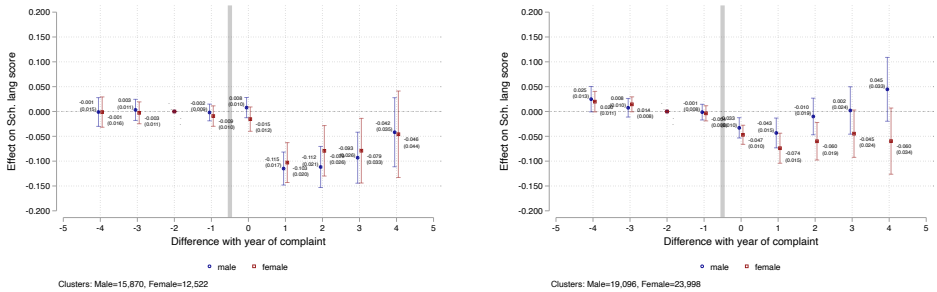
B. School Copay



C. Average Math Score

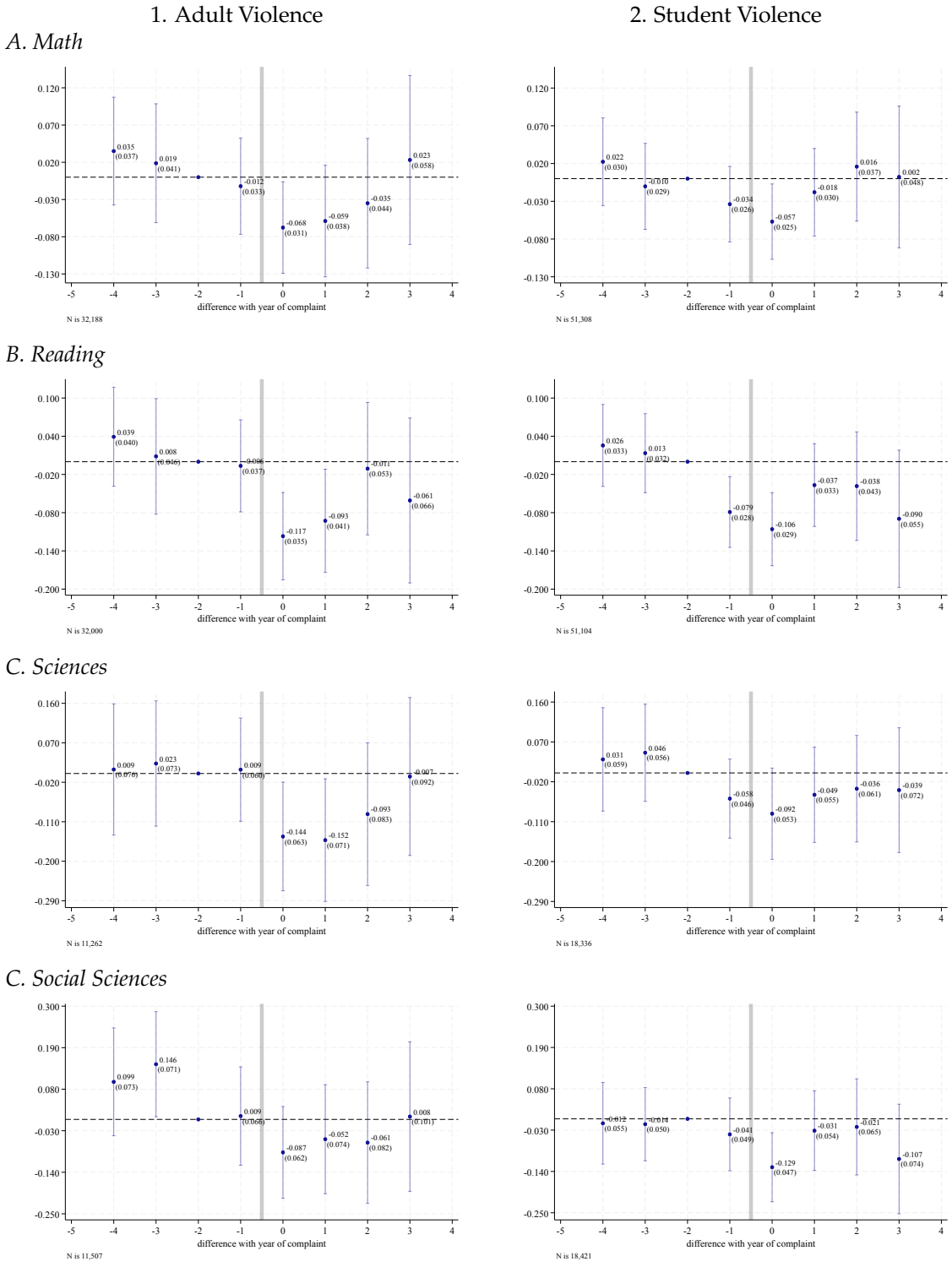


D. Average Reading Score



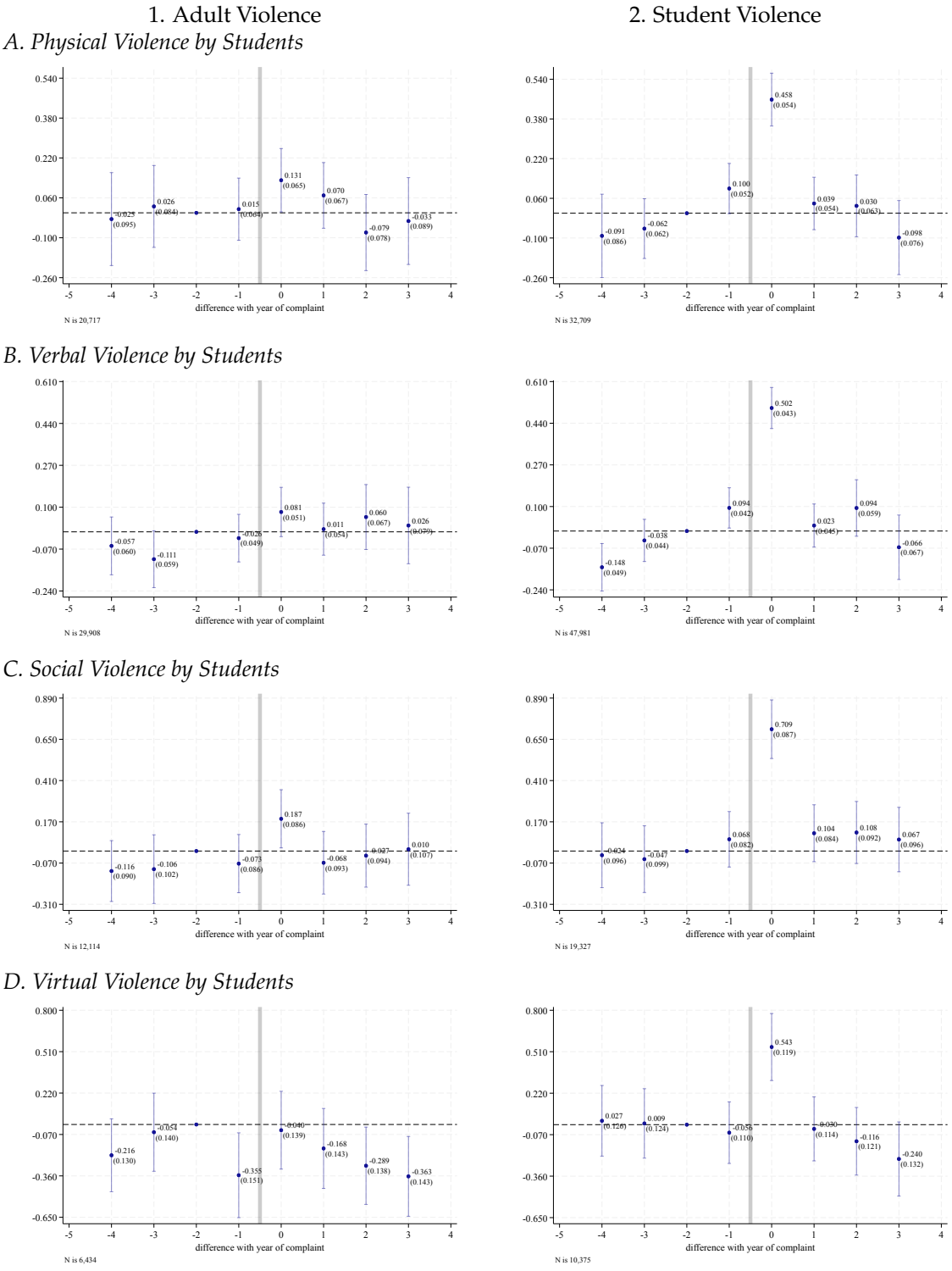
Notes: This figure shows event-study estimates of school violence on school characteristics for victims of adult violence (column 1) and student violence (column 2), comparing males (blue points) and females (red points). Panel A reports effects on school transfers, Panel B on school monthly copay (USD), and Panels C and D on the school average math and reading scores, respectively. The reference period is two years before the incident (t-2). Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the student level.

Figure 7: Impact of Violence Reports on Survey-Based Test Scores



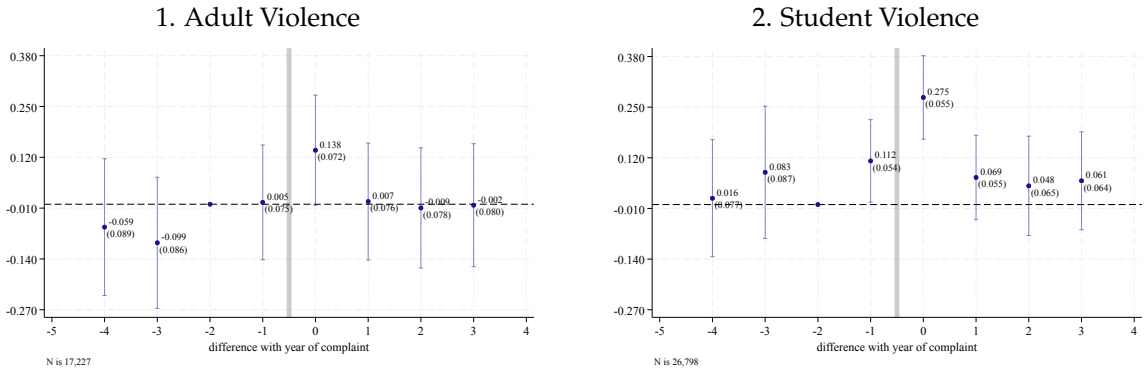
Notes: This figure shows event-study estimates of school violence on survey standardized tests for victims of adult violence (column 1) and student violence (column 2). Panels A-D presents effects on math, reading, sciences, and social sciences scores, respectively. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure 8: Impact of Violence Reports on Survey-Based Measures of Student Victimization



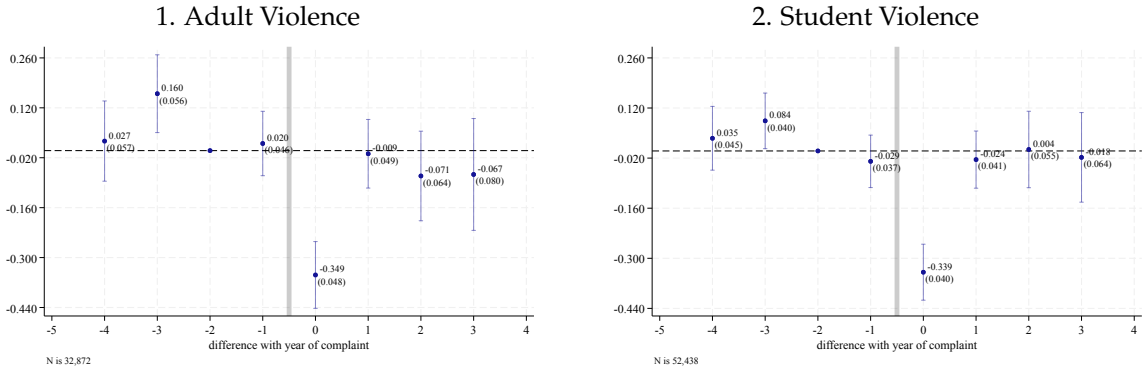
Notes: This figure shows event-study estimates of school violence on survey-based measures of violence for victims of adult violence (column 1) and student violence (column 2). Panels A-D presents effects on perceived physical, verbal, social, and virtual violence, respectively. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure 9: Impact of Violence Reports on Survey-Based Measures of Discrimination



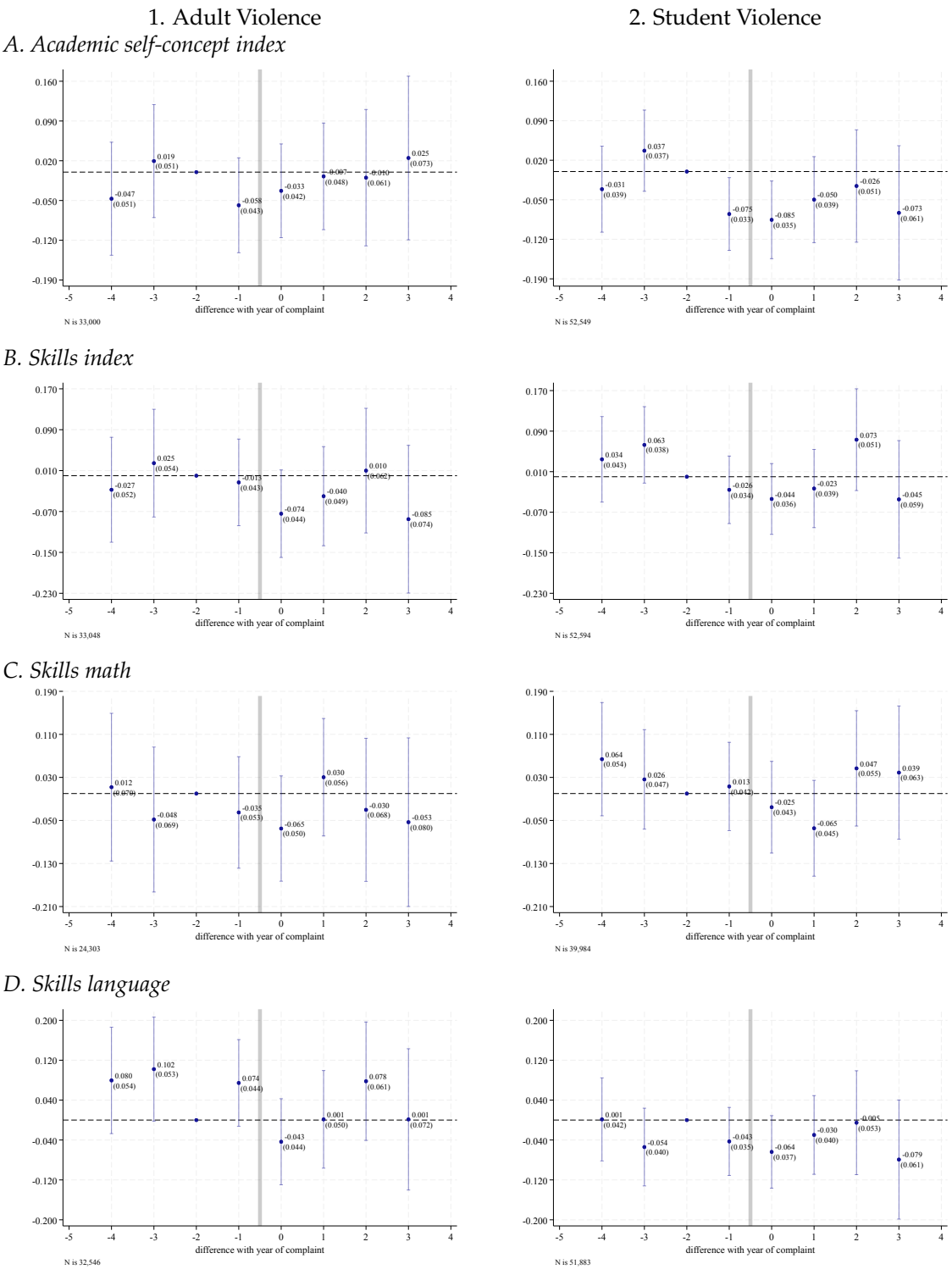
Notes: This figure shows event-study estimates of school violence on survey-based measures of discrimination for victims of adult violence (column 1) and student violence (column 2). The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure 10: Impact of Violence Reports on Survey-Based Measures of Belonging



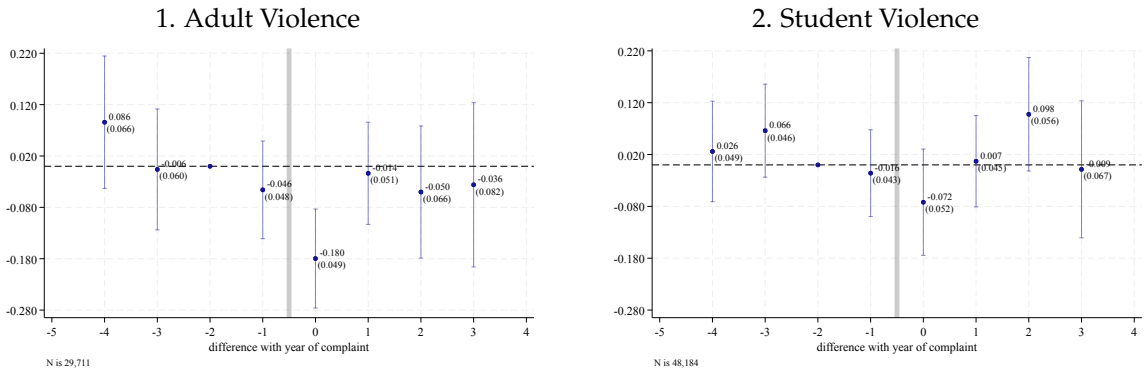
Notes: This figure shows event-study estimates of school violence on survey-based measures of school belonging for victims of adult violence (column 1) and student violence (column 2). The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level..

Figure 11: Impact of Violence Reports on Survey-Based Measures of Academic Self-Concept



Notes: This figure shows event-study estimates of school violence on survey-based measures of academic self-concept for victims of adult violence (column 1) and student violence (column 2). Panels A-D report effects on an aggregate academic self-concept index, average self-reported skills across all subjects, and self-reported skills for math and language, respectively. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure 12: Impact of Violence Reports on Survey-Based Measures of Teachers' Expectations

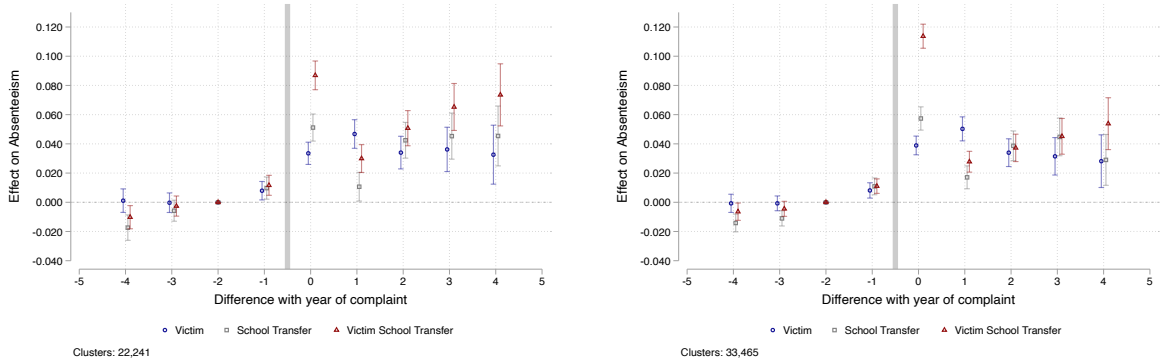


Notes: This figure shows event-study estimates of school violence on survey-based measures of perceived teachers' expectations. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

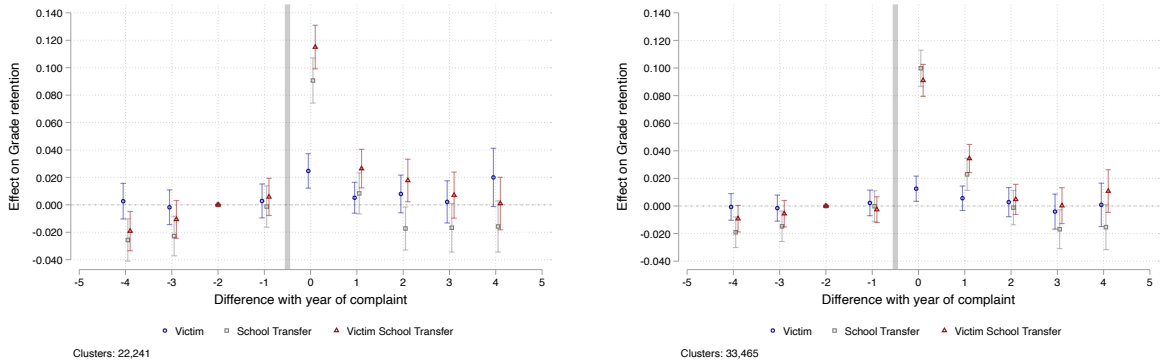
Figure 13: School Transfer as a Potential Mechanism

1. Adult Violence | 2. Student Violence

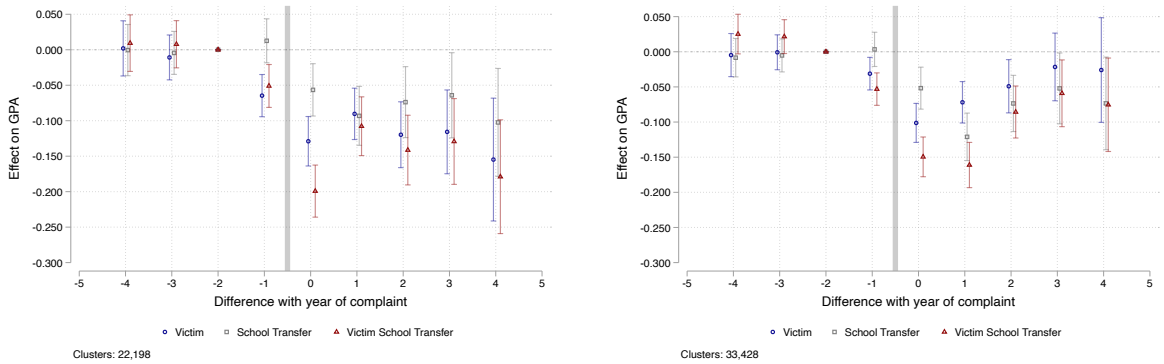
A. Absenteeism



B. Grade Retention

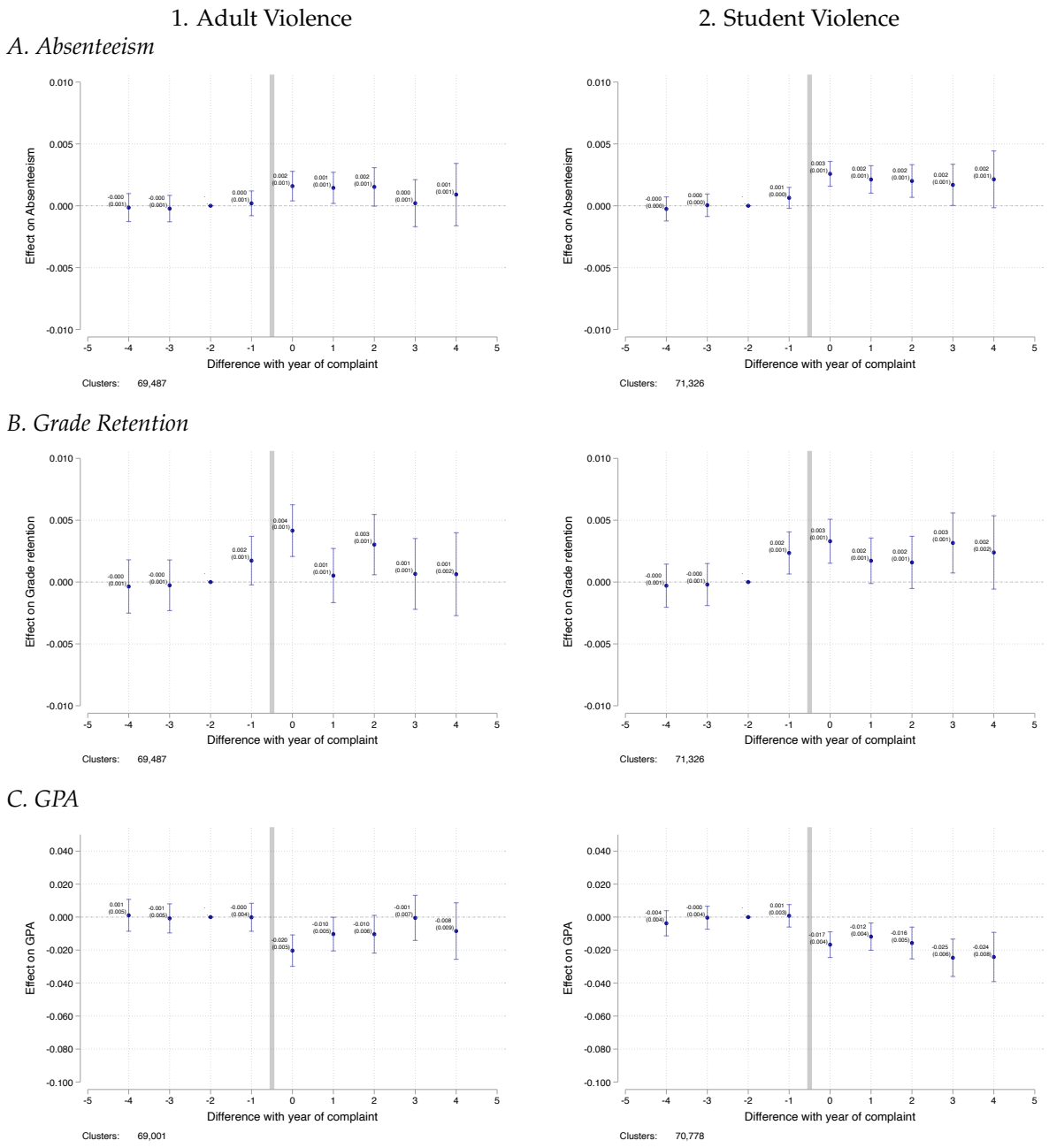


C. GPA



Notes: This figure reports event-study estimates of how school transfers mediate the effects of violence on educational outcomes. Column 1 shows results for victims of adult-perpetrated violence; Column 2 for victims of student-perpetrated violence. Blue dots represent victims who did not transfer schools, gray dots represent control students who transferred schools, and red dots represent victims who transferred schools. Panel A reports effects on absenteeism, Panel B on grade retention, and Panel C on GPA. The reference period is two years prior to the incident (t–2). All models include individual fixed effects, year fixed effects, and grade-by-years-since-complaint fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the student level.

Figure 14: Event-Study Effects on Victims' Classmates



Notes: This figure presents event-study estimates on the classmates outcomes for victims of adult violence (column 1) and student violence victims (column 2). All estimations control for individual fixed effects, year fixed effects, and the combination of grade and years since the report fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the student level.

Table 1: Characteristics of Reported School Violence

	Abuse by Adult		Abuse by Student	
	Men	Women	Men	Women
Psychological Violence	0.71	0.76	0.18	0.36
	(0.46)	(0.43)	(0.38)	(0.48)
Psychological and Physical Violence	0.29	0.24	0.82	0.64
	(0.46)	(0.43)	(0.38)	(0.48)
Frequency: Once Monthly	0.25	0.24	0.11	0.08
	(0.43)	(0.43)	(0.31)	(0.27)
Frequency: Multiple Times Monthly	0.24	0.25	0.17	0.15
	(0.43)	(0.43)	(0.37)	(0.36)
Frequency: More than Weekly	0.50	0.51	0.71	0.76
	(0.50)	(0.50)	(0.45)	(0.43)
Cyberbullying	0.09	0.08	0.24	0.41
	(0.29)	(0.27)	(0.43)	(0.49)
Observations	729	689	1,439	1,807

Notes: This table summarizes characteristics of school violence complaints filed online between 2021 and 2023, disaggregated by perpetrator and victim gender. Since 2021, complainants have been asked to indicate the type of violence (physical, psychological, or both), the frequency of incidents (isolated or recurrent), and whether the case involved cyberbullying. Standard deviations are reported in parentheses.

Table 2: Characteristics of Schools Attended by Students Who Report School Violence Incidents vs. Non-Reporting Students

	No Report	Abuse by Adult		Abuse by Student	
	All	Men	Women	Men	Women
% Female	0.49	0.45	0.53	0.44	0.53
	(0.15)	(0.12)	(0.15)	(0.13)	(0.15)
Average Attendance	0.90	0.90	0.90	0.90	0.89
	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Average GPA	5.74	5.74	5.74	5.75	5.73
	(0.29)	(0.27)	(0.26)	(0.26)	(0.27)
Average Grade Retention	0.04	0.04	0.04	0.04	0.04
	(0.05)	(0.04)	(0.04)	(0.04)	(0.04)
Average School Change	0.15	0.14	0.15	0.14	0.15
	(0.11)	(0.10)	(0.10)	(0.09)	(0.10)
Average Class Size	32.52	31.70	32.20	32.55	33.20
	(7.58)	(7.93)	(7.77)	(7.12)	(6.71)
Public School	0.40	0.37	0.36	0.37	0.36
	(0.49)	(0.48)	(0.48)	(0.48)	(0.48)
Voucher School	0.52	0.57	0.58	0.56	0.58
	(0.50)	(0.50)	(0.49)	(0.50)	(0.49)
Private School	0.09	0.06	0.05	0.07	0.06
	(0.28)	(0.24)	(0.22)	(0.25)	(0.24)
Capital	0.38	0.42	0.43	0.43	0.44
	(0.49)	(0.49)	(0.49)	(0.49)	(0.50)
Rural School	0.08	0.08	0.07	0.06	0.04
	(0.26)	(0.28)	(0.26)	(0.23)	(0.20)
Average Math Score	259.28	256.29	256.71	256.12	256.25
	(31.59)	(28.41)	(28.34)	(28.78)	(29.23)
Average Language Score	253.89	251.74	253.24	250.92	251.64
	(23.07)	(20.87)	(21.39)	(21.40)	(22.12)
Monthly School Copay (USD)	57	47	42	52	48
	(138)	(121)	(110)	(125)	(121)
Average Father's Schooling	11.80	11.87	11.90	12.07	11.99
	(2.42)	(2.21)	(2.12)	(2.19)	(2.10)
Average Mother's Schooling	11.84	11.90	11.93	12.07	12.00
	(2.28)	(2.10)	(2.04)	(2.09)	(2.01)
Average Monthly Household Income (USD)	813.66	774.76	754.49	806.93	781.50
	(737.69)	(622.04)	(556.78)	(626.25)	(592.19)
Obs	14,124,273	3,995	3,144	4,810	6,052

Notes: This table compares characteristics of schools attended by students who reported incidents of violence with those attended by students who did not report during the same period. Column 1 presents averages for schools attended by non-reporting students. Columns 2–5 report averages for schools attended by students who reported cases of adult- or student-perpetrated violence, disaggregated by victim gender. Standard deviations are reported in parentheses.

Table 3: Characteristics of Students Who Report Violence

	No Report	Abuse by Adult		Abuse by Student	
	All	Men	Women	Men	Women
A. Educational outcomes the year before the incident					
Attendance	0.91	0.88	0.88	0.88	0.88
	(0.14)	(0.14)	(0.14)	(0.14)	(0.14)
	[14,124,273]	[3,995]	[3,144]	[4,810]	[6,052]
GPA	5.69	5.52	5.67	5.61	5.61
	(0.62)	(0.65)	(0.61)	(0.60)	(0.61)
	[13,879,888]	[3,941]	[3,101]	[4,740]	[5,960]
Grade retention	0.04	0.07	0.04	0.04	0.05
	(0.19)	(0.25)	(0.20)	(0.19)	(0.21)
	[14,124,273]	[3,995]	[3,144]	[4,810]	[6,052]
School Change	0.16	0.20	0.21	0.19	0.21
	(0.37)	(0.40)	(0.41)	(0.40)	(0.41)
	[14,124,273]	[3,995]	[3,144]	[4,810]	[6,052]
B. Socioeconomic characteristics					
Mother's schooling	11.91	12.67	12.67	12.88	12.47
	(3.48)	(3.28)	(3.27)	(3.23)	(3.22)
	[12,610,662]	[3,240]	[2,706]	[3,858]	[5,359]
Father's schooling	11.86	12.51	12.52	12.77	12.34
	(3.61)	(3.49)	(3.36)	(3.35)	(3.36)
	[12,412,652]	[3,171]	[2,648]	[3,756]	[5,217]
Household income (USD)	831.78	890.41	806.11	912.18	817.61
	(888.35)	(874.70)	(779.41)	(859.87)	(797.87)
	[12,625,858]	[3,248]	[2,706]	[3,862]	[5,364]
C. Special Education Needs					
Student with special needs	0.17	0.27	0.18	0.31	0.18
	(0.38)	(0.45)	(0.38)	(0.46)	(0.38)
	[14,124,273]	[3,995]	[3,144]	[4,810]	[6,052]
Specific learning disabilities	0.11	0.19	0.12	0.20	0.12
	(0.32)	(0.39)	(0.32)	(0.40)	(0.33)
	[14,124,273]	[3,995]	[3,144]	[4,810]	[6,052]
Autism spectrum disorder	0.00	0.02	0.01	0.04	0.00
	(0.07)	(0.15)	(0.08)	(0.20)	(0.07)
	[14,124,273]	[3,995]	[3,144]	[4,810]	[6,052]
D. Violence exposure of students and their peers the year of the incident					
Exposure to physical violence	-0.00	0.37	0.08	0.79	0.62
	(1.00)	(1.36)	(1.13)	(1.44)	(1.52)
	[2,433,835]	[577]	[468]	[649]	[811]
Exposure to verbal violence	-0.00	0.27	0.25	0.68	0.90
	(1.00)	(1.13)	(1.18)	(1.26)	(1.37)
	[3,249,638]	[810]	[600]	[870]	[999]
Exposure to social violence	-0.00	0.10	0.59	0.57	1.20
	(1.00)	(1.17)	(1.48)	(1.51)	(1.71)
	[1,470,645]	[252]	[261]	[248]	[483]
Exposure to virtual violence	-0.00	0.11	0.40	0.47	1.14
	(1.00)	(1.19)	(1.42)	(1.62)	(1.97)
	[727,702]	[142]	[152]	[160]	[291]
School belonging	0.00	-0.55	-0.60	-0.46	-0.54
	(1.00)	(1.22)	(1.25)	(1.21)	(1.18)
	[3,471,693]	[848]	[614]	[904]	[1,043]
Peers' exposure to physical violence	0.00	0.03	0.04	0.07	0.02
	(0.25)	(0.27)	(0.30)	(0.28)	(0.24)
	[2,699,438]	[708]	[572]	[821]	[1,087]
Peers' exposure to verbal violence	0.00	0.05	0.02	0.06	0.03
	(0.27)	(0.28)	(0.28)	(0.28)	(0.26)
	[3,598,454]	[977]	[735]	[1,106]	[1,328]
Peers' exposure to social violence	0.00	0.04	0.02	0.03	0.03
	(0.19)	(0.23)	(0.25)	(0.21)	(0.22)
	[1,671,983]	[319]	[321]	[324]	[667]
Peers' exposure to virtual violence	0.00	0.02	0.08	0.06	0.06
	(0.23)	(0.28)	(0.33)	(0.25)	(0.24)
	[750,165]	[148]	[154]	[163]	[298]

Notes: This table summarizes student characteristics by reports of school violence. Column 1 presents averages for non-victims. Columns 2 and 3 report averages for victims of adult-perpetrated violence by gender, and Columns 4 and 5 report averages for victims of student-perpetrated violence by gender. Standard deviations are shown in parentheses and sample sizes in square brackets.

Table 4: Effect of Violence on Long Term Outcomes

	By Adult			By Student		
	Mean	Est.	N	Mean	Est.	N
High School On Time	0.75	-0.12^{***}	15300	0.76	-0.09^{***}	23392
		(0.01)			(0.01)	
High School	0.82	-0.09^{***}	15300	0.83	-0.06^{***}	23392
		(0.01)			(0.01)	
Takes Std. Test	0.66	-0.05^{***}	15300	0.66	-0.02^{***}	23392
		(0.01)			(0.01)	
Math Score	30.64	-3.40^{***}	15300	29.28	-2.77^{***}	23392
		(0.44)			(0.35)	
Lang. Score	30.69	-1.89^{***}	15300	30.11	-2.88^{***}	23392
		(0.44)			(0.35)	
Post-secondary Enrollment	0.65	-0.03^{***}	15300	0.65	0.00	23392
		(0.01)			(0.01)	
University	0.37	-0.02^{***}	15300	0.36	-0.01^{*}	23392
		(0.01)			(0.01)	
Vocational	0.32	-0.01	15300	0.32	0.02^{***}	23392
		(0.01)			(0.01)	
Above Mean-Score Program	0.19	-0.01^{*}	15300	0.18	-0.02^{***}	23392
		(0.01)			(0.00)	

Notes: This table reports long-term effects of school violence on educational outcomes using a matching approach that controls for pre-incident educational trajectories and socioeconomic characteristics. The sample includes 9,646 students (54% of the original sample) who could have completed high school by 2022 based on their grade level at the time of the incident. Mean column shows control group averages. Robust standard errors are reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

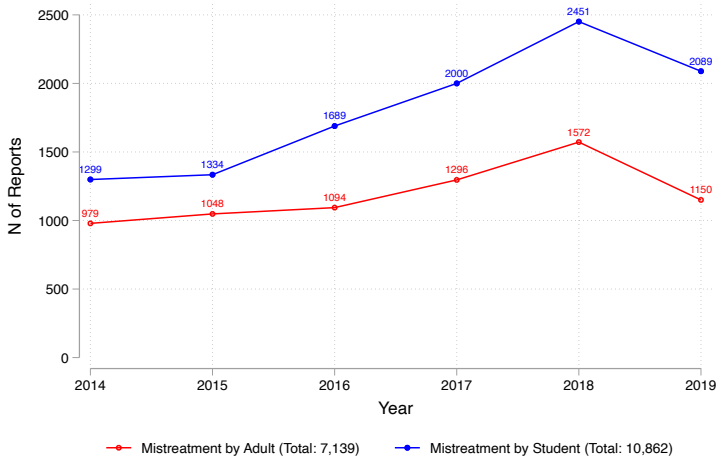
Table 5: Lee Bounds for Long-term Test Score Effects

	Math score			Language score		
	Effect	Lower-bound	Upper-bound	Effect	Lower-bound	Upper-bound
	(1)	(2)	(3)	(4)	(5)	(6)
A. Adult violence						
treated	-0.083***	-0.168***	-0.003	-0.006	-0.076***	0.083***
	(0.019)	(0.019)	(0.019)	(0.020)	(0.019)	(0.019)
dep var. control	-0.18	-0.03	-0.27	-0.18	-0.04	-0.28
N	9,481	8,982	8,977	9,681	9,138	9,171
B. Student violence						
treated	-0.100***	-0.134***	-0.068***	-0.102***	-0.131***	-0.071***
	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
dep var. control	-0.18	-0.16	-0.26	-0.18	-0.14	-0.23
N	14,707	14,430	14,458	15,041	14,769	14,794

Notes: This table reports Lee bounds for long-term test score effects to address potential selection bias from differential attrition in standardized test-taking. Column (1) shows the main effect estimates; columns (2) and (3) present the lower and upper bounds, respectively. Math and language scores are measured as percentiles in the national distribution. "dep var. control" shows the mean of the dependent variable for the control group. Panel A presents results for victims of adult violence, and Panel B for victims of student violence. Robust standard errors are reported in parentheses.$***p < 0.01, **p < 0.05, *p < 0.1$.

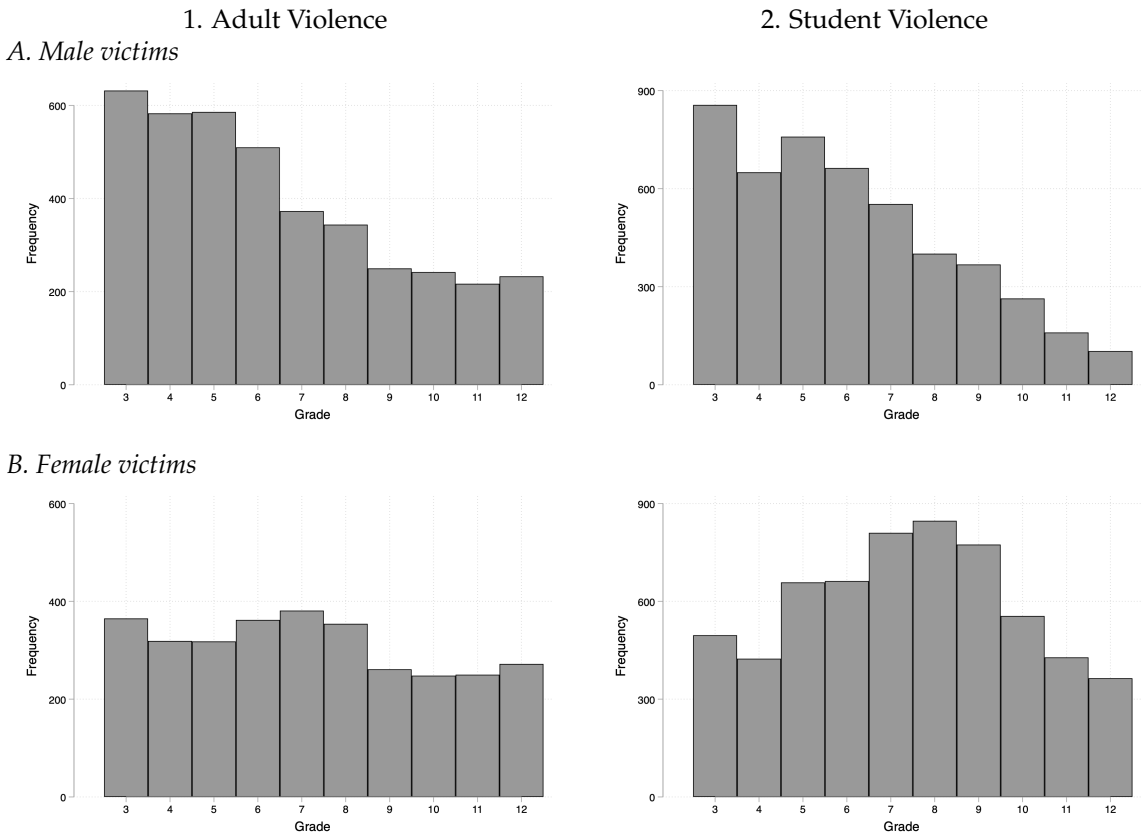
A Descriptive Statistics of Violence Reports

Figure A.1: School Violence Reports over Time



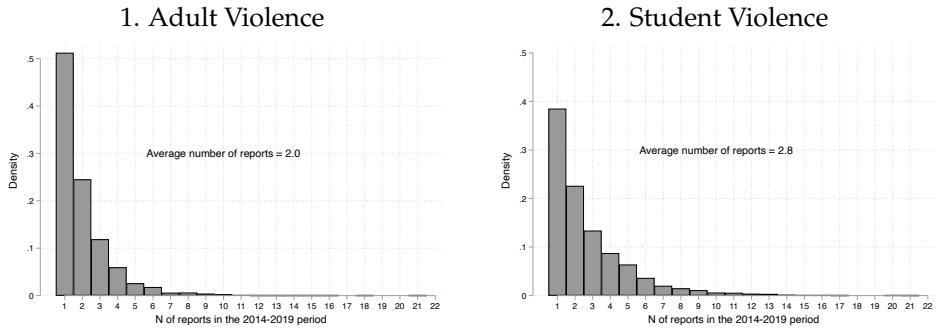
Notes: This figure plots the number of school violence reports filed with Chile's Superintendency of Education from 2014 to 2019. The blue line corresponds to adult-perpetrated violence against students, and the red line corresponds to student-perpetrated violence.

Figure A.2: Distribution of Reports by Grade



Notes: This figure shows the distribution of violence reports by grade level and victim gender for cases included in the analysis. Column 1 presents reports of adult-perpetrated violence, and Column 2 reports of student-perpetrated violence. Panels A and B display results for male and female victims, respectively. The analysis includes reports from 3rd grade onward; reports from 1st and 2nd grade are excluded.

Figure A.3: Distribution of Violence Reports for Reporting Schools



Notes: This figure shows the distribution of violence reports across schools from 2014 to 2019, restricted to schools with at least one reported incident. Column 1 presents the distribution of adult-perpetrated violence reports, and Column 2 the distribution of student-perpetrated violence reports. Among reporting schools, the average number of adult-perpetrated violence reports was 2.0, while the average for student-perpetrated violence reports was 2.7.

B SIMCE Survey

This section describes the variables we use from the SIMCE data as part of our analysis. Tables B.1 report the availability of each measure by grade and year. The variables we use can be divided into three categories: students' perception of the frequency of peer-perpetrated violence, discrimination, and psychological factors.

B.1 Perception of Violence

The first set of questions measures students' perception of the frequency of different types of violence. SIMCE categorizes the following four types of violence:

1. Physical violence: referring to the frequency of being hit or having belongings damaged.
2. Verbal violence: related to the frequency of insults, mockery, or verbal threats.
3. Social violence: referring to the frequency of isolation, gossip, or public humiliation.
4. Virtual violence: related to the frequency of threats, humiliation, or mockery through digital platforms such as Facebook, WhatsApp, or Instagram.

Panels A–D of Table B.1 show that verbal violence is available for the majority of grade-year combinations, while virtual violence is the least available measure.

The structure of the questions is consistent across years for grades 4b, 8b, and 2m. For grades 8b and 2m, the measures come from the following question: "During this academic year, how often have you been bullied or mistreated in any of the following ways by students at your school?"

1. Physically: by hitting you or damaging your belongings.
2. Verbally: by insulting you, making fun of you, or threatening you.
3. Socially: by isolating you, speaking badly about you, or humiliating you in front of others.
4. Virtually: by threatening you, humiliating you, or making fun of you through messages on the Internet (e.g., Facebook, WhatsApp, Messenger, emails).

With the following options: 1. never; 2. a couple of times a year; 3. a couple of times a month; 4. several times a week; 5. every day.

For grades 4b and 6b in 2016 and 2018, the measures of physical and verbal violence come from the following question: "During the past month, how many times has the following happened to you at your school?"

1. Physically: a classmate has hit you.
2. Verbally: a classmate has made fun of you.

Each question has four options: 1. never or almost never; 2. a few times; 3. many times; 4. always or almost always.

For grade 6b in 2014 and 2015, only the verbal measure is available, based on the question: "During this year, I have wanted to stay home because other students have bothered me at school," with response options: 1. very false; 2. false; 3. true; 4. very true.

Finally, for grade 6b, a similar structure to grades 8b and 2m is used with the question: "During this year, how often have other students at your school bullied or mistreated you in the following way?"

1. Physically: by hitting you or damaging your belongings.
2. Verbally: by insulting you, making fun of you, or threatening you.
3. Socially: by isolating you, speaking badly about you, or humiliating you in front of others.

With the following options: 1. never; 2. a few times; 3. many times; 4. always or almost always.

We standardize all measures by grade and year due to minor variations in the question wording and response options.

B.2 Discrimination

The second set of questions measures students' perceptions of discriminatory behavior against them. The questions vary only by grade, remain consistent across all years, and follow the same structure for different reasons for discrimination.

The survey includes the following categories for discrimination: (1) personality, (2) physical characteristics, (3) gender, (4) learning skills, (5) disability, (6) socioeconomic background, (7) immigrant, (8) native population, (9) political idelology, (10) religion, (11) sexual orientation, and (12) pregnancy or having children.

For grades 2m and 8b in 2012 to 2016, the discrimination question was the following: "During this academic year, how often have you felt looked down upon, discriminated against, or excluded at your school for any of the following reasons?" with response options: 1. never, 2. a few times, 3. most of the time, and 4. always. For the other years and grades, the response options were binary (yes or no) for the following question: "During this academic year, have you felt discriminated against at your school for any of the following reasons?"

Table B.2 reports, by grade and year, the availability of each discrimination category. Due to variation across years and grades, the index reported in Figure 10 corresponds to an average across all categories, standardized by grade and survey year.

B.3 Psychological factors

The last set of questions we use as part of our analysis relates to psychological factors that could mediate the effects of school violence on educational outcomes. We consider three different types of outcomes: belonging (Baumeister and Leary, 1995; Walton and Cohen, 2011), academic self-concept (Marsh, 1990;

Brunner et al., 2010; Arens et al., 2021), and teachers' expectations (Rosenthal and Jacobson, 1969; Jussim and Harber, 2005).

B.3.1 Belonging

The questions on belonging generally follow the same structure across all grades and years. They ask students to indicate their level of agreement with a set of statements. For some grade-year combinations, the response options are: 1. strongly disagree, 2. disagree, 3. agree, and 4. strongly agree; for others, the options are: 1. very false, 2. false, 3. true, and 4. very true. The statements we use to construct the index are the following:

1. Happy: I am happy to come to my school.
2. Like: I really like my school.
3. Speak well: I always speak positively about my school to others.
4. Pride: I feel proud of my school.
5. Recommend: I would recommend my school to a friend.
6. Defend: If someone spoke badly about my school, I would defend it.
7. Change: I would feel sad if I had to change schools.
8. Teachers: My teachers make me feel like an important part of my school.
9. Principal: The principal makes me feel like an important part of my school.

For some grades and years, the question on happiness is worded as follows: "Thinking about how you currently feel, how happy do you come to your school?" with response options: 1. not at all, 2. somewhat, and 3. quite a lot.

In Figure 10, we report the effects on an index that averages all of these questions, and we standardize all variables within year and grade.

B.3.2 Academic self-concept

We use two measures to assess students' academic self-concept.

The first measure aggregates responses to several statements regarding students' perceptions of their abilities in school. Specifically, we use the following list of statements to construct the index:

1. I can do difficult homework and assignments well.
2. I know I can finish assignments even if they are difficult.
3. Most of the things I do at school work well for me.
4. I pay attention in all my classes, even if I don't like some of them.

5. I find it difficult to understand what they teach me in class (reverse coded).
6. I know I can get good grades.
7. I am happy with my grades.
8. I can finish the year with a good GPA.
9. I know I am a good student.
10. I am smart.
11. I always remember everything I learn.
12. When I reach adulthood, I will achieve everything I want.

Although the exact response options vary slightly by grade and survey year, they consistently follow a similar structure. Students indicate their level of agreement with each statement using one of two formats:

- 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree; or
- 1 = Very false, 2 = False, 3 = True, 4 = Very true.

The second measure of academic self-concept asks students to evaluate their perceived skills across different subjects. In general, they reply to the following question: "how skilled do you feel to learn each of the following subjects?", with response options: 1. no skilled, 2. not very skilled, 3. quite skilled, 4. very skilled. We consider as part of the general index the following subjects: math, language, arts, biology, sports, social sciences, English, music, sciences, physics, and chemistry.

B.3.3 Teachers' expectations

The teachers' expectation index is based on six questions in which students indicate their levels of agreement or disagreement with two statements:

1. My teachers tell me that I can learn.
2. My teachers tell me that I am a good student.
3. My teachers motivate me to study.
4. My teachers motivate me to improve every day.
5. My teachers encourage me to express my opinions.
6. My teachers take into account my opinions.

Table B.1: Availability of Violence Measures by Grade and Year

Panel A. Physical Violence

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	x	x	.
6B	x	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	.	.	x	x	x	x	.

Panel B. Verbal Violence

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	x	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	.	.	.	.	.	.	.

Panel C. Social Violence

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	x	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	.	.	x	.	x	x	.

Panel D. Virtual Violence

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	x	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	.	.	.	.	.	.	.

Notes: x indicates availability of the measure for that grade-year combination. 4B, 6B, and 8B refer to 4th, 6th, and 8th grade respectively. 2M refers to second year of high school.

Table B.2: Availability of Discrimination Measures by Grade and Year

Panel A. Personality

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel B. Physical characteristics

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	.	x	x	x	x	x	.

Panel C. Gender

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel D. Learning skills

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	x	.	.	.
8B	.	x	x	.	x	.	x
2M	.	x	x	x	x	x	.

Panel E. Disability

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	.	x	x	x	x	x	.

Panel F. Socioeconomic background

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel G. Immigrant

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel H. Native (indigenous)

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	x	x	x	.	x	.	x
2M	.	.	.	.	.	.	.

Panel I. Political ideology

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel J. Religion

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel K. Sexual orientation

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel L. Having children

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	.	x	x	x	x	x	.

Notes: x indicates availability of the measure for that grade-year combination. 4B, 6B, and 8B refer to 4th, 6th, and 8th grade respectively. 2M refers to second year of high school.

Table B.3: Availability of Belonging Measures by Grade and Year

Panel A. Belonging index

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel B. Student happy to go to the school

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel C. Student likes the school

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	.	.	.	.
6B	x	x	x	.	.	.	.
8B	.	.	.	.	.	.	x
2M	.	.	.	.	.	.	.

Panel D. Student speaks well about the school

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	.	.	.	.
6B	x	x	x	.	.	.	.
8B	.	.	.	.	.	.	.
2M	x	x	x	x	.	.	.

Panel E. Student feels proud of the school

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	x	x	x	.	x	.	.
2M	x	x	x	x	x	x	.

Panel F. Student would recommend school

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel G. Student would defend the school

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	.	.	.	.
6B	x	x	x	.	.	.	.
8B	x	x	x	.	.	.	.
2M	x	x	x	.	.	.	.

Panel H. Student would feel sad if they had to change schools

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	.	.	.	.
6B	x	x	x	.	.	.	.
8B	.	.	.	.	.	.	.
2M	.	.	.	.	.	.	.

Panel I. Teachers make the student feel important

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	.	x	.
6B	x	x	x	x	.	x	.
8B	.	.	.	.	x	.	.
2M	.	.	.	x	x	x	.

Panel J. The principal makes the student feel important

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	.	x	.
6B	x	x	x	x	.	x	.
8B	.	.	.	.	x	.	.
2M	.	.	.	.	x	x	.

Notes: x indicates availability of the measure for that grade-year combination. 4B, 6B, and 8B refer to 4th, 6th, and 8th grade respectively. 2M refers to second year of high school.

Table B.4: Availability of Academic Self-concept Measures by Grade and Year

Panel A. I can do difficult homework and assignments well

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	x	x	.
6B	.	.	.	x	.	x	.
8B	.	.	.	.	x	.	x
2M	.	.	x	x	x	x	.

Panel B. I can finish assignments even if they are difficult

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	.	.	.
6B	x	x	x	x	.	.	.
8B	x	.	x	.	.	.	.
2M	x	.	.	.	.	.	.

Panel C. Most of the things I do at school work well for me.

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	.	.	.	.
6B	x	x	x	.	.	.	.
8B	x	x	x	.	x	.	.
2M	x	x	x	x	x	x	.

Panel D. I pay attention in all my classes

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	.	.	.	.	.
6B	x	x	.	.	.	.	.
8B	x	x	.	.	.	.	.
2M	x	x	.	x	.	.	.

Panel E. I find it difficult to understand what they teach me

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	x	x	x	.	x	.	.
2M	x	x	x	x	x	x	.

Panel F. I know I can get good grades

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	x	x	x	x	.
6B	.	.	x	x	.	x	.
8B	.	.	x	.	x	.	x
2M	.	.	x	x	x	x	.

Panel G. I am happy with the grades I am able to achieve

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	.	.	.	.	.
6B	x	x	.	.	.	.	.
8B	x	x	.	.	.	.	.
2M	x	x	.	.	.	.	.

Panel H. I can finish the year with a good GPA

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	x	.
6B	.	.	.	x	.	x	.
8B	.	.	.	.	.	.	.
2M	.	.	.	.	.	.	.

Panel I. I know I am a good student

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	x	x	.
6B	.	.	.	x	.	x	.
8B	.	.	.	.	.	.	.
2M	.	.	.	.	.	.	.

Panel J. I am smart

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	.	.	.	.	.
6B	x	x	.	.	.	.	.
8B	x	x	.	.	.	.	.
2M	x	x	.	.	.	.	.

Panel K. I always remember everything I learn

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	.	.	.	.
6B	x	x	x	.	.	.	.
8B	x	x	.	.	.	.	.
2M	x	x	.	.	.	.	.

Panel L. When I reach adulthood, I will achieve everything I want

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	.	.	.	x	.
6B	x	x	.	.	.	x	.
8B	x	x	.	.	.	.	.
2M	x	x	.	.	.	.	.

Notes: x indicates availability of the measure for that grade-year combination. 4B, 6B, and 8B refer to 4th, 6th, and 8th grade respectively. 2M refers to second year of high school.

Table B.5: Availability of Skills Measures by Grade and Year

Panel A. Math

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	.	x	x	x	.
6B	x	x	x	x	.	x	.
8B	.	.	.	.	x	.	x
2M	.	.	.	x	x	x	.

Panel B. Language

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel C. Arts

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	x	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel D. Biology

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	.	x	.
6B	.	.	.	.	.	x	.
8B	.	.	.	.	x	.	x
2M	.	.	.	x	x	x	.

Panel E. Sports

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	x	x	x	.	x	.	x
2M	.	x	x	x	x	x	.

Panel F. Social sciences

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	x	x	.
6B	.	.	.	x	.	x	.
8B	.	.	x	.	x	.	x
2M	.	.	x	x	x	x	.

Panel G. English

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	x	x	x	x	.
6B	.	.	x	x	.	x	.
8B	.	.	.	.	x	.	x
2M	.	.	.	x	x	x	.

Panel H. Music

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	x	x	.
6B	.	.	.	x	.	x	.
8B	.	x	x	.	x	.	x
2M	x	x	x	x	x	x	.

Panel I. Sciences

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	x	.	.
6B	.	.	x	.	.	.	.
8B	.	x	x	.	.	.	.
2M	.	.	x	.	.	.	.

Panel J. Physics

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	.	.	.	.	x	.	x
2M	.	x	.	x	x	x	.

Panel K. Chemistry

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	.	.	.	.
8B	.	.	.	.	x	.	x
2M	.	x	.	x	x	x	.

Notes: x indicates availability of the measure for that grade-year combination. 4B, 6B, and 8B refer to 4th, 6th, and 8th grade respectively. 2M refers to second year of high school.

Table B.6: Availability of Teachers' Expectations Measures by Grade and Year

Panel A. My teachers tell me that I can learn

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	x	x	x	x	.
6B	.	.	x	x	.	x	.
8B	.	.	x	.	x	.	x
2M	.	.	x	x	x	x	.

Panel B. My teachers tell me that I am a good student

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	.	.	.	.
6B	.	.	.	x	.	x	.
8B	.	.	.	.	x	.	x
2M	.	.	.	.	x	x	.

Panel C. My teachers motivate me to study

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	x	.	.	.	.
6B	.	.	x	.	.	.	.
8B	.	.	x	.	x	.	x
2M	.	.	x	x	x	x	.

Panel D. My teachers motivate me to improve every day

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	x	.	.	.	.
6B	.	.	x	.	.	.	.
8B	.	.	.	.	x	.	x
2M	.	.	.	.	x	x	.

Panel E. My teachers encourage me to express my opinions

Grade	2013	2014	2015	2016	2017	2018	2019
4B	.	.	.	x	x	x	.
6B	.	.	.	x	.	x	.
8B	.	.	.	.	x	.	.
2M	.	.	.	.	.	.	.

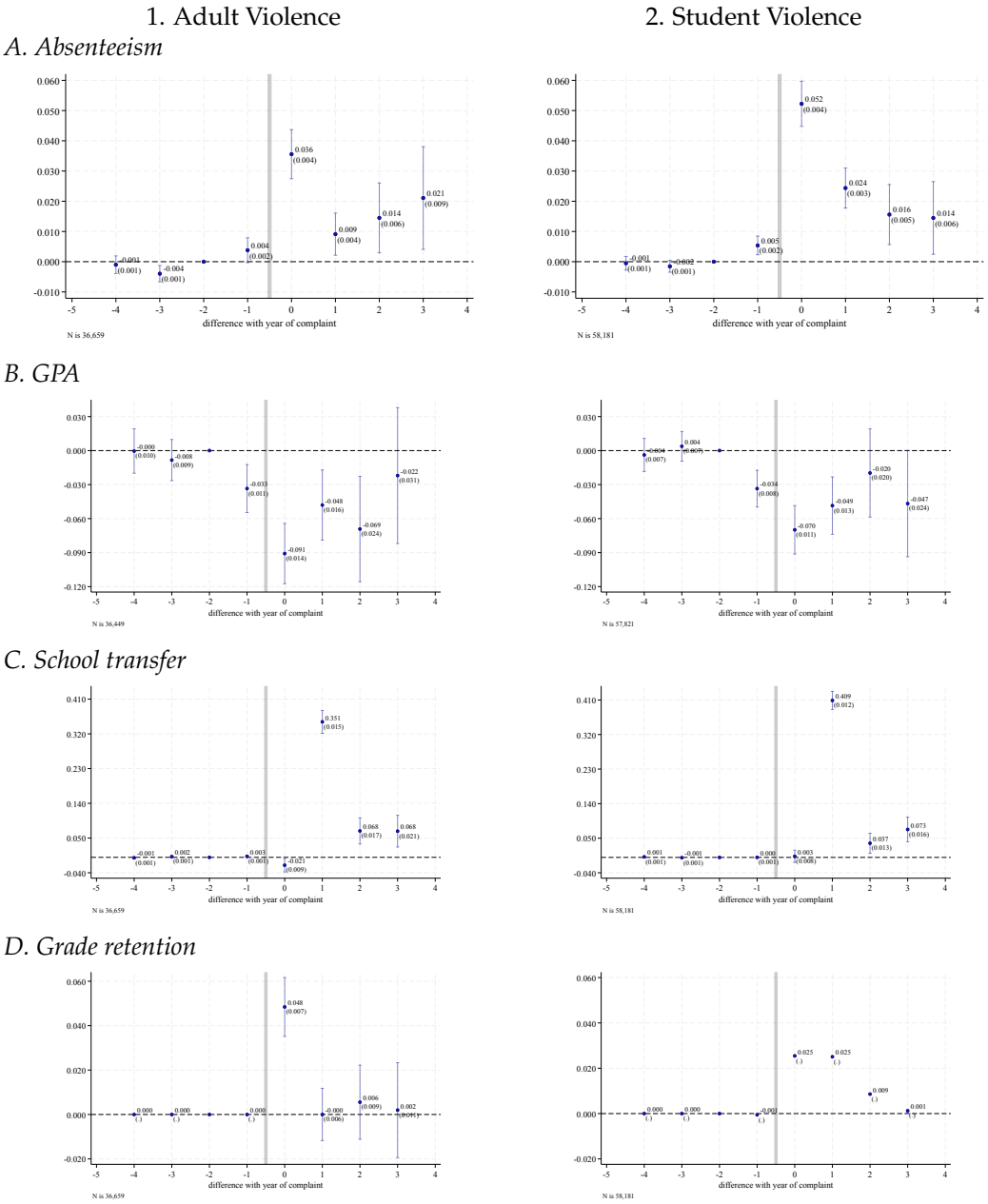
Panel F. My teachers take into account my opinions

Grade	2013	2014	2015	2016	2017	2018	2019
4B	x	x	x	x	x	x	.
6B	x	x	x	x	.	x	.
8B	.	.	.	.	.	.	.
2M	.	.	.	.	.	.	.

Notes: x indicates availability of the measure for that grade-year combination. 4B, 6B, and 8B refer to 4th, 6th, and 8th grade respectively. 2M refers to second year of high school.

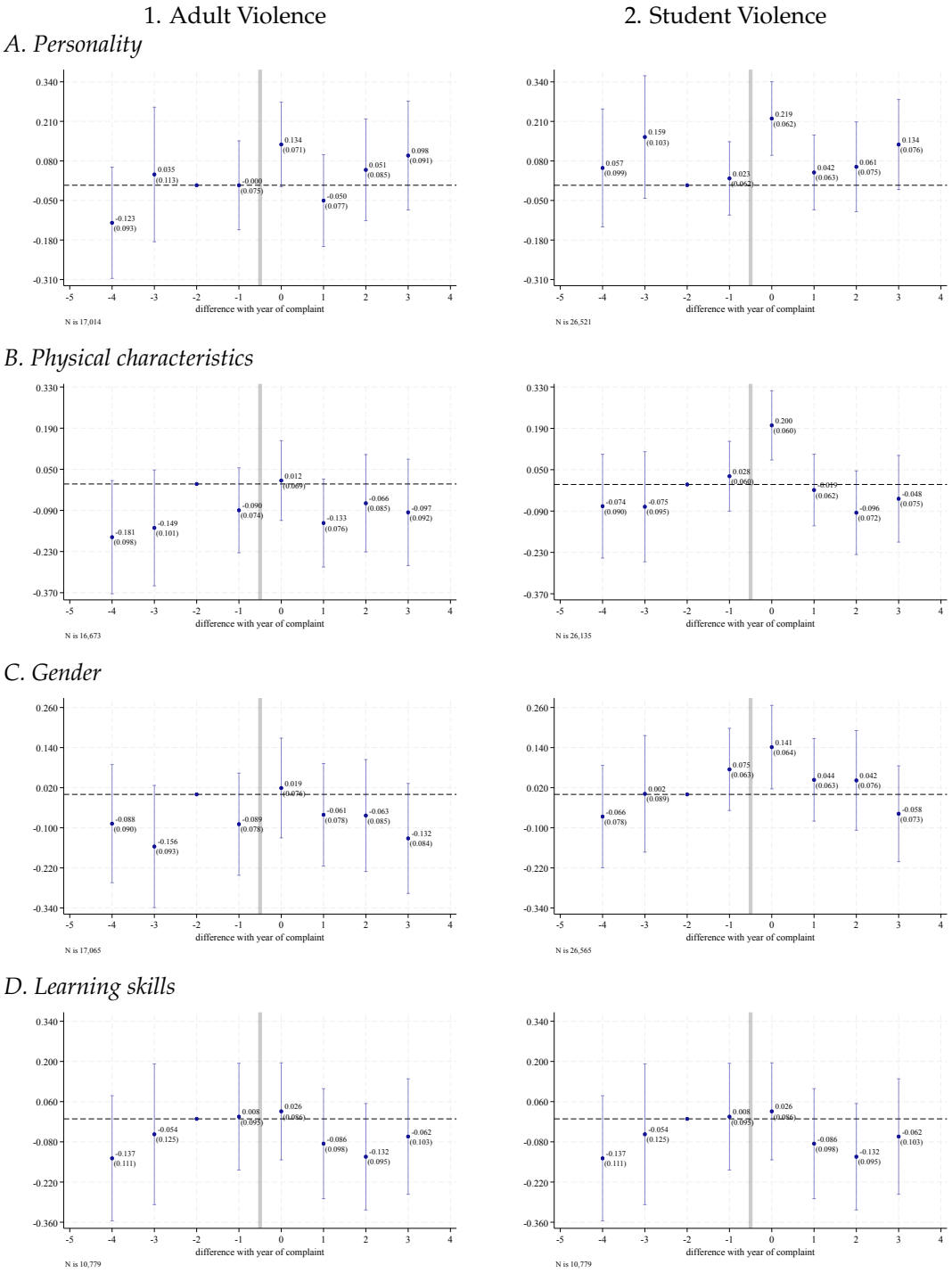
C Survey-Based Results

Figure C.1: Event-study Estimates on Main Outcomes for Survey Sample



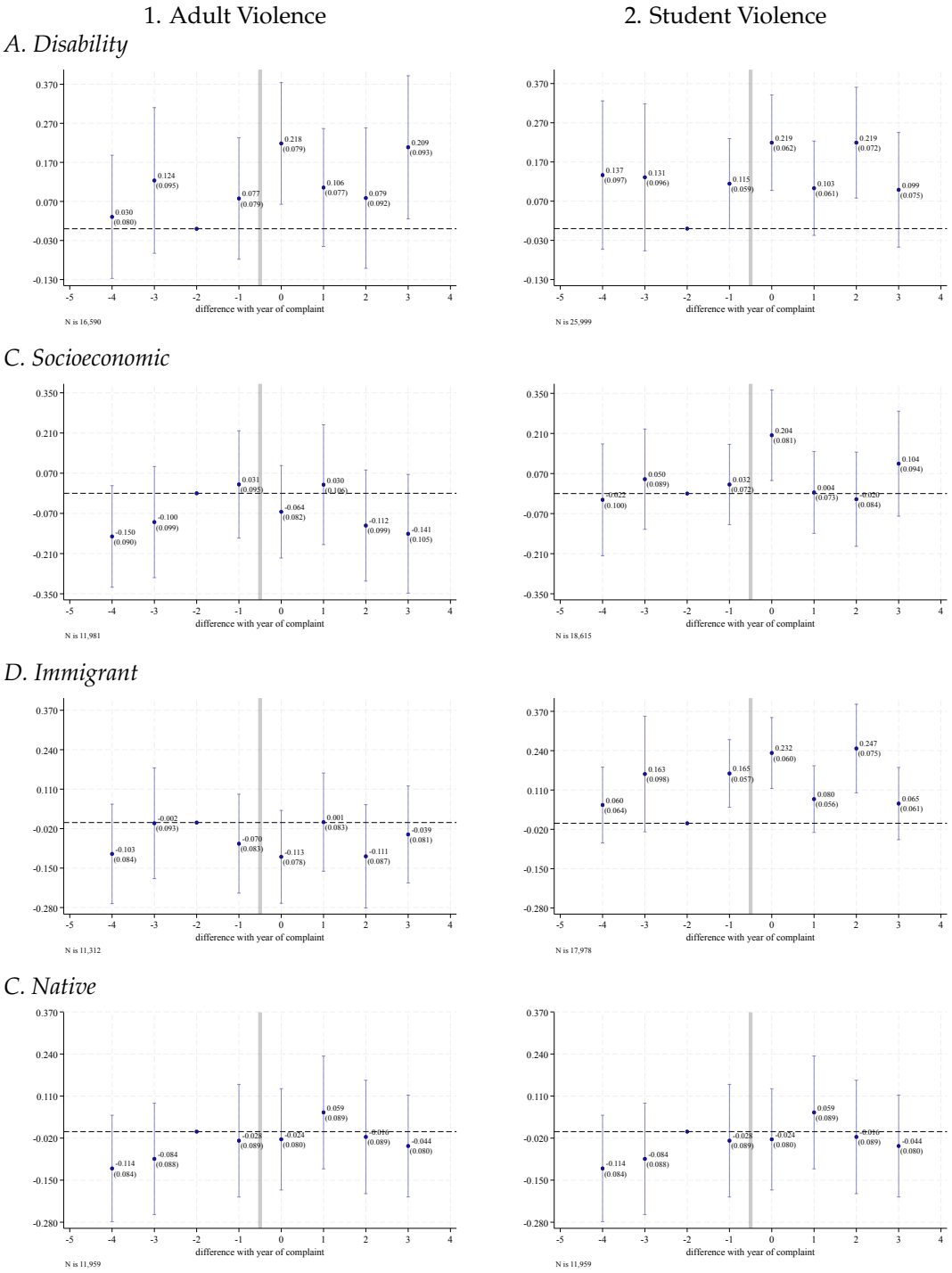
Notes: This figure presents event-study estimates on main educational outcomes for the survey sample, comparing victims of adult violence (column 1) and student violence (column 2). Panel A shows effects on absenteeism; Panel B on GPA; Panel C on school transfers; and Panel D on grade retention. The results validate the alternative empirical design, showing estimates consistent with the findings from the DiD strategy in the administrative sample. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.2.i: Impact of Violence Reports on Survey-Based Measures of Types of Discrimination



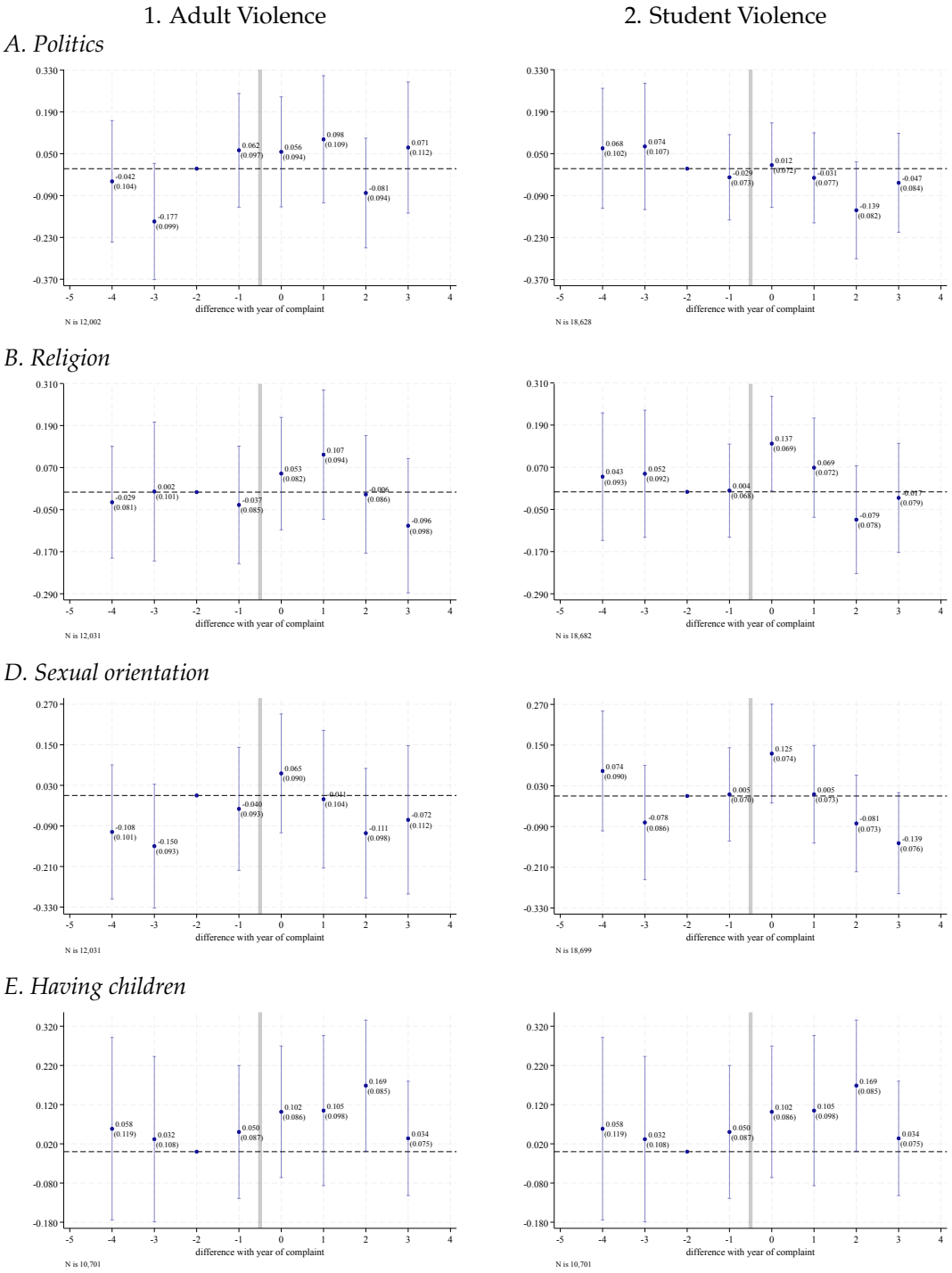
Notes: This figure presents event-study estimates on survey-based measures of specific types of discrimination for victims of adult violence (column 1) and student violence (column 2). Panel A shows effects on discrimination based on personality; Panel B on discrimination based on physical characteristics; Panel C on discrimination based on gender; and Panel D on discrimination based on learning skills. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.2.ii: Impact of Violence Reports on Survey-Based Measures of Types of Discrimination



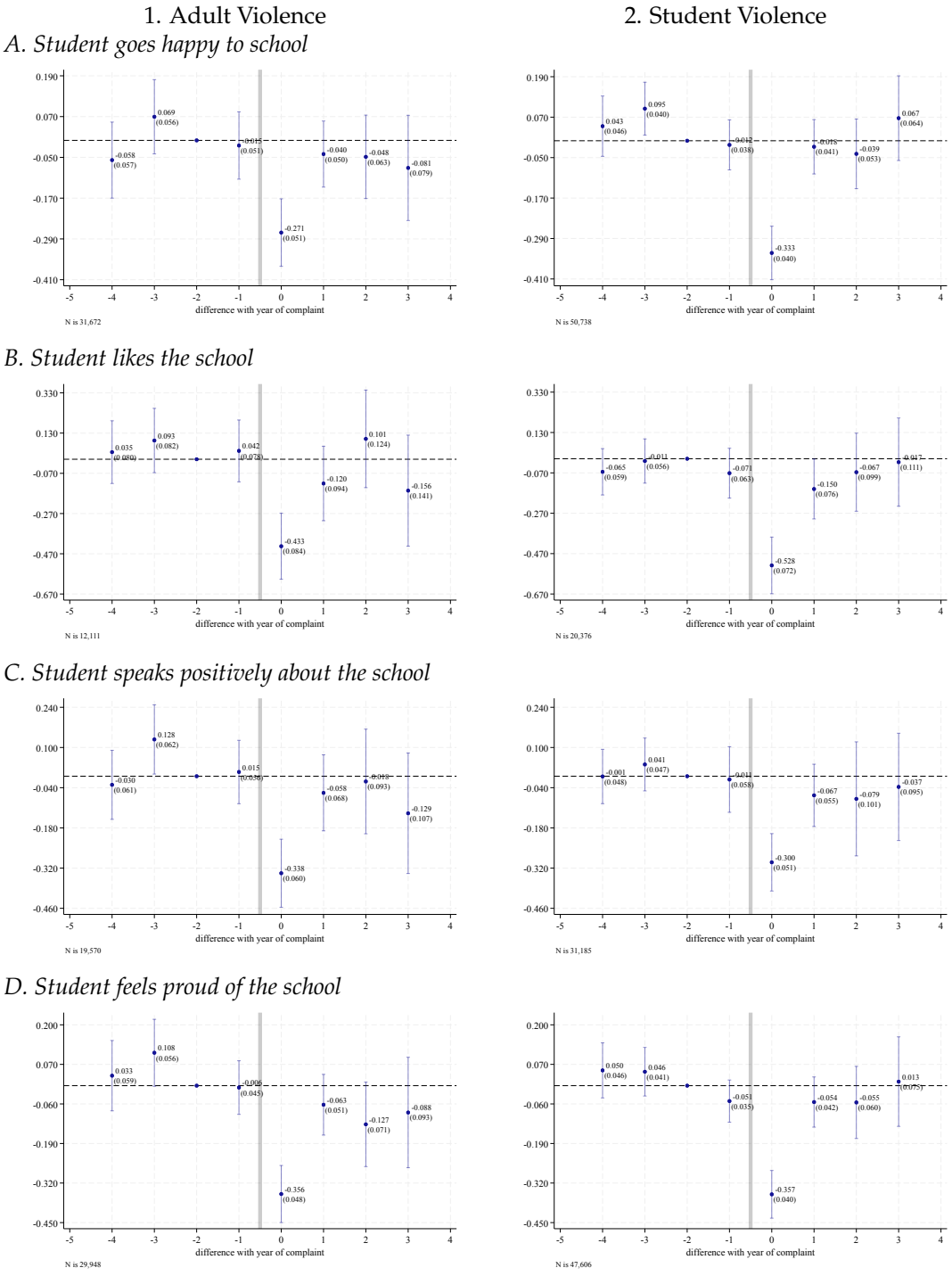
Notes: This figure presents event-study estimates on survey-based measures of specific types of discrimination for victims of adult violence (column 1) and student violence (column 2). Panel A shows effects on discrimination based on disability; Panel B on discrimination based on socioeconomic status; Panel C on discrimination based on immigrant status; and Panel D on discrimination based on native/indigenous status. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.2.iii: Impact of Violence Reports on Survey-Based Measures of Types of Discrimination



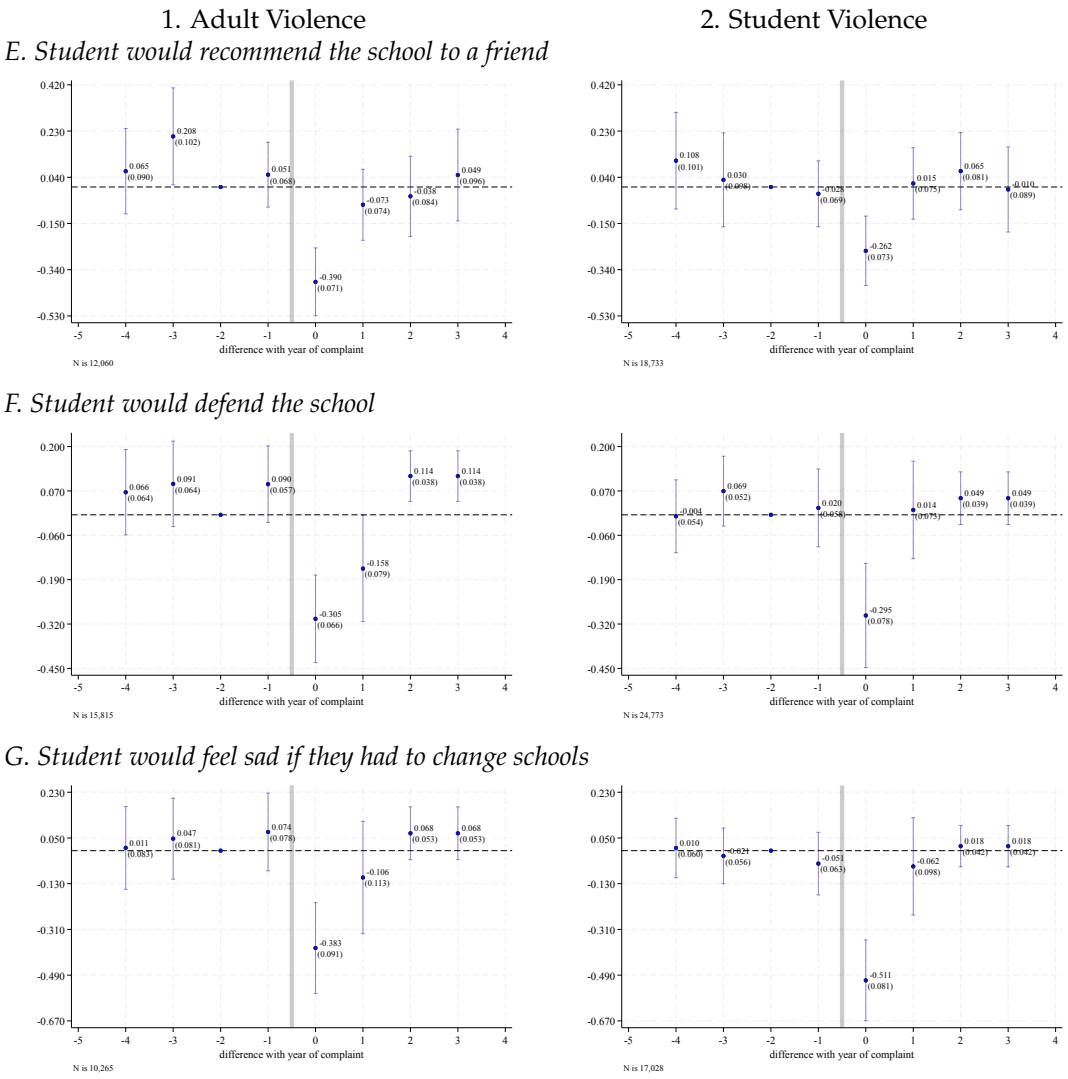
Notes: This figure presents event-study estimates on survey-based measures of specific types of discrimination for victims of adult violence (column 1) and student violence (column 2). Panel A shows effects on discrimination based on politics; Panel B on discrimination based on religion; Panel C on discrimination based on sexual orientation; and Panel D on discrimination based on having children. The reference period is two years before the incident (t-2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.3.i: Impact of Violence Reports on Survey-Based Measures of Sense of School Belonging



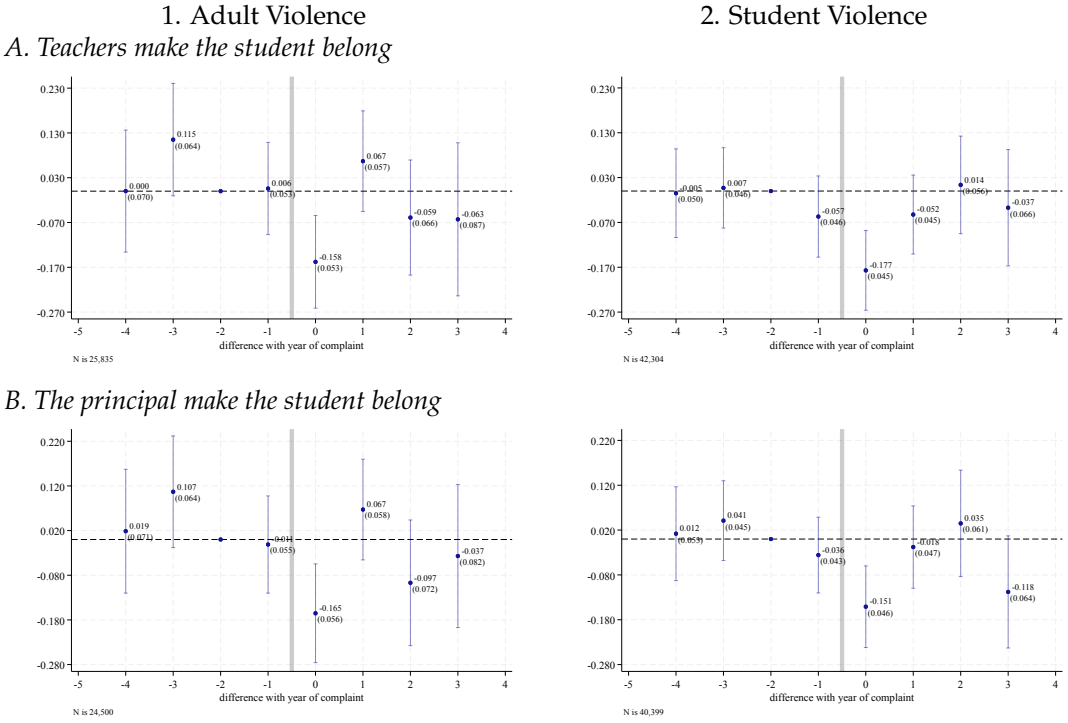
Notes: This figure presents event-study estimates on survey-based measures of belonging of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.3.ii: Impact of Violence Reports on Survey-Based Measures of Sense of School Belonging



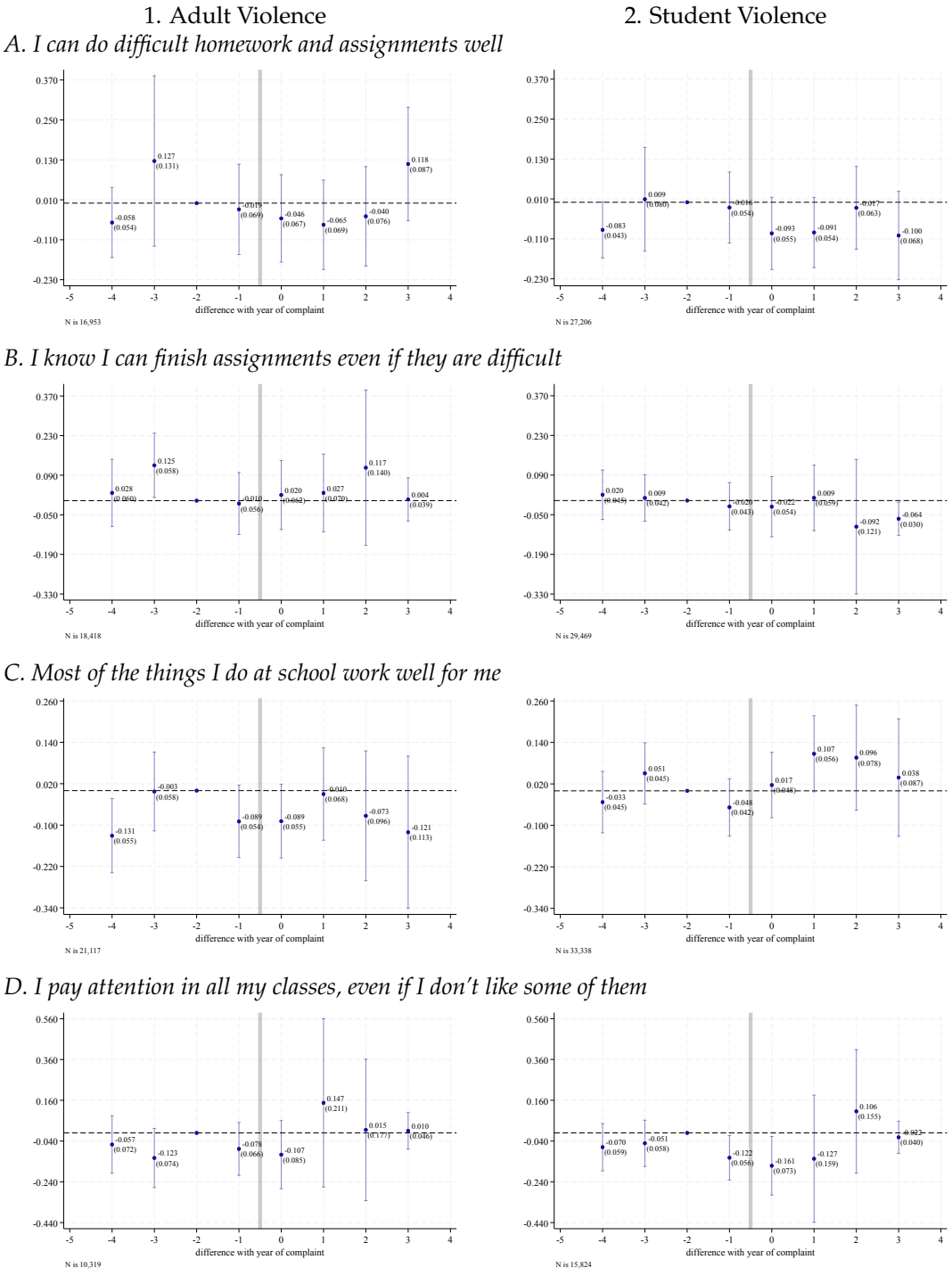
Notes: This figure presents event-study estimates on survey-based measures of belonging of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.3.iii: Impact of Violence Reports on Survey-Based Measures of Sense of School Belonging by Adults



Notes: This figure presents event-study estimates on survey-based measures of belonging of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.4.i: Impact of Violence Reports on Survey-Based Measures of Academic Self-Concept

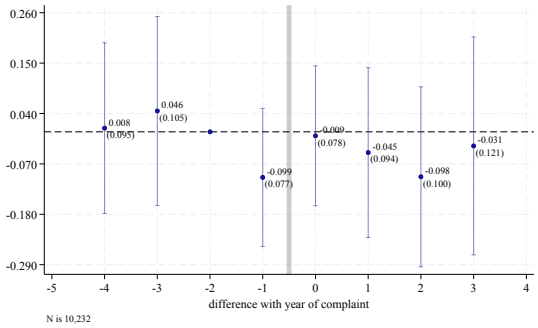


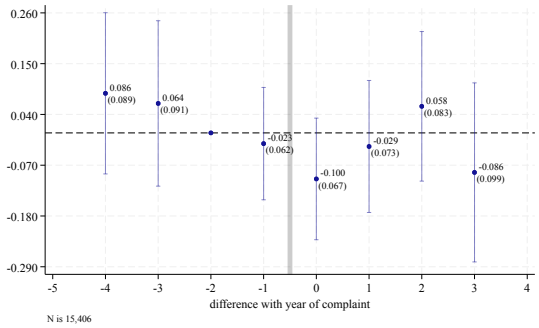
Notes: This figure presents event-study estimates on survey-based measures of academic self-concept of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.4.ii: Impact of Violence Reports on Survey-Based Measures of Academic Self-Concept

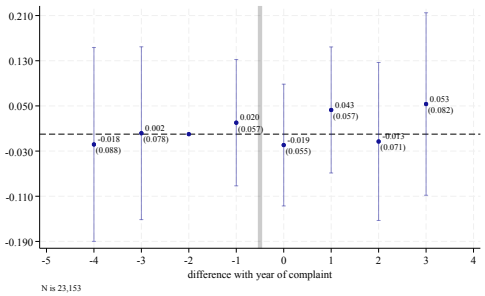
1. Adult Violence | 2. Student Violence

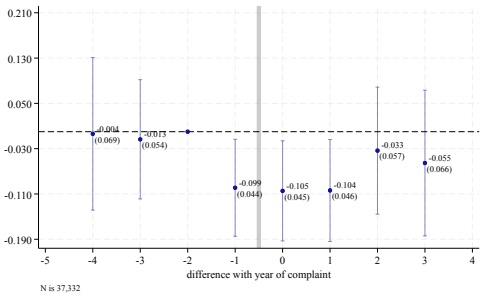
E. I find it difficult to understand what they teach me in class (reversed)



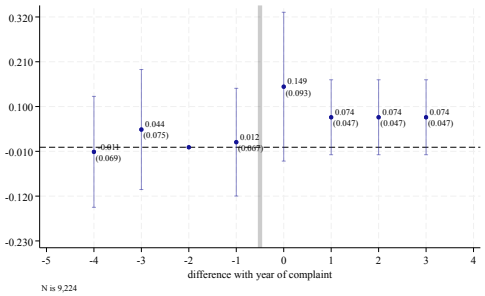


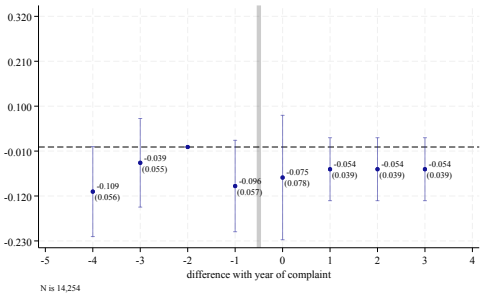
F. I know I can get good grades.



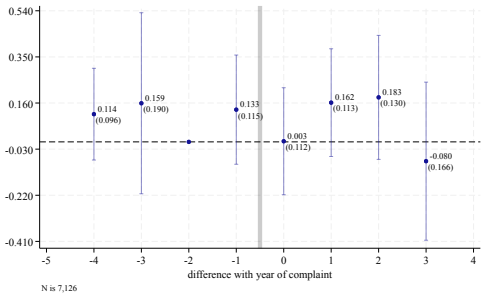


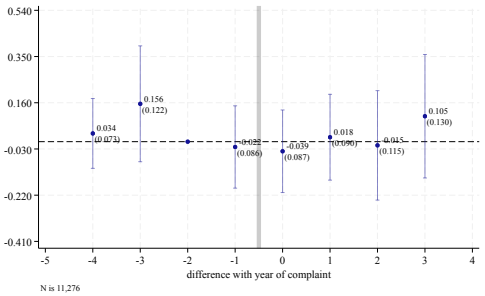
G. I am happy with my grades





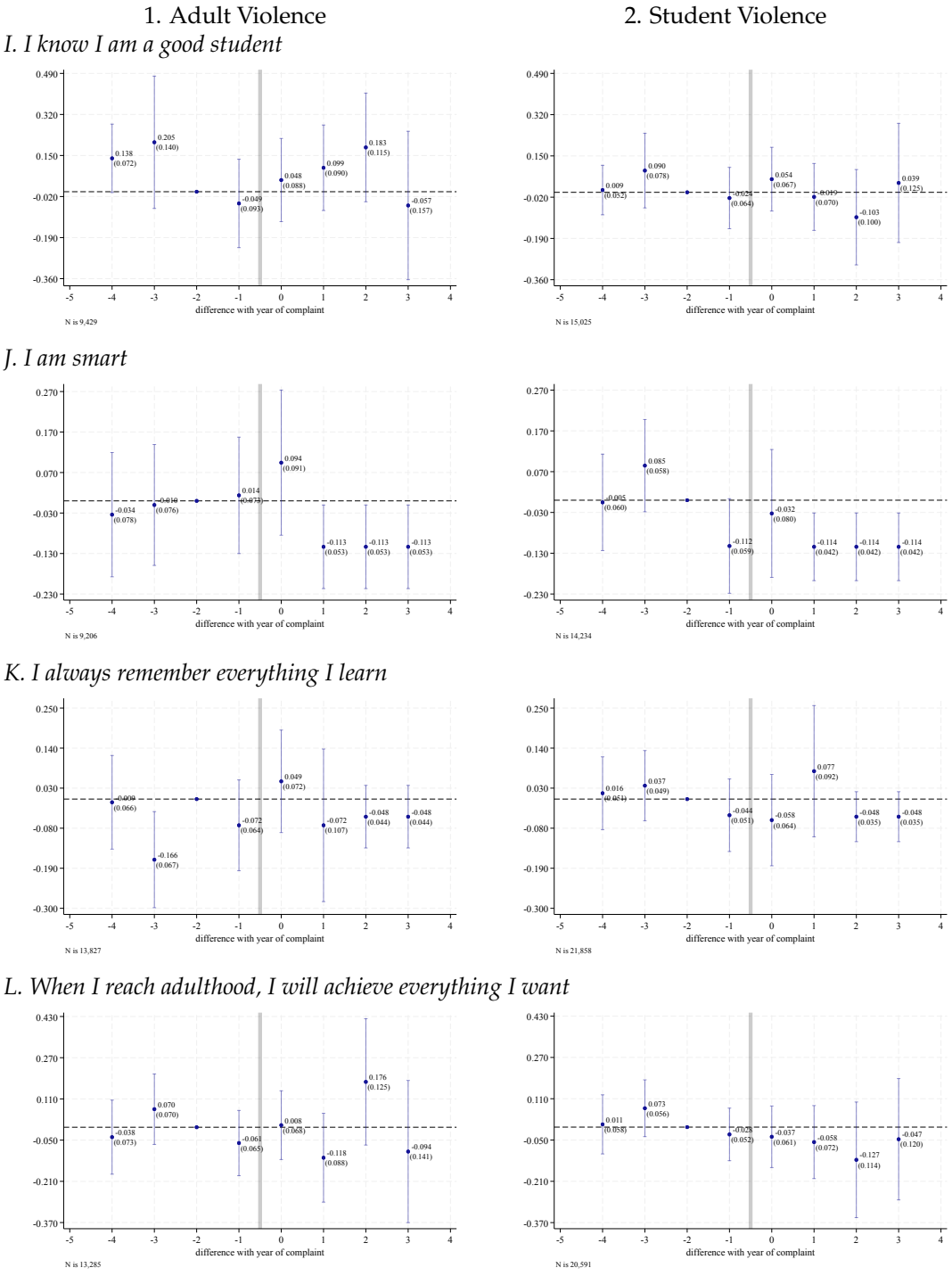
H. I can finish the year with a good GPA





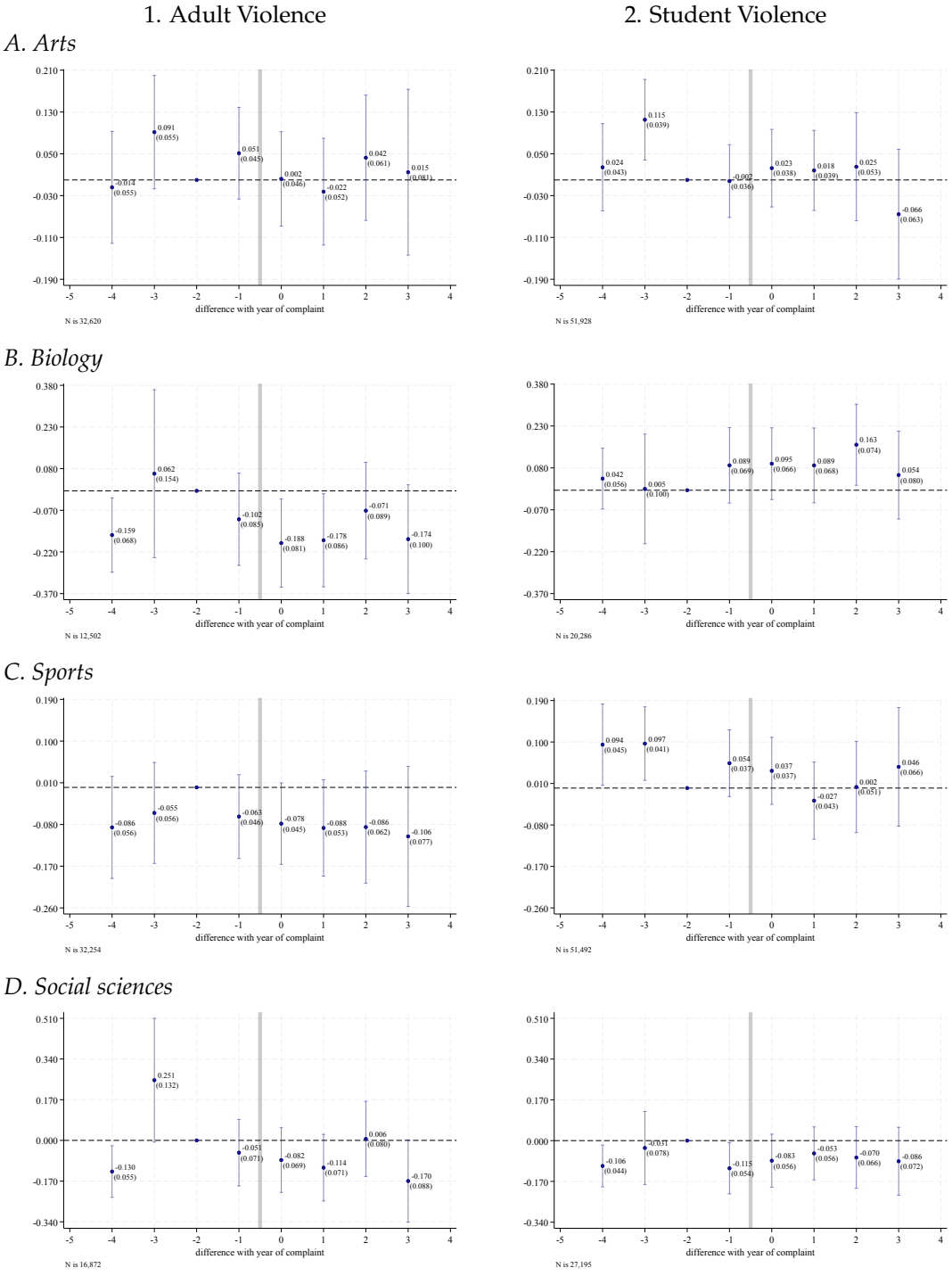
Notes: This figure presents event-study estimates on survey-based measures of academic self-concept of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.4.iii: Impact of Violence Reports on Survey-Based Measures of Academic Self-Concept



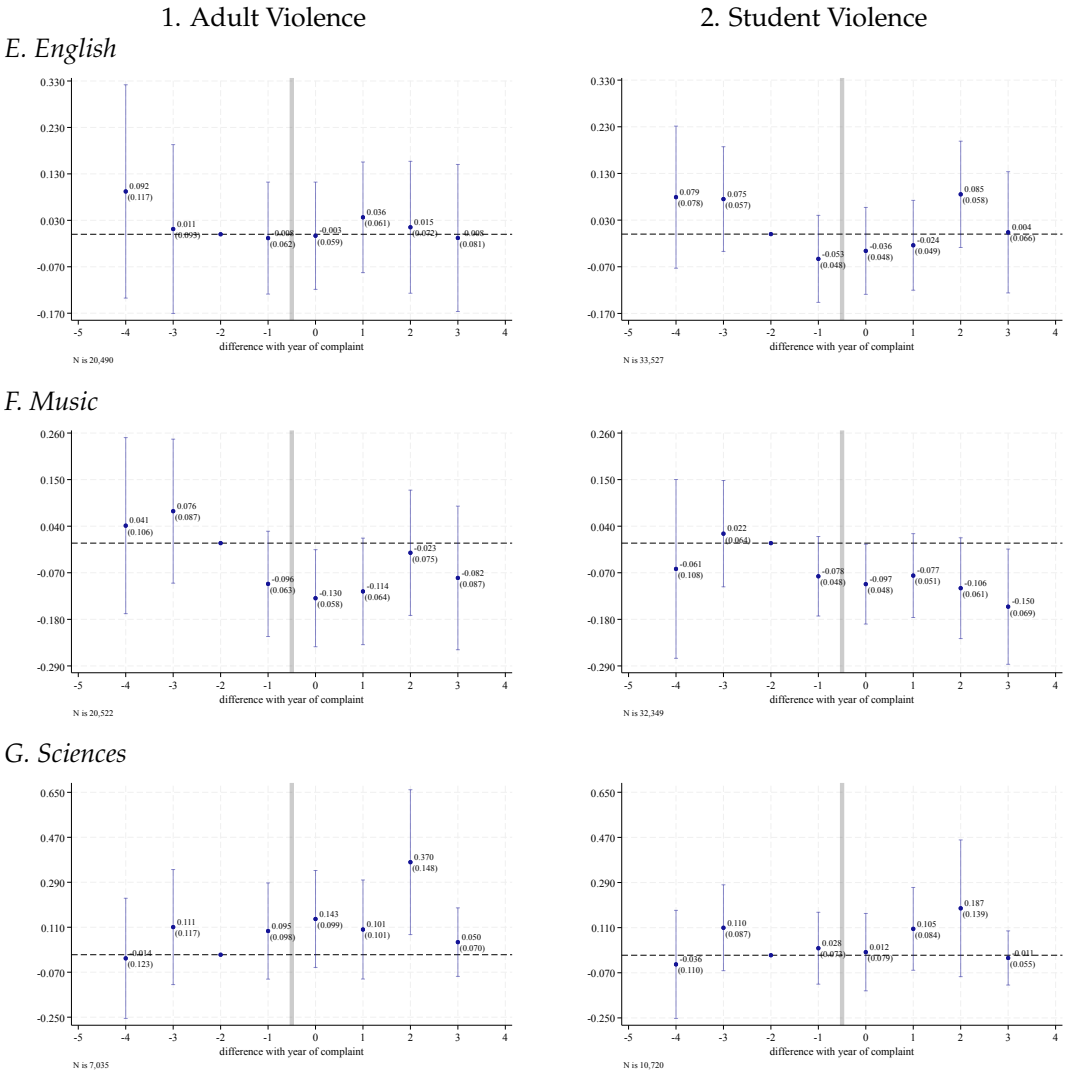
Notes: This figure presents event-study estimates on survey-based measures of academic self-concept of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.4.i: Impact of Violence Reports on Survey-Based Measures of Perception of Own Skills



Notes: This figure presents event-study estimates on survey-based measures of students' perception of their skills of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.4.ii: Impact of Violence Reports on Survey-Based Measures of Perception of Own Skills



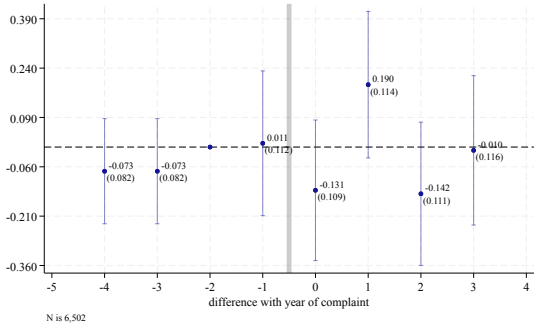
Notes: This figure presents event-study estimates on survey-based measures of students' perception of their skills of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

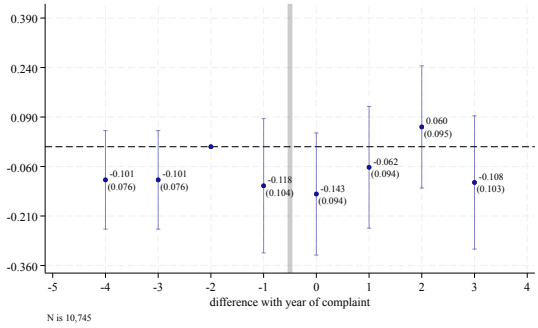
Figure C.4.iii: Impact of Violence Reports on Survey-Based Measures of Perception of Own Skills

1. Adult Violence

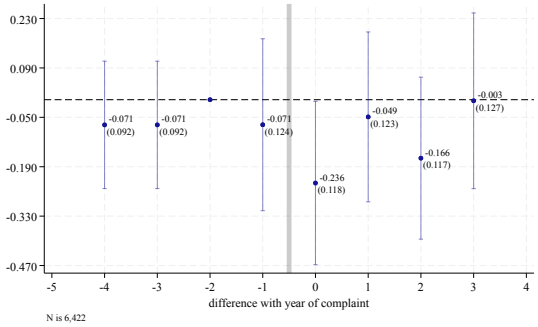
2. Student Violence

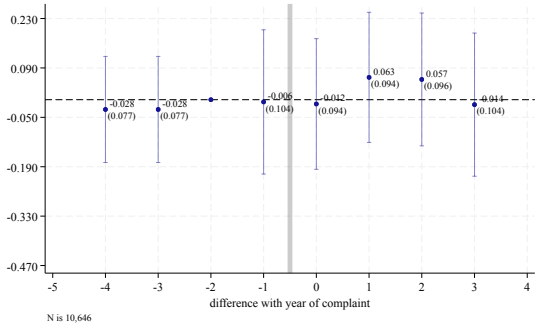
H. Physics





I. Chemistry



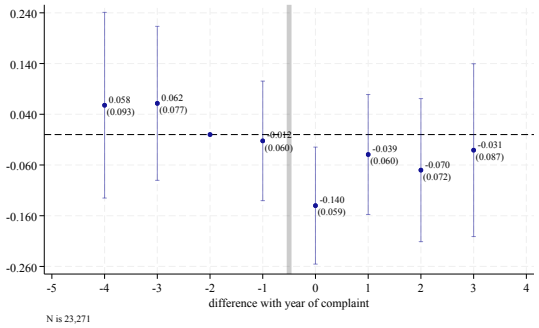


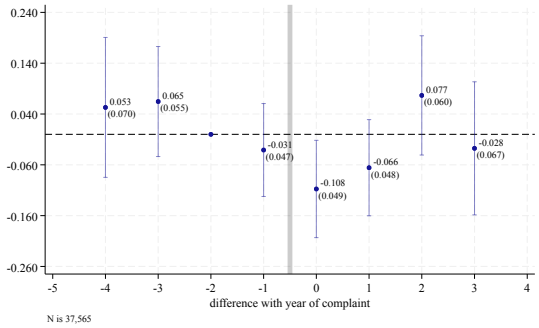
Notes: This figure presents event-study estimates on survey-based measures of students' perception of their skills of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.5.i: Impact of Violence Reports on Survey-Based Measures of Teachers Expectations

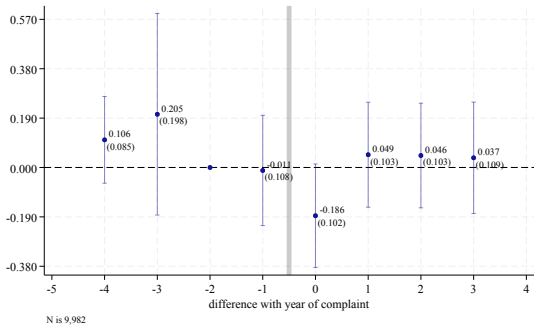
1. Adult Violence | 2. Student Violence

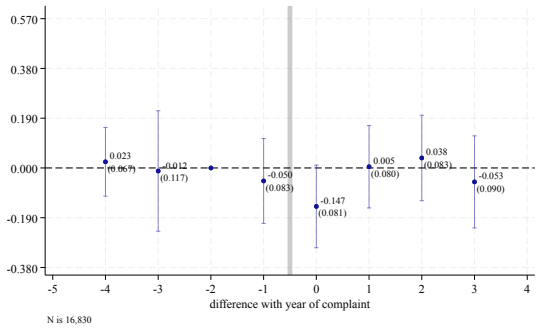
A. My teachers tell me that I can learn



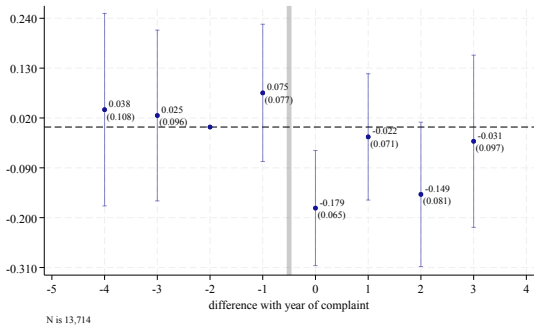


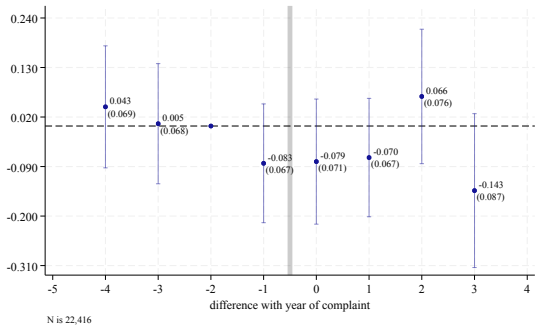
B. My teachers tell me that I am a good student





C. My teachers motivate me to study



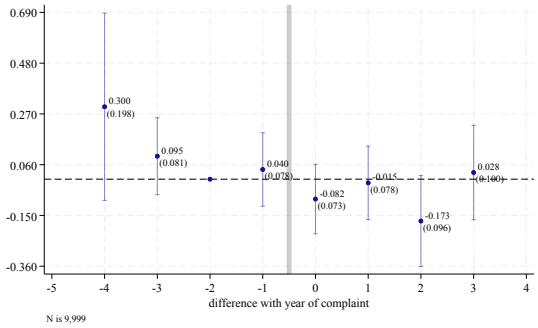


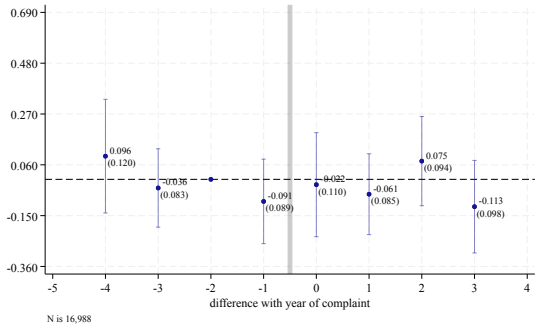
Notes: This figure presents event-study estimates on survey-based measures of teachers expectations of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

Figure C.5.i: Impact of Violence Reports on Survey-Based Measures of Teachers Expectations

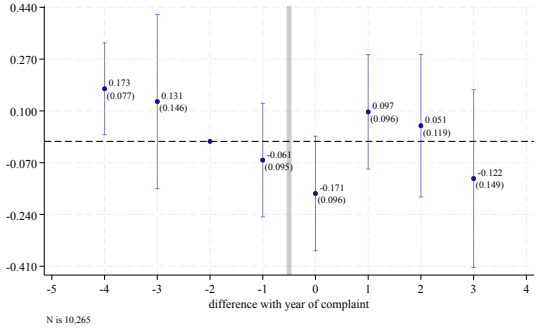
1. Adult Violence | 2. Student Violence

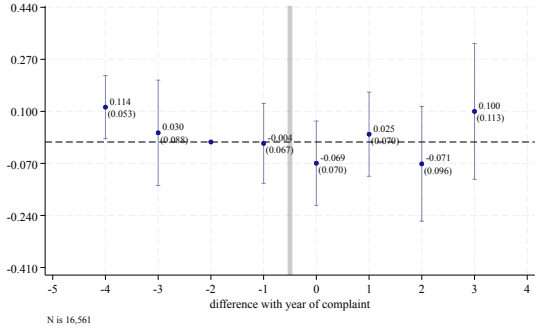
D. My teachers motivate me to improve every day



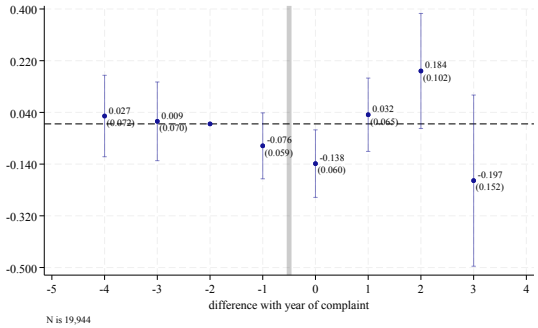


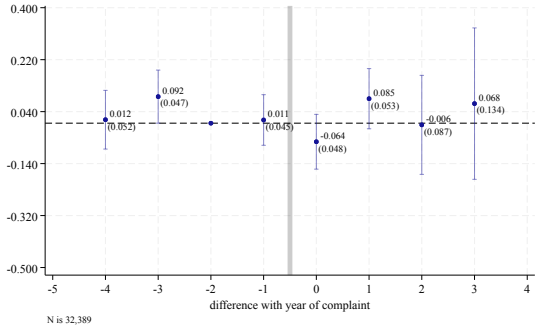
E. My teachers encourage me to express my opinions





F. My teachers take into account my opinions





Notes: This figure presents event-study estimates on survey-based measures of teachers expectations of victims of adult violence (column 1) and student violence (column 2). All estimations control for fixed effects for the combination of match, calendar year, and years since the report. The lines represent 95% confidence intervals with standard errors clustered at the school level.

D Heterogeneous Effects by Student Characteristics and Violence Type

We examine whether the impact of school violence varies across different student characteristics and types of violent incidents.

Tables D.1 and D.2 examine whether the impact of violence by adults or students varies depending on gender, the grade level when victimization occurs, and students' socioeconomic status. These tables present effects on short- and medium-term outcomes. Tables D.3 and D.4 present the corresponding analysis for long-term outcomes.

Beyond demographic factors, we analyze whether effects vary by violence characteristics: psychological versus physical violence, frequency of incidents, and presence of cyberbullying. Since detailed violence classifications are only available for online reports filed from 2021 onward, this analysis uses reports from 2021-2023 and is presented in Tables D.5 and D.6. Because these reports are more recent and we have fewer observations, we cannot examine whether long-term effects differ by type of violence.

Table D.1: Heterogeneous Effects of Adult Violence on Short-term Outcomes by Students' Characteristics

	Absenteeism	Dropout	School change	GPA	Grade retention
	(1)	(2)	(3)	(4)	(5)
Violence Exposure	0.04^{***}	0.01^{***}	0.09^{***}	-0.11^{***}	0.02^{***}
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Mean Control	0.11	0.02	0.17	-0.03	0.04
Clusters	28,424	28,424	28,424	28,370	28,424
Obs	230,928	230,928	230,928	223,932	230,928
By Gender					
Violence Exposure	0.04^{***}	0.01^{***}	0.08^{***}	-0.14^{***}	0.03^{***}
	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)
Violence Exposure x Female	-0.00	-0.01^{*}	0.01	0.07^{***}	-0.01
	(0.00)	(0.00)	(0.01)	(0.02)	(0.00)
Mean Control	0.11	0.02	0.17	-0.03	0.04
Clusters	28,424	28,424	28,424	28,370	28,424
Obs	230,928	230,928	230,928	223,932	230,928
By Grade					
Violence Exposure	0.03^{***}	0.01^{**}	0.11^{***}	-0.09^{***}	0.01^{***}
	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)
Violence Exposure x Middle School	0.01	0.00	-0.03^{***}	-0.03	0.01
	(0.01)	(0.00)	(0.01)	(0.02)	(0.01)
Violence Exposure x High School	0.02^{***}	0.00	-0.05^{***}	-0.04^{*}	0.03^{***}
	(0.01)	(0.00)	(0.01)	(0.03)	(0.01)
Mean Control	0.11	0.02	0.17	-0.03	0.04
Clusters	28,424	28,424	28,424	28,370	28,424
Obs	230,928	230,928	230,928	223,932	230,928
By Maternal Education					
Violence Exposure	0.06^{***}	0.01^{***}	0.10^{***}	-0.10^{***}	0.03^{***}
	(0.01)	(0.00)	(0.01)	(0.02)	(0.01)
Violence Exposure x Mother High School	-0.03^{***}	-0.01^{***}	-0.01	-0.01	-0.01
	(0.01)	(0.00)	(0.01)	(0.03)	(0.01)
Violence Exposure x Mother Tertiary	-0.03^{***}	-0.01^{*}	-0.02^{**}	-0.02	-0.01
	(0.01)	(0.00)	(0.01)	(0.03)	(0.01)
Mean Control	0.11	0.01	0.17	-0.03	0.04
Clusters	23,687	23,687	23,687	23,672	23,687
Obs	203,352	203,352	203,352	198,210	203,352

Notes: This table reports the heterogeneous effects of adult-perpetrated violence on short-term educational outcomes by student characteristics. Each column represents a different outcome: (1) Absenteeism, (2) Dropout, (3) School change, (4) GPA, and (5) Grade retention. The analysis uses matched DiD estimation comparing victims of adult violence to matched control students with similar pre-incident educational trajectories. Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. "Violence Exposure" represents the main effect of experiencing adult-perpetrated violence. Interaction terms (e.g., "Violence Exposure x Female") capture differential effects for specific subgroups. Standard errors are clustered at the individual level and reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table D.2: Heterogeneous Effects of Student Violence on Short-term Outcomes by Students Characteristics

	Absenteeism	Dropout	School change	GPA	Grade retention
	(1)	(2)	(3)	(4)	(5)
Violence Exposure	0.05^{***}	0.01^{***}	0.11^{***}	-0.08^{***}	0.02^{***}
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Mean Control	0.11	0.02	0.17	0.02	0.04
Clusters	43,169	43,169	43,169	43,085	43,169
Obs	355,496	355,496	355,496	345,016	355,496
By Gender					
Violence Exposure	0.04^{***}	0.01^{***}	0.09^{***}	-0.10^{***}	0.02^{***}
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)
Violence Exposure x Female	0.01^{***}	-0.00	0.03^{***}	0.03^{**}	-0.00
	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)
Mean Control	0.11	0.02	0.17	0.02	0.04
Clusters	43,169	43,169	43,169	43,085	43,169
Obs	355,496	355,496	355,496	345,016	355,496
By Grade					
Violence Exposure	0.04^{***}	0.01^{**}	0.12^{***}	-0.05^{***}	0.01^{***}
	(0.00)	(0.00)	(0.01)	(0.01)	(0.00)
Violence Exposure x Middle School	0.00	-0.00	-0.01^{*}	-0.03^{*}	0.01^{*}
	(0.00)	(0.00)	(0.01)	(0.02)	(0.00)
Violence Exposure x High School	0.03^{***}	0.00	-0.01	-0.06^{***}	0.02^{***}
	(0.01)	(0.00)	(0.01)	(0.02)	(0.00)
Mean Control	0.11	0.02	0.17	0.02	0.04
Clusters	43,169	43,169	43,169	43,085	43,169
Obs	355,496	355,496	355,496	345,016	355,496
By Maternal Education					
Violence Exposure	0.07^{***}	0.01^{***}	0.12^{***}	-0.09^{***}	0.02^{***}
	(0.01)	(0.00)	(0.01)	(0.02)	(0.00)
Violence Exposure x Mother High School	-0.03^{***}	-0.01^{***}	-0.01	0.03	-0.01^{*}
	(0.01)	(0.00)	(0.01)	(0.02)	(0.01)
Violence Exposure x Mother Tertiary	-0.04^{***}	-0.01^{***}	-0.01	0.02	-0.01
	(0.01)	(0.00)	(0.01)	(0.02)	(0.00)
Mean Control	0.11	0.01	0.17	0.02	0.04
Clusters	36,649	36,649	36,649	36,636	36,649
Obs	317,652	317,652	317,652	310,354	317,652

Notes: This table reports the heterogeneous effects of student-perpetrated violence on short-term educational outcomes by student characteristics. Each column represents a different outcome: (1) Absenteeism, (2) Dropout, (3) School change, (4) GPA, and (5) Grade retention. The analysis uses matched DiD estimation comparing victims of adult violence to matched control students with similar pre-incident educational trajectories. Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. "Violence Exposure" represents the main effect of experiencing student-perpetrated violence. Interaction terms (e.g., "Violence Exposure x Female") capture differential effects for specific subgroups. Standard errors are clustered at the individual level and reported in parentheses.$***p < 0.01, **p < 0.05, *p < 0.1$.

Table D.3: Heterogeneous Effects of Adult Violence on Long-term Outcomes by Students Characteristics

	High School on-time	High School H	Takes Std. Test	Math Score	Lang. Score	Post-secondary Enrollment	University	Vocational	Above Mean-Score Program
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Violence Exposure	−0.12***	−0.09***	−0.06***	−3.70***	−2.15***	−0.04***	−0.03***	−0.01	−0.01**
	(0.01)	(0.01)	(0.01)	(0.48)	(0.48)	(0.01)	(0.01)	(0.01)	(0.01)
Mean Control	0.76	0.84	0.68	31.58	31.57	0.67	0.38	0.32	0.19
Obs	14,039	14,039	14,039	14,039	14,039	14,039	14,039	14,039	14,039
By Gender									
Violence Exposure	−0.13***	−0.10***	−0.06***	−3.82***	−2.19***	−0.04***	−0.04***	0.00	−0.03***
	(0.01)	(0.01)	(0.01)	(0.69)	(0.66)	(0.01)	(0.01)	(0.01)	(0.01)
Violence Exposure x Female	0.00	0.00	0.01	0.25	0.08	−0.01	0.02	−0.03	0.02*
	(0.02)	(0.01)	(0.02)	(0.94)	(0.94)	(0.02)	(0.02)	(0.02)	(0.01)
Mean Control	0.76	0.84	0.68	31.58	31.57	0.67	0.38	0.32	0.19
Obs	14,039	14,039	14,039	14,039	14,039	14,039	14,039	14,039	14,039
By Grade									
Violence Exposure	−0.13***	−0.08***	−0.12***	−7.93***	−6.48***	−0.13***	−0.12***	−0.01	−0.04*
	(0.03)	(0.02)	(0.03)	(1.65)	(1.63)	(0.03)	(0.03)	(0.02)	(0.02)
Violence Exposure x Middle School	0.02	−0.01	0.06**	4.21**	3.75**	0.07**	0.09***	−0.02	0.02
	(0.03)	(0.03)	(0.03)	(1.83)	(1.81)	(0.03)	(0.03)	(0.03)	(0.02)
Violence Exposure x High School	−0.00	−0.02	0.07**	5.06***	5.57***	0.12***	0.11***	0.01	0.03
	(0.03)	(0.03)	(0.03)	(1.77)	(1.75)	(0.03)	(0.03)	(0.03)	(0.02)
Mean Control	0.76	0.84	0.68	31.58	31.57	0.67	0.38	0.32	0.19
Obs	14,039	14,039	14,039	14,039	14,039	14,039	14,039	14,039	14,039
By Maternal Education									
Violence Exposure	−0.14***	−0.11***	−0.05***	−2.52***	−0.47	−0.04**	−0.01	−0.04**	−0.01
	(0.02)	(0.02)	(0.02)	(0.86)	(0.86)	(0.02)	(0.02)	(0.02)	(0.01)
Violence Exposure x Mother High School	0.03	0.04**	−0.00	0.47	−1.01	0.01	−0.03	0.05**	0.01
	(0.02)	(0.02)	(0.02)	(1.20)	(1.20)	(0.02)	(0.02)	(0.02)	(0.02)
Violence Exposure x Mother Tertiary	0.02	0.01	−0.00	−3.11**	−3.17***	−0.01	−0.03	0.03	−0.03
	(0.02)	(0.02)	(0.02)	(1.21)	(1.22)	(0.02)	(0.02)	(0.02)	(0.02)
Mean Control	0.77	0.85	0.69	32.26	32.29	0.68	0.39	0.32	0.20
Obs	13,328	13,328	13,328	13,328	13,328	13,328	13,328	13,328	13,328

Notes: This table reports the heterogeneous effects of adult-perpetrated violence on long-term educational outcomes by student characteristics. Each column represents a different outcome: (1) High school on-time graduation, (2) High school graduation, (3) Takes standardized test, (4) Math score, (5) Language score, (6) Post-secondary enrollment, (7) University enrollment, (8) Vocational enrollment, and (9) Above mean-score program enrollment. The analysis uses a matching approach that controls for pre-incident educational trajectories and socioeconomic characteristics. "Violence Exposure" represents the main effect of experiencing adult-perpetrated violence. Interaction terms (e.g., "Violence Exposure x Female") capture differential effects for specific subgroups. Robust standard errors are reported in parentheses.$***p < 0.01, **p < 0.05, *p < 0.1$.

Table D.4: Heterogeneous Effects of Student Violence on Long-term Outcomes by Students Characteristics

	High School on-time	High School H	Takes Std. Test	Math Score	Lang. Score	Post-secondary Enrollment	University	Vocational	Above Mean-Score Program
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Violence Exposure	−0.09***	−0.07***	−0.03***	−2.87***	−2.90***	−0.00	−0.01*	0.02***	−0.01**
	(0.01)	(0.01)	(0.01)	(0.38)	(0.37)	(0.01)	(0.01)	(0.01)	(0.01)
Mean Control	0.77	0.85	0.68	30.12	30.94	0.66	0.38	0.32	0.18
Obs	21,533	21,533	21,533	21,533	21,533	21,533	21,533	21,533	21,533
By Gender									
Violence Exposure	−0.09***	−0.05***	−0.00	−1.74**	−2.35***	−0.00	−0.02*	0.02*	−0.02**
	(0.01)	(0.01)	(0.01)	(0.68)	(0.65)	(0.01)	(0.01)	(0.01)	(0.01)
Violence Exposure x Female	0.00	−0.03***	−0.04***	−1.74**	−0.85	−0.00	0.01	−0.00	0.02
	(0.01)	(0.01)	(0.01)	(0.81)	(0.79)	(0.01)	(0.01)	(0.01)	(0.01)
Mean Control	0.77	0.85	0.68	30.12	30.94	0.66	0.38	0.32	0.18
Obs	21,533	21,533	21,533	21,533	21,533	21,533	21,533	21,533	21,533
By Grade									
Violence Exposure	−0.04	0.00	−0.04	−2.54	−6.47**	−0.03	−0.03	−0.00	−0.02
	(0.05)	(0.04)	(0.05)	(3.02)	(2.81)	(0.05)	(0.05)	(0.04)	(0.03)
Violence Exposure x Middle School	−0.04	−0.06*	0.03	0.55	3.88	0.03	0.02	0.02	0.00
	(0.05)	(0.04)	(0.05)	(3.07)	(2.87)	(0.05)	(0.05)	(0.04)	(0.03)
Violence Exposure x High School	−0.06	−0.08**	0.01	−1.10	3.46	0.03	0.01	0.03	0.02
	(0.05)	(0.04)	(0.05)	(3.06)	(2.85)	(0.05)	(0.05)	(0.04)	(0.03)
Mean Control	0.77	0.85	0.68	30.12	30.94	0.66	0.38	0.32	0.18
Obs	21,533	21,533	21,533	21,533	21,533	21,533	21,533	21,533	21,533
By Maternal Education									
Violence Exposure	−0.10***	−0.08***	−0.03*	−1.26*	−1.23*	−0.01	−0.00	−0.00	0.01
	(0.01)	(0.01)	(0.02)	(0.70)	(0.67)	(0.02)	(0.01)	(0.02)	(0.01)
Violence Exposure x Mother High School	0.02	0.02	0.01	−1.46	−2.26**	0.03	−0.03	0.05***	−0.01
	(0.02)	(0.02)	(0.02)	(0.94)	(0.91)	(0.02)	(0.02)	(0.02)	(0.01)
Violence Exposure x Mother Tertiary	0.00	0.03*	−0.00	−2.72***	−2.17**	0.00	0.00	0.00	−0.04**
	(0.02)	(0.02)	(0.02)	(1.00)	(0.97)	(0.02)	(0.02)	(0.02)	(0.01)
Mean Control	0.78	0.85	0.69	30.62	31.47	0.67	0.38	0.32	0.19
Obs	20,650	20,650	20,650	20,650	20,650	20,650	20,650	20,650	20,650

Notes: This table reports the heterogeneous effects of student-perpetrated violence on long-term educational outcomes by student characteristics. Each column represents a different outcome: (1) High school on-time graduation, (2) High school graduation, (3) Takes standardized test, (4) Math score, (5) Language score, (6) Post-secondary enrollment, (7) University enrollment, (8) Vocational enrollment, and (9) Above mean-score program enrollment. The analysis uses a matching approach that controls for pre-incident educational trajectories and socioeconomic characteristics. "Violence Exposure" represents the main effect of experiencing student-perpetrated violence. Interaction terms (e.g., "Violence Exposure x Female") capture differential effects for specific subgroups. Robust standard errors are reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table D.5: Heterogeneous Effects of Adult Violence by Violence Type

	Absenteeism	Dropout	School change	GPA	Grade retention
	(1)	(2)	(3)	(4)	(5)
Violence Exposure	0.04^{***}	0.00	0.06^{***}	-0.15^{***}	0.00
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Mean Control	0.11	0.01	0.13	-0.03	0.01
Clusters	2,835	2,835	2,835	2,835	2,835
Obs	17,014	17,014	17,014	16,746	17,014
Physical vs Psychological					
Violence Exposure	0.04^{***}	0.00	0.07^{***}	-0.15^{***}	0.00
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Violence Exposure x Physical	0.00	0.00	-0.00	0.01	-0.00
	(0.01)	(0.01)	(0.02)	(0.05)	(0.01)
Mean Control	0.11	0.01	0.13	-0.03	0.01
Clusters	2,835	2,835	2,835	2,835	2,835
Obs	17,014	17,014	17,014	16,746	17,014
Frequency					
Violence Exposure	0.04^{***}	-0.00	0.06^{***}	-0.14^{***}	0.01^{**}
	(0.01)	(0.00)	(0.02)	(0.04)	(0.00)
Violence Exposure x Monthly	0.00	0.00	0.02	-0.01	-0.01
	(0.01)	(0.01)	(0.02)	(0.05)	(0.01)
Violence Exposure x Weekly	0.01	0.01	-0.02	0.04	-0.02^{***}
	(0.01)	(0.00)	(0.03)	(0.07)	(0.01)
Mean Control	0.11	0.01	0.13	-0.02	0.01
Clusters	2,813	2,813	2,813	2,813	2,813
Obs	16,870	16,870	16,870	16,603	16,870
Cyberbullying					
Violence Exposure	0.04^{***}	0.00	0.07^{***}	-0.15^{***}	0.00
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Violence Exposure x Cyberbullying	-0.03^{**}	0.01	-0.03	0.03	-0.02^{**}
	(0.01)	(0.01)	(0.03)	(0.07)	(0.01)
Clusters	2,835	2,835	2,835	2,835	2,835
Obs	17,014	17,014	17,014	16,746	17,014

Notes: This table reports the heterogeneous effects of adult-perpetrated violence by violence type characteristics. Each column represents a different outcome: (1) Absenteeism, (2) Dropout, (3) School change, (4) GPA, and (5) Grade retention. The analysis uses matched DiD estimation. "Violence Exposure" represents the main effect of experiencing adult-perpetrated violence. Interaction terms capture differential effects by violence characteristics: physical vs. psychological violence, frequency of incidents (monthly, weekly), and presence of cyberbullying. Sample includes online reports filed between 2021-2023 with detailed violence classifications. Robust standard errors are reported in parentheses. $***p < 0.01, **p < 0.05, *p < 0.1$.

Table D.6: Heterogeneous Effects of Student Violence by Violence Type

	Absenteeism	Dropout	School change	GPA	Grade retention
	(1)	(2)	(3)	(4)	(5)
Violence Exposure	0.05^{***}	0.00	0.10^{***}	-0.09^{***}	0.00^{*}
	(0.00)	(0.00)	(0.01)	(0.02)	(0.00)
Mean Control	0.11	0.01	0.13	0.01	0.01
Clusters	6,490	6,490	6,490	6,490	6,490
Obs	40,426	40,426	40,426	39,847	40,426
Physical vs Psychological					
Violence Exposure	0.06^{***}	0.00	0.10^{***}	-0.08^{***}	0.01^{**}
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Violence Exposure x Physical	-0.01	-0.00	-0.00	-0.01	-0.00
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Mean Control	0.11	0.01	0.13	0.01	0.01
Clusters	6,490	6,490	6,490	6,490	6,490
Obs	40,426	40,426	40,426	39,847	40,426
Frequency					
Violence Exposure	0.04^{***}	0.00	0.06^{***}	-0.07^{**}	0.00
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Violence Exposure x Monthly	0.01	-0.00	0.04^{***}	-0.01	0.00
	(0.01)	(0.00)	(0.02)	(0.03)	(0.00)
Violence Exposure x Weekly	0.01	-0.00	0.07^{***}	-0.04	0.00
	(0.01)	(0.00)	(0.02)	(0.03)	(0.00)
Mean Control	0.11	0.01	0.13	0.02	0.01
Clusters	6,416	6,416	6,416	6,416	6,416
Obs	39,932	39,932	39,932	39,360	39,932
Cyberbullying					
Violence Exposure	0.05^{***}	0.00^{*}	0.09^{***}	-0.06^{***}	0.00
	(0.00)	(0.00)	(0.01)	(0.02)	(0.00)
Violence Exposure x Cyberbullying	0.00	-0.00	0.01	-0.08^{***}	0.01^{***}
	(0.01)	(0.00)	(0.01)	(0.03)	(0.00)
Clusters	6,490	6,490	6,490	6,490	6,490
Obs	40,426	40,426	40,426	39,847	40,426

Notes: This table reports the heterogeneous effects of student-perpetrated violence by violence type characteristics. Each column represents a different outcome: (1) Absenteeism, (2) Dropout, (3) School change, (4) GPA, and (5) Grade retention. The analysis uses a matched DiD estimation. "Violence Exposure" represents the main effect of experiencing student-perpetrated violence. Interaction terms capture differential effects by violence characteristics: physical vs. psychological violence, frequency of incidents (monthly, weekly), and presence of cyberbullying. Sample includes online reports filed between 2021-2023 with detailed violence classifications. Robust standard errors are reported in parentheses.$***p < 0.01, **p < 0.05, *p < 0.1$.

E Robustness Tests

A potential concern is that our primary matching approach might overfit pre-trends, creating an artificial similarity between victims and matched controls that could bias our results. To test the robustness of our findings against this concern, we implement a fuzzy matching strategy with fewer matching variables, including only grade, gender, and school characteristics of the school attended the year before the incident. Results presented in Figure E.1 demonstrate that our findings remain unchanged under this alternative specification.

Additionally, we conduct a placebo test to further validate our causal interpretation. We artificially set the event time as three years before the actual incident and estimate effects using the same empirical strategy with t-2 as the reference period. We expect this exercise to show no effects during the artificial "event year" or the year preceding it. Results presented in Figure E.2 confirm our expectations, showing no major effects during these placebo periods.

We also address the concern that unobserved school-level shocks might simultaneously affect both the probability of reporting violence and student outcomes. To test for this possibility, in Figure E.3 we implement an alternative matching strategy using classmates as controls. For this exercise, we restrict our sample to victims attending schools with at least five students of the same gender enrolled in their grade, ensuring the feasibility of finding appropriate matches (with more than 98% of victims satisfying this condition). Specifically, for each treated student, we identify a match from the same grade and gender within the same school during the incident year, ensuring exposure to identical school-level conditions and policies. We acknowledge that this approach is not our preferred specification, as our main results demonstrate significant spillover effects on classmates, which could lead this strategy to underestimate the true treatment effects. Nevertheless, even when using these potentially contaminated controls, we observe statistically significant impacts in both the short and medium term, though the magnitudes are somewhat attenuated relative to our main estimates.

Finally, we examine treatment effects on siblings to address concerns that unobserved household-level shocks might simultaneously increase the probability of reporting violence and affect student outcomes. While we acknowledge that violence reports may directly impact siblings through family dynamics, this exercise helps us assess whether our main results could be driven by household-level confounders rather than the violence incident itself.

We identify siblings using the Spanish naming tradition prevalent in Chile, where individuals receive two surnames corresponding to the father's and mother's first surnames, respectively. Within each school, we classify students as siblings if they share the same pair of surnames in the same order and attend the same institution in any year between 2004 and 2017. To minimize false positives, we exclude surname pairs appearing 100 or more times in our sample in any given year.[21]

Our sibling analysis includes 5,675 siblings from 4,772 reporting students (an average of 1.2 siblings per reporter), enrolled between 3rd grade and 12th grade at the time of the report. Of these, 53% are younger siblings and 47% are older siblings. Notably, 59% of siblings attended the same school as the reporting

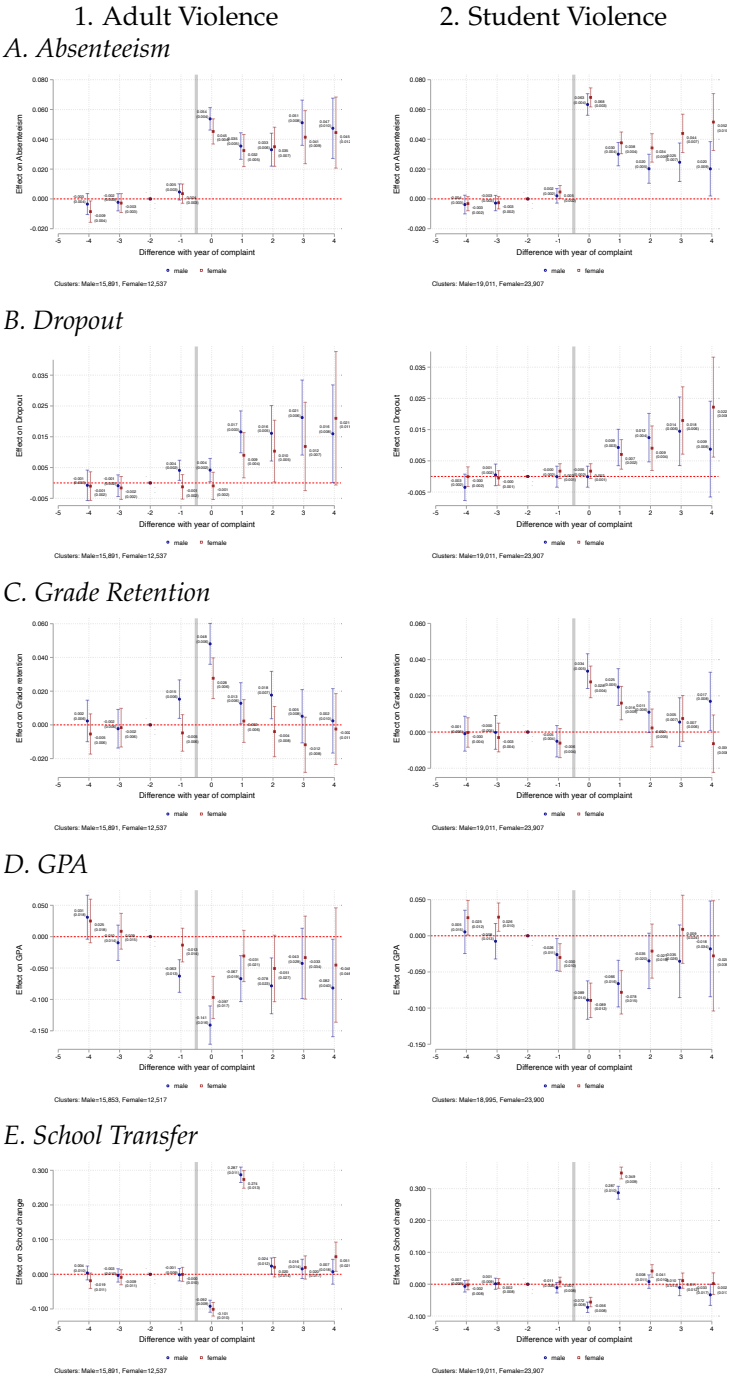
[21] To validate our surname-based sibling identification, we match our records with parental national identification numbers (NIDs) from higher education exam registrations. Using mothers' NIDs available for 54% of our sample, we find that 93% of same-school students sharing identical surnames are indeed siblings, confirming the reliability of our identification strategy.

student during the incident year. The sample comprises 3,276 siblings of peer violence reporters and 2,418 siblings of adult abuse reporters.

Results presented in Figure E.4 show that while siblings experience some effects—which is expected given potential family disruption from the reporting process—these impacts are considerably smaller than those observed for direct victims. Specifically, we find no significant effects on dropout rates, grade retention, or GPA for siblings. There is an increase in the probability of changing schools (0.13 p.p) and an increase in absenteeism (0.015 p.p), both substantially smaller than the effects observed for direct victims. Descriptively, approximately 35% of siblings initially enrolled in the same school as the reporter transfer the following year, compared to roughly 55% of direct victims who change schools.

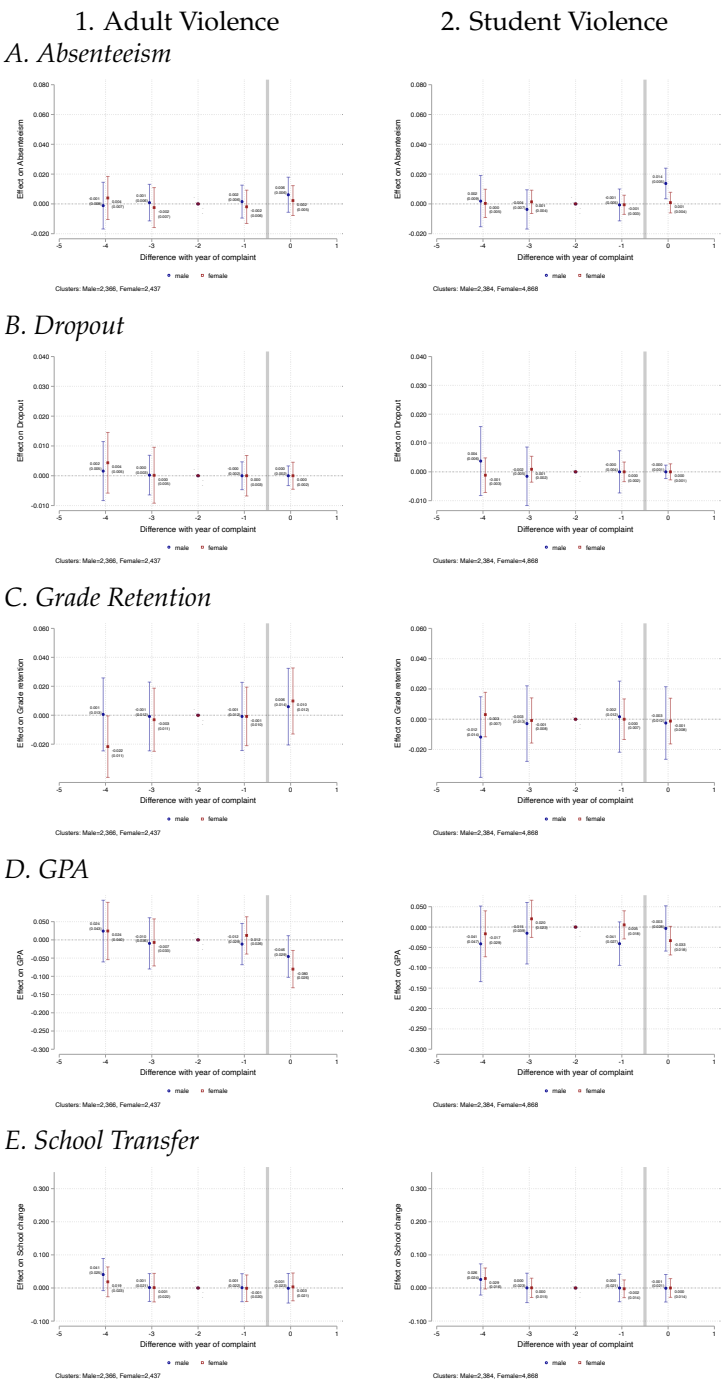
The relatively modest effects on siblings, combined with their distinct pattern compared to direct victim effects, provide additional confidence that our main results reflect the causal impact of violence exposure rather than unobserved household-level factors that might confound our estimates.

Figure E.1: Robustness of Results to Fuzzier Matching



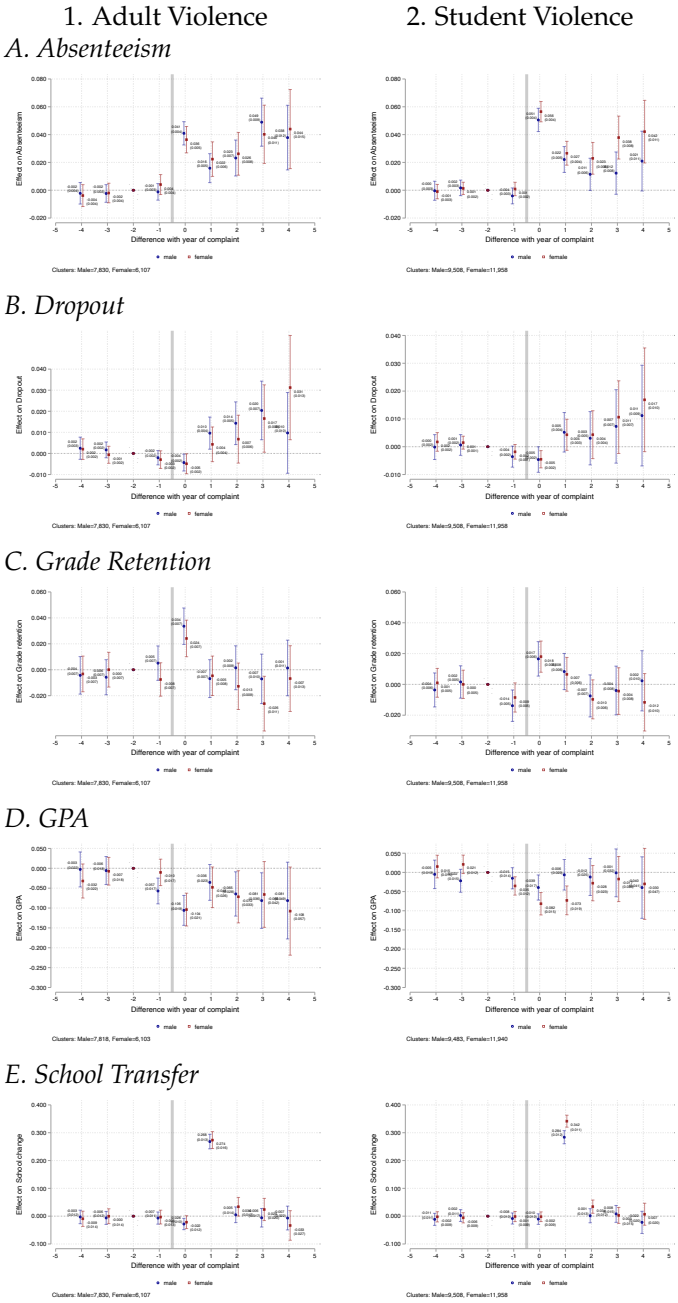
Notes: This figure shows event-study estimates of school violence on educational outcomes using a fuzzy matching strategy with fewer matching variables as a robustness check. The analysis compares victims of adult violence (column 1) and student violence (column 2) to matched controls, including only grade, gender, and school characteristics of the school attended the year before the incident. Panel A shows effects on absenteeism, Panel B on dropout rates, Panel C on grade retention, Panel D on GPA, and Panel E on school transfers. The reference period is two years before the incident (t-2). Results demonstrate robustness of main findings to alternative matching specifications. Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the individual level.

Figure E.2: Robustness of Results to Placebo Timing



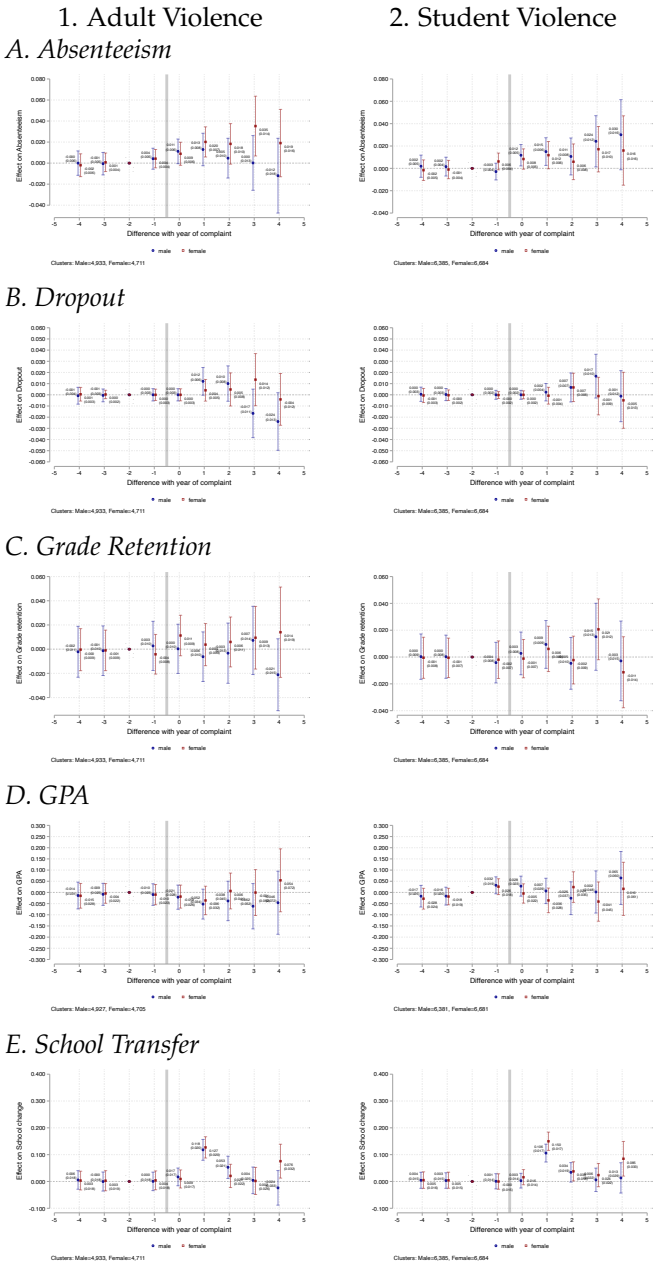
Notes: This figure shows event-study estimates using a placebo test where the event time is artificially set three years before the actual incident as a robustness check. The analysis compares victims of adult violence (column 1) and student violence (column 2) to matched controls during this artificial event period. Panel A shows effects on absenteeism, Panel B on dropout rates, Panel C on grade retention, Panel D on GPA, and Panel E on school transfers. The reference period is two years before the artificial incident (t-2). Results show no significant effects during the placebo periods, supporting the causal interpretation of main findings. Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The lines represent 95% confidence intervals with standard errors clustered at the individual level.

Figure E.3: Robustness of Results to using Classmates as Controls



Notes: This figure shows event-study estimates using an alternative matching strategy with classmates as controls as a robustness check. The analysis compares victims of adult violence (column 1) and student violence (column 2) to same-gender classmates from the same grade and school during the incident year. The sample is restricted to victims attending schools with at least five students of the same gender enrolled in their grade (with more than 98% of victims satisfying this condition). Panel A shows effects on absenteeism, Panel B on dropout rates, Panel C on grade retention, Panel D on GPA, and Panel E on school transfers. The reference period is two years before the incident (t-2). While this approach may underestimate true treatment effects due to spillover effects on classmates, results still show statistically significant impacts in both the short and medium term, though magnitudes are somewhat attenuated relative to main estimates. Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The shaded areas represent 95% confidence intervals with standard errors clustered at the individual level.

Figure E.4: Event-Study Effects on Siblings



Notes: This figure shows event-study estimates for siblings of violence victims as a robustness check to address concerns about unobserved household-level shocks. The analysis examines treatment effects on 5,675 siblings from 4,772 reporting students, enrolled between 3rd grade and 12th grade at the time of the report. Siblings are identified using Chile's Spanish naming tradition, where students sharing the same pair of surnames in the same order within a school are classified as siblings. The sample comprises 3,276 siblings of peer violence reporters and 2,418 siblings of adult abuse reporters, with 59% attending the same school as the reporting student during the incident year. Panel A shows effects on absenteeism, Panel B on dropout rates, Panel C on grade retention, Panel D on GPA, and Panel E on school transfers. The reference period is two years before the incident (t-2). While siblings show some effects due to potential family disruption from the reporting process, these impacts are considerably smaller than those observed for direct victims, providing confidence that main results reflect causal effects of violence exposure rather than household-level confounders. Estimates include individual fixed effects, year fixed effects, and grade-by-years-since-report fixed effects. The shaded areas represent 95% confidence intervals with standard errors clustered at the individual level.