Can Attitudinal Changes Toward Reporting Curb Violence? An Experimental School Intervention in Peru *

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Abstract

This paper explores a preventative approach to reduce youth violence in urban settings of developing countries. In the context of Peru, we examine a school-based intervention aimed at changing attitudes toward reporting violence, using a randomized control trial. The intervention trained students and key school personnel through classroom discussions, and an online platform for reporting and solving incidents using less punitive practices. Our findings, drawn from student survey data, school records, and police data, show a 50 percent decline in youth violent crime in treated schools and their surrounding areas. These effects primarily stem from changes in attitudes and behaviors concerning the reporting of violence. Using school records and data from the online platform, we find that students increase their reporting of violence, with most cases being successfully resolved in the schools. The drop in school violence also has beneficial long-term effects: there is a noticeable decrease in school dropout rates and a lower likelihood of school perpetrators engaging in adult criminal activities four years post-intervention. These results underscore the effectiveness of initiatives that encourage reporting of violence in school settings, in reducing crime, and fostering a safe environment without stigmatizing perpetrators.

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1 Introduction

Youth violence is especially pronounced in developing countries, where the highest rates of violent crime are found in urban areas, disproportionately affecting young people (UNODC 2019; IgarapeInstitute 2017). Much of this violence typically emerges in early adolescence, often within school settings where extreme violence is both observed and accepted. One common approach to reduce violence is through policing and incarcerating older individuals (e.g., Becker 1968; Draca and Machin 2015; Blattman et al. 2021) or by imposing severe punishments on younger individuals in schools (Bacher-Hicks et al. 2019; Owens 2017; Weisburst 2019). However, in developing countries, where law enforcement is weak and there are common norms against reporting violence, these measures often fall short.[1] Furthermore, harsh punishments at a young age can have negative impacts in the long term by reinforcing a cycle of criminal activity (Billings and Hoekstra 2023; Adukia et al. 2023; Shem-Tov et al. 2021; Aizer and Doyle Jr 2015).

In response to these challenges, this paper proposes a preventative approach focused on changing attitudes and behaviors about reporting violence at a young age. This approach involves a new school-based system designed to report and resolve violence using less punitive practices. A growing literature suggests it is possible to change preferences and beliefs about gender attitudes, social norms, and political views (e.g., Dhar et al. 2022; Dahl et al. 2021; Bursztyn et al. 2020; Cantoni et al. 2017; Paluck and Green 2009; Chong and Ferrara 2009). Drawing on these insights, our study examines whether changing attitudes toward reporting violence at an early age can decrease youth violence and how that might influence long-term behavior. In particular, we investigate the potential impact of challenging the social norm of not reporting to authorities on reducing violence among young people and enhancing human capital in the long run.

We exploit experimental variation in a school intervention in Peru that trained students through discussions, roleplaying, and an online platform to increase reporting of violence. In particular, the intervention not only promoted a new school platform to report violent events but also the use of less punitive practices to solve them, allowing to avoid the trade-off between reporting and facing negative consequences versus not reporting and more school violence. The intervention, which we evaluate through a randomized controlled trial, was implemented by the Ministry of Education (MoE) in secondary schools, covering about 19,500 students in urban areas during 2015. The intervention particularly targeted first- and second-year secondary students (12–14 years old) and involved classroom activities to improve the reporting of violence via an online school platform for about three hours a week during October and November 2015. It focused on the first years of secondary education since that is a period when children are more vulnerable to violence and potential recruitment by juvenile gangs (Sviatschi 2022a,b; Cruz et al. 2017).

The MoE was particularly interested in reducing the high levels of extreme violence among

[1] This lack of reporting to authorities affects police officers' ability to detect and punish criminal behavior. For example, recent estimates show that about 90 percent of all crimes in Latin America, the most violent continent in the world, are unreported (Jaitman and Anauati 2020). This challenge is particularly severe in high-crime areas with diminished trust in the police and justice system.

young people in marginalized urban areas of Peru. Baseline data from 2015 show that about 73 percent of students aged 12–14 had experienced physical violence (with 10 percent involving weapons), 30 percent had experienced violent thefts, and 50 percent had been associated with gangs. Nevertheless, there was a high tolerance for violence: while 79.5 percent of adolescents reported witnessing violence at school, 29.1 percent did not intervene, and 27.8 percent even participated or encouraged it (INEI 2015b). This reluctance to report is mainly due to social norms against "snitching" as well as fear of retaliation due to either harsh penalties or unresolved incidents.

To boost reporting among students, the intervention aimed to cultivate a lower tolerance for violence and a sense of security in reporting it. Thus, the intervention consisted of two complementary components implemented across all treated schools. The first component involved workshops about violence, including information on its long-term consequences and the importance of reporting it and reducing bystander behavior. Importantly, this component aimed to show the negative consequences of not reporting violence, affecting not only victims but also perpetrators who might escalate their own violent behavior. The workshops tried to show students that at an early age, such behaviors could be corrected within the school setting. Additionally, hands-on activities like festivals, marathons, and pamphlets complemented these workshops, reinforcing the messages throughout the school.[2]

The second component focused on promoting a new anonymous platform for reporting violence, aiming to both raise awareness and provide a safe response tool. This component sought to change the view that reporting violence is not beneficial by promoting a new system that protects victims and uses less punitive practices to deter future violent behavior.[3] To this end, key school personnel (the teacher coordinator, the school head, and the person responsible for maintaining the school's peaceful coexistence) were also trained on using the online platform and resolving incidents, countering the belief that reporting violence is futile and showcasing the effectiveness of proper reporting mechanisms.

We analyze the intervention's effects through surveys and administrative data from schools, colleges, and police records. The main outcome of interest is the incidence of violence, which we measure in several ways. First, we use the endline survey to analyze the effects two months after the intervention, focusing on physical violence, injuries, threats, or thefts by peers. Second, we use administrative school records to measure whether students were more likely to be involved in violent incidents or thefts at school one year after the intervention. Third, we use police records to measure the incidence of youth violence in schools and their surrounding areas within one year of the intervention and four years later to examine adult criminality.

[2]Each session prompted students to reflect on the presence of violence in their lives and the importance of reporting it. Roleplaying and theater representations were used in these sessions so students could assume the roles of victims and perpetrators.

[3]In many neighborhoods, students often lacked a reliable way to report violence. This absence of a trustworthy system led to a common belief among students that not reporting was a safer choice to reduce retaliation and to prevent their peers from being marked by minor criminal offenses. The intervention tried to counter this belief by highlighting the benefits of effective reporting systems in schools.

We also use data on intermediate outcomes to shed light on the mechanisms behind the intervention. To understand the roles of reporting and attitudes in our results, we focus on two aspects. First, we consider the actual reporting of violence and bystander behavior using the endline survey, school administrative records, and data from the online platform. Second, we look at attitudes and beliefs regarding violence. We use the endline survey to assess whether students believed violence could affect their school performance, whether they were willing to intervene, and whether they thought school personnel could help.

We also use administrative records from the universe of Peruvian schools, applications to Peruvian colleges, and adult arrest rates to understand how the intervention affects long-term outcomes such as school dropout, mobility, college applications, and adult arrest records four and five years after the intervention.

The first main finding is that violence declines in treated schools. Using self-reported behaviors from the endline survey, we find that students in treated schools are less likely to experience violence. We see not only a reduction in verbal threats but also a large decline in physical violence, thefts, and exposure to weapons. We validate this result with administrative school records, finding that one year post-intervention, students are less likely to receive the lowest behavior grade, typically given to those involved in physical violence and thefts. Consistent with these results, using police administrative data, we find that within one year, violent crime declines by 50 percent in treated schools and their surrounding areas. Moreover, we observe a decline in drug-related crimes which are usually associated with gangs.

The program offered two main strategies to reduce violence. The first aimed to challenge preexisting views about reporting, namely that students should not report violent incidences and violence can be accepted under certain circumstances. The second strategy aimed to increase awareness of the effectiveness of reporting violence within the school system, potentially changing participants' beliefs about the costs and benefits associated with violence and its reporting. Therefore, to analyze the mechanisms underlying the decline in violence, we explore intermediate secondary outcomes such as reporting, beliefs, attitudes, and behaviors concerning violent events and bystander behavior.

We find that the intervention significantly improves attitudes and behaviors about reporting violence. Using the endline survey, we observe that students are more willing to intervene in violent situations, thereby reducing bystander behavior. In fact, using administrative data from schools and the online platform, we find that students in treated schools are more likely to report violence to school authorities, and most of the cases are successfully resolved within the school. There is also evidence that the intervention changes participant beliefs: treated students are more likely to associate school violence with worse educational outcomes and are increasingly likely to recognize the significance of the role school personnel play in resolving conflicts. Furthermore, the reduction in bystander behavior provides some evidence that the intervention might also reduce the social stigma associated with reporting. Finally, while the intervention aimed to reduce the acceptance of violence, we see no change in these attitudes. This result may stem from a prevalent

belief among students that violence is still acceptable for a "fair" cause. Importantly, even if students could understand why someone would use violence, they still recognized the importance of reporting it to prevent escalation.

We also find that the intervention positively impacts long-term consequences for human capital. Administrative records for the universe of all Peruvian schools show that treated students are less likely to drop out or transition to a different school. Additionally, we find some evidence that these students earned higher scores on the college entrance exam. To analyze whether these effects are solely due to changes in teachers' behavior, we study the effects on younger and older cohorts that were not treated. We find no changes in dropout and mobility for these cohorts, suggesting that the observed effects are driven by actual changes in treated students' behavior.

Our second main finding is that the intervention reduces adult criminality for young school aggressors. On the one hand, the intervention increases the reporting of violence and reduces the incidence of violent events. On the other hand, reporting could generate negative effects for those reported as perpetrators if authorities expel them, or it could increase their chances of being in juvenile detention centers. We find consistent evidence with the first mechanism. School perpetrators are 45 percent less likely to be involved in crime as adults, suggesting that this type of intervention can benefit both potential victims and perpetrators. These results are consistent with the view that reporting violent behavior at a young age can prevent violence from escalating. Moreover, they are in line with the rate of success of reported cases within the online platform and how school authorities dealt with the incidents using less punitive practices.

One potential concern is our reliance on self-reported data for certain outcomes. For example, there could be social desirability bias in the treated schools (e.g., experimenter demand effects). Nonetheless, we believe misreporting is an unlikely mechanism, for several reasons. First, most of the measures are validated by administrative records. For example, the self-reported incidence of violence is validated by school and police reports showing that injuries and thefts declined in treated schools and their surrounding areas a year after the intervention. If the short-term results are driven by experimenter demand effects in treated schools, they would likely disappear a year later. Moreover, we also see a similar pattern when using police records on adult criminality four years post-intervention and when using administrative school records related to students' violent behavior a year post-intervention.

Second, measurement error does not explain the pattern of treatment effects: although we observe a drop in the incidence of violence and a change in attitudes toward reporting it, there is no evidence of altered attitudes about the justification of violence. Systematic measurement error would need to correlate with reporting, not with acceptance. This seems unlikely, especially given the magnitudes of the impacts and the intervention's effort to change students' acceptance of violence. Therefore, the lack of a change in the acceptance of violence reduces this concern. Third, the spillovers of these effects on non-self-reported schooling and crime outcomes (e.g., dropout, mobility, arrests) four years after the program ended offer reassurance that it genuinely changed participants' behavior. Finally, endline data were collected by the National Institute of Statistics

and Informatics (INEI), which had no relationship with the intervention teams or the schools.

Our results extend recent literature by Dhar et al. (2022) showing that schools can be a fertile environment for shaping attitudes at an early age. In particular, we show that schools can help change norms concerning reporting, a task more challenging at the neighborhood level where the only way to report violence is through the police, whom residents frequently distrust. By promoting a new school-based system, the intervention not only changes students' perceptions about reporting but also provides the tools to translate attitudinal changes into behavior. Importantly, we show that increasing the reporting of violence at an early age can be effective for both victims and perpetrators, helping to prevent future criminal involvement.

This paper is also closely related to novel research on preventative alternatives to reduce violent crime. Some interventions highlight the role of cognitive behavioral therapy in preventing automatic behavior in high-risk individuals as well as access to jobs or cash grants (e.g., Hjalmarsson et al. 2015; Carr and Packham 2019; Davis and Heller 2020; Blattman et al. 2022; Bhatt et al. 2023). In the same line, recent literature highlights the role of school behavioral interventions and the development of non-cognitive skills (e.g., Alan et al. 2021; Karmaliani et al. 2020; Cunha et al. 2023; Dinarte 2020), as well as improving management practices and programs directed toward teachers or school social leaders to reduce violence at schools (Smarrelli 2021; Devries et al. 2015; Fabbri et al. 2021; Paluck et al. 2016).[4] We complement this body of literature by focusing on an alternative intervention that targets attitudes and behaviors toward reporting in a context where the prevalence of violence is often the byproduct of social norms. In particular, we analyze an intervention that targets school violence in the context of gangs and urban poverty, where norms of not reporting and a culture of punitive practices can be more salient. We also take a step further by providing new evidence that changing attitudes toward reporting can be relevant to increasing human capital and preventing criminal careers of school perpetrators. In this line, we add to recent work showing how shocks or interventions to early adolescence can be key to reducing adult criminal behavior (Sviatschi 2019, 2022a,b).

Closely related to our paper, a new literature studies the effects of restorative justice programs in schools. A meta-analysis of this literature shows that participation in these programs is linked to improved behavior, a better school climate, and a reduced likelihood of students engaging in

[4] Alan et al. focus on the impact of a program aimed toward building social skills and cohesion in Turkish elementary schools that received a large influx of Syrian children. In treated schools, teachers received training and implemented the program during extracurricular hours on a weekly basis. In these schools, the program had strong effects in reducing high-intensity peer violence and victimization. Karmaliani et al. study the effects of the interventions of Right To Play, a program that seeks to foster a child's social and emotional development through sports and games. Meanwhile, Cunha et al. focus on a parent-directed intervention toward fostering empathy in Chinese adolescents. Devries et al. measure the impacts on school staff violence toward children participating in the Good School Toolkit, an intervention designed by a Ugandan non-profit organization. Similarly, Fabbri et al. analyze the *EmpaTeach* initiative that focuses on empathy-building exercises and group work to equip teachers with self-regulation, alternative discipline techniques, and classroom management strategies to reduce the use of physical violence from teachers to students in the Nyarugusu refugee camp, Tanzania. Smarrelli studies a government program oriented to improving school leaders' skills to improve conflict and violence management in Peruvian schools. Last, Paluck et al. study the impact of a social influence strategy in schools. In treatment schools, some students were randomly assigned to an intervention that encouraged taking a stance against conflict. In the schools where these social referents were present, disciplinary reports dropped by 30 percent over a year.

behaviors detrimental to their health (Lodi et al. 2022). Recent work by Adukia et al. (2023) using a differences-in-differences approach also provides further evidence on the causal effects of these interventions. The authors show that restorative justice practices in the Chicago Public Schools system focused on coaching, leadership, and peer counseling reduce both violent and non-violent child arrests inside and outside school grounds. We add to this new work by providing experimental evidence that similar types of practices can also work in developing countries, provided there is an initial shift in attitudes toward reporting.

The remainder of the paper is organized as follows. In the next section, we present the setting and intervention. Section 3 describes the experimental design and data. Section 4 presents the empirical strategy. Section 5 presents the results. Section 6 concludes.

2 Background

2.1 School Violence in Peru and Protocols to Combat It

School violence affects millions of students in Peru. According to the Peruvian National Survey on Social Relations (ENARES), in 2015 approximately 75.3 percent of children and 73.8 percent of adolescents experienced some kind of violence in school at least once (INEI 2015b). Moreover, 47.4 percent of adolescents aged 12–17 (the ages range for secondary education in Peru) had experienced peer violence in the last 12 months. This violence took various forms, from verbal threats to extreme physical violence (such as gang violence and use of weapons), with 80.3 percent of these incidents occurring in or around school premises.

According to the ENARES survey, most victims did not receive any support. In 2015, only 44.7 percent of those who reported being victims in the last 12 months asked for help, and very few reported it to school authorities (INEI 2015a). The reluctance to report was mainly attributable to two factors: there was a social norm among students to not interfere or "snitch" on others, and many believed that reporting violence could lead to null or severe repercussions for the perpetrators, including suspensions or harsh measures, potentially prompting retaliation against the victims. Moreover, social tolerance of violence against children and adolescents remained high at 42.1 percent. This is confirmed in our sample at baseline, where more than 40 percent of students agreed with the use of physical violence and about 45 percent agreed with bystander behavior. This high social tolerance was partly due to students' lack of awareness about the consequences of violence: about 42 percent believed that both engaging in violence and not reporting it had very little effect on their learning and well-being at school.

In 2011, the Peruvian government implemented measures against school violence through a law that promoted peaceful coexistence in educational institutions. The objective was to establish a safe school environment by preventing, identifying, resolving, and eliminating violence there. One important initiative was SiseVe ("Yes, we see it"), an online platform that allows individuals to report violent incidents in schools and their surrounding areas. This initiative spans multiple ministries in addition to the MoE, including the Ministry of Health, the Ministry of Women and

Vulnerable Populations, the Ministry of Justice, the Ministry of the Interior (i.e., national security), and the Public Ministry.

SiseVe not only provides tools for violence prevention and response but also offers relevant information on community resources to protect children and adolescents. Students, parents, friends, and witnesses can use it to anonymously report a violent incident.[5] Each report is then forwarded to the local education authorities, who verify it and ensure that the victims are protected from further harm. Once a report is filed, the MoE, through the Regional Education Department (DRE) and the Local Education Management Unit (UGEL), becomes aware of the incident and opens a new case.

The MoE has established a detailed response protocol for each type of violence.[6] For example, in cases of psychological and/or physical violence between students, the relevant school authorities talk separately with every student involved, inform parents of the situation, and try to resolve it with additional information from witnesses, teachers, and other school members. Moreover, to prevent future recurrences, the school principal coordinates with the program tutor to develop sessions and other activities related to preventing violence in the classroom. If the authorities believe a more in-depth solution is warranted, they refer the case to other institutions such as the Ministry of Health, Public Ministry, National Police, and Emergency Center for Women, based on the victim's specific needs. Subsequently, the school principal, teaching coordinator, and the person in charge of maintaining the school's peaceful coexistence continue to monitor the case and regularly meet with parents.[7] A case is considered closed once the violence has stopped and protection has been guaranteed for the affected students, including their ability to remain in school safely and improvements in their socio-emotional well-being.

A central goal of the SiseVe initiative was to ensure that each student continued attending school, thereby maintaining their continuity within the educational system. Therefore, each protocol is designed to keep both victims and aggressors in school. This approach includes measures to prevent re-victimization and confrontations between students. At the same time, schools are discouraged from using punitive measures such as expulsion, instead focusing on providing socio-emotional support to the aggressor. This aims to foster their sense of belonging and change their behavior without removing them from the educational environment.

Despite these efforts, by 2015, many school authorities were not well acquainted with the system and protocols for handling violence. In response to this knowledge gap, the MoE designed an intensive pilot program to change attitudes toward reporting and increase knowledge about this

[5]The report is made anonymously. However, the alleged victim's name should be reported even when the alleged aggressor's name can be omitted.

[6]The MoE developed the Protocols for Attention to School Violence, led by the school head, the teaching coordinator, and the person in charge of the school's peaceful coexistence from the Committee for Tutoring and Educational Guidance. The protocols vary depending on whether it is a case of violence between students or between students and teachers and depending on the type of violence (verbal, physical, sexual, or psychological). Likewise, the protocols require other government institutions to be involved in cases of violence that put students' lives at risk. The SiseVe protocol can be found here.

[7]The person responsible for the school's peaceful coexistence could be a psychologist, but they must be physically present at the school.

system among students and key school staff.

2.2 Description of the Intervention

In 2015, as part of the SiseVe initiative, the MoE launched an intervention to decrease the acceptance of violence and increase reporting. This was achieved by training key school personnel (the school head, the person responsible for maintaining peaceful coexistence within the school, and the program tutor) on the online platform. The training, carried out by a specialized team, covered various aspects: handling school violence using the SiseVe platform, which included engaging with relevant activities and materials, and adopting proper response protocols. After the training, the school personnel facilitated the intervention workshops for students. The intervention was also coordinated with the pedagogical team of the DRE and the UGEL. During implementation, all treated schools received visits from the intervention team and unannounced visits from regional and local authorities (DRE and UGEL).

The intervention workshops targeted students in the first and second years of secondary education (ages 12–14 years) during school hours. The MoE focused on these grades as they mark the period when most children often begin to engage in violent events and join gangs. For treated schools, the program consisted of 3-hour classroom sessions every Friday in October and the first week of November (a total of 15 hours). Before the program, these hours were generally used for art projects or study assistance under teacher supervision. Importantly, it did not crowd out core teaching activities, which remained the same as in control schools. Therefore, the number of hours children interacted with their classmates and teachers did not vary across the treatment and control classrooms.

The intervention had two complementary components that were jointly delivered in all treated schools. The first component consisted of two types of activities to curb tolerance of violence and encourage responsiveness: (i) workshops about violence, including information about its consequences, and the importance of reporting it; and (ii) hands-on activities to reinforce the messages provided during the workshops. Each session prompted students to reflect on violence in their lives and neighborhoods. In many sessions, students discussed news or stories about violence and how not reporting it could lead to more violent events. The workshops highlighted the negative consequences of not reporting for both victims and perpetrators (e.g., the case of a student who started being involved with gangs doing minor crimes and ended up involved in higher-level crimes). Students also took part in roleplaying, debates, and theater representations so they could assume the roles of victims and perpetrators. They also worked in groups to communicate what they learned by creating informative material, such as anti-violence slogans and posters, and by organizing music festivals and in-school parades with pamphlets. In total, 130 activities were offered, with each school implementing 5, on average. Appendix A provides a list of the activities and initiatives.

For the second component, the intervention team had two main tasks concerning the SiseVe platform: training students about its use in the workshops and launching an awareness campaign

for the rest of the school. They promoted the platform by showing students how to access and use it and explaining key aspects of its functions, such as user anonymity and the response procedures of local authorities. Finally, each school received a detailed information package of resources to address episodes of school violence.[8] This component aimed to increase trust in the school system as an effective tool for reporting and solving violence. In particular, through both components, students learned not only to help their peers by reporting violence but also that the online platform served as a tool to resolve violence before it escalated, not just to punish aggressors.

3 Study Design and Violence Outcomes

3.1 Experimental Design

We collaborated with the MoE to conduct a cluster randomized controlled trial of the school program in a sample of eligible schools. To be eligible for the intervention, schools had to satisfy the following criteria: be a public school, offer enrollment in secondary grades, be located in a low-income urban area, have computers connected to the internet, and not participate in other MoE interventions.[9] Of all the nationwide schools that met these criteria, we randomly selected 33 as treatment observations and 33 as control observations. The randomization was stratified by region. Within the schools selected for the intervention, all students in the first and second years of secondary school were treated. The study sample includes 1,870 classrooms from 66 secondary schools and over 19,512 children ages 12 to 14. Figure 1 presents the geographic distribution of the treatment and control schools.

[8] This package was titled "10 Recursos para Prevenir y Atender Casos de Violencia Escolar" (10 Resources to Prevent and Address Cases of School Violence). Appendix B provides a review of the protocols.

[9] Access to computers and the internet were required since the SiseVe platform is online.

Figure 1: Location of study schools by treatment status

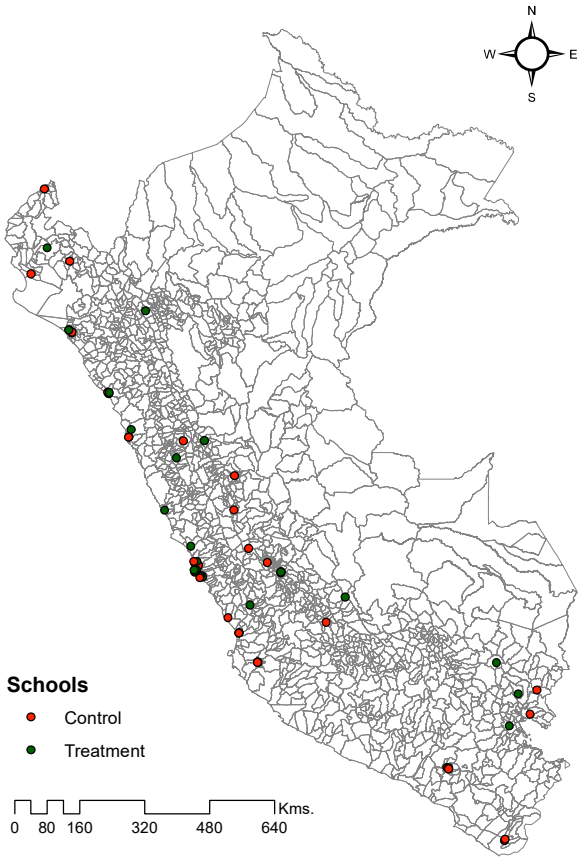


Table 1 presents balance checks on baseline school characteristics (e.g., the number of students and teachers per school, students per classroom, and administration type) and balance checks on students' characteristics by treatment status. Consistent with random assignment to the intervention, we find no statistically significant differences between treatment and control schools.

Table 1: Baseline balance of school and children's observable characteristics

	Treatment	Control	Difference (T - C)	p-value (T = C)
A. Balance of school observable characteristics				
# students at secondary level	845.000	822.455	22.545	0.892
Secondary enrollment (log)	6.377	6.343	0.034	0.887
% Co-educational schools	0.818	0.848	-0.030	0.746
# teachers at secondary level	49.879	49.970	-0.091	0.992
# students per teacher (secondary)	16.171	15.575	0.597	0.591
# sections (secondary)	29.606	28.303	1.303	0.806
# students per section	26.887	26.720	0.167	0.919
% schools in the coast region	0.667	0.697	-0.030	0.795
% schools in the highlands or Amazon region	0.333	0.242	0.091	0.422
Average HDI (Local level)	0.519	0.512	0.008	0.679
Average income per capita (Local level)	709.403	696.021	13.382	0.447
B. Balance of child observable characteristics				
% Female	0.487	0.431	0.056	0.292
Average age	13.234	13.171	0.063	0.296
% Delayed students (1 = more than two years behind)	0.045	0.045	0.001	0.918
% Migrant students	0.285	0.264	0.022	0.360
% Separated parents	0.419	0.401	0.018	0.510
% Experience violence at home	0.424	0.433	-0.009	0.731
Average # of siblings	2.886	2.841	0.044	0.743
Average health status (1 = lowest / 4 = highest)	2.984	2.979	0.004	0.894
% health problem or disability	0.058	0.058	0.000	0.956
% Poor	0.324	0.263	0.060	0.250
% Water supply at home	0.856	0.900	-0.045	0.103
% Electricity at home	0.971	0.969	0.001	0.867
% Bathroom at home	0.893	0.901	-0.008	0.811
% Internet users	0.630	0.644	-0.014	0.790

Notes: ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively.

The intervention had high compliance due to MoE efforts and enforcement. Since the program was designed and implemented by the MoE, school participation was mandatory. All schools receiving the treatment underwent the full intervention. To enforce compliance, the intervention team made announced visits to schools, with each visit being reported back to the MoE by the school principals (the intervention team also had to report each school visit). Moreover, the intervention was coordinated between the MoE and the UGELs, which are in constant communication with school authorities since they are responsible for overseeing educational quality and distributing resources. The established relationship between schools and UGELs facilitated smooth collaboration with the MoE. According to fieldwork reports, all school authorities were enthusiastic and readily undertook the activities.

To understand the effects of the intervention, specially trained employees from the National

Institute of Statistics and Informatics (INEI) administered surveys in the classroom to both treated and control children before and after the intervention (baseline and endline). Teachers were not present in the classroom during data collection. The baseline survey was collected from April to May 2015, and the endline survey, which asked the same questions, was administered two months post-intervention. The endline survey's response rate is 92 percent, with no differential attrition by treatment status. Moreover, attrition in the treatment versus control group is not differential by baseline outcomes (see Appendix Tables A.2, A.3, and A.4).

3.2 Incidence of School Violence

The main outcome of interest is the incidence of violence in schools and their surrounding areas. To measure this outcome, we use three sources of data. First, we measure victimization using the endline survey, where students reported whether they had experienced any type of violence at school. We then combine 8 school violence incidence variables into a weighted index (see the Appendix for more details). We measure incidents mostly through direct questions about students' involvement in violent acts at school (e.g., whether they experienced physical or verbal violence by other students).

Second, we use school administrative reports for the end of the academic year in 2016, when teachers grade each student's behavior. The grading for the behavior score ranges from A to C, with C being the lowest grade possible. Importantly, teachers assigned the lowest score to students involved in extremely violent events, such as physical fights or thefts. We match the behavior data using the students' national IDs, available for 90 percent of the sample. However, it is important to note that recording the behavior score is not mandatory for schools, and therefore 30 percent of schools did not report this score.[10]

Third, we use police records on violent incidents in schools and their surrounding areas for the end of 2015 and 2016 from the Peruvian Crime Incidence Hotspot Map, managed by the Ministry of the Interior, which includes thefts and injuries. We also complement this data with reports related to drug selling which are usually associated with juvenile gangs. Since the map was entirely georeferenced and had geolocation codes for each school, we can identify the number of crime reports related to youth crimes from each school and within a predetermined perimeter around each school.

The last two measures concern extremely violent episodes, while the reported measure from the endline survey also includes less violent events. The advantages of using administrative records from both the police and schools are that they are not driven by potential experimenter demand effects and can measure medium-term effects.

[10] We analyze if there is a correlation between not reporting the score and our treatment, and we find no evidence of it (see Column 3 in Table A.2).

3.3 Reporting and Attitudes toward Violence

The program incorporated two main strategies to reduce violence. The first was to challenge social norms around reporting and the view that reporting would lead to negative consequences for victims and perpetrators. For example, many students refrained from reporting violence due to the social backlash from peers. Moreover, in the focus groups, many students believe that reporting could lead to harsh consequences for perpetrators and possibly escalate violence. The second strategy aimed to change beliefs about the consequences of violence and the acceptability of it in certain circumstances. Thus, to understand the mechanisms of the intervention, we focus on two outcomes: (i) the actual reporting of violence and (ii) attitudes and beliefs regarding violence and reporting.

To evaluate changes in reporting behavior, we use three different measures. First, we use the endline survey that asked students if they had sought help from school staff or reported a violent incident to school authorities if they were victimized in the past month. Second, since this was a reported measure that could be subject to experimenter demand effects, we also use data from the SiseVe platform, which includes the school code, enabling us to identify the number and status of reports made at the school level. Third, the endline survey helps us measure bystander behavior as students reported whether they or others defended a victim or reported the incident to any authority. For bystander behavior, we construct a weighted index of four direct questions on students' willingness to help their classmates in these situations.

Finally, to measure changes in attitudes and beliefs, we use the endline survey to construct three outcomes. The first measure involves assessing students' attitudes toward discussing and reporting violence, focusing on their willingness to seek help or report incidents they had experienced or witnessed, as well as their comfort in seeking help at school. We construct a weighted reporting index based on four questions related to students' ability to talk to adults and report violence.

The second measure evaluates attitudes and beliefs about the use of violence. This encompassed students' perspectives on justifying violence, the belief that their school performance would improve without violence, and confidence in school personnel's ability to resolve violent events. We create a weighted index by combining six variables, which are six direct questions on students' attitudes toward acceptance of violence at school and whether these attitudes were considered "common" (e.g., whether students were amused to see students hit others). The third measure is an index created from students' beliefs on violence and education. This is based on two questions that asked them if they believed less peer violence and more effective management by school authorities would benefit their learning process.

All indexes are also balanced between treatment and control groups at baseline (see Table 1).

Table 2: Baseline balance of outcome variables

	Treatment	Control	Difference (T - C)	p-value (T = C)
School viol. incidence index	-0.103	0.000	-0.083	0.311
Reporting behavior	0.352	0.349	0.004	0.750
Bystander behavior index	0.008	0.000	0.005	0.839
Attitudes toward reporting index	-0.022	0.000	0.017	0.799
Attitudes toward acceptance of violence index	0.005	0.000	0.019	0.743
Beliefs on violence and education index	-0.033	0.000	-0.023	0.448
Students carry weapons	0.110	0.126	-0.011	0.672

Notes: ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively. The variable "Reporting behavior" is a dummy variable that takes the value of 1 if a student reports school violent cases to the school authorities (teachers, principal, or tutor). The variable "Students carry weapons" is a dummy variable and takes the value of 1 if students reported that their classmates brought weapons to school.

3.4 Dropout and College Applications

Given the short time between the intervention and the endline survey, we can only measure the short-term effects on participants' beliefs and attitudes. Nevertheless, we can measure medium-term effects by using data from the MoE's national online system for educational institutions ("SIAGIE"), which simplifies the registration process for student enrollment.[11] These data allow us to construct two indicators of school enrollment: school dropouts, which is defined as not being enrolled in any educational institution (public or private) in Peru the year after the intervention, and school mobility, which is defined as not being enrolled in the same school the year after the intervention.

The SIAGIE dataset includes students' national IDs and school codes that show the school of registration and attendance for a specific academic year. By matching the IDs from the baseline survey (available for almost 90 percent of the sample) with the ones in administrative records, we can identify whether a student had registered in the school system for the next academic year and, if so, whether they had transferred to another school.[12]

We also study college applications and average scores on Peruvian college entrance exams as long-term outcomes. For these college-related outcomes, we construct a college application index using administrative records from 2018 to 2020 of the National Superintendence of University Higher Education. These identify whether a student—those who had been in the target years of secondary education and had graduated by 2019—applied to college after graduating from high school. The average score on the entrance exam identifies the average application score for each student across all college applications they submitted.

[11] Additionally, the SIAGIE data provide information on school characteristics such as administration type, school size, school type (single sex or coeducational), and educational levels.

[12] Column 2 in Table A.2 shows that the matching on ID is balanced across treatment status.

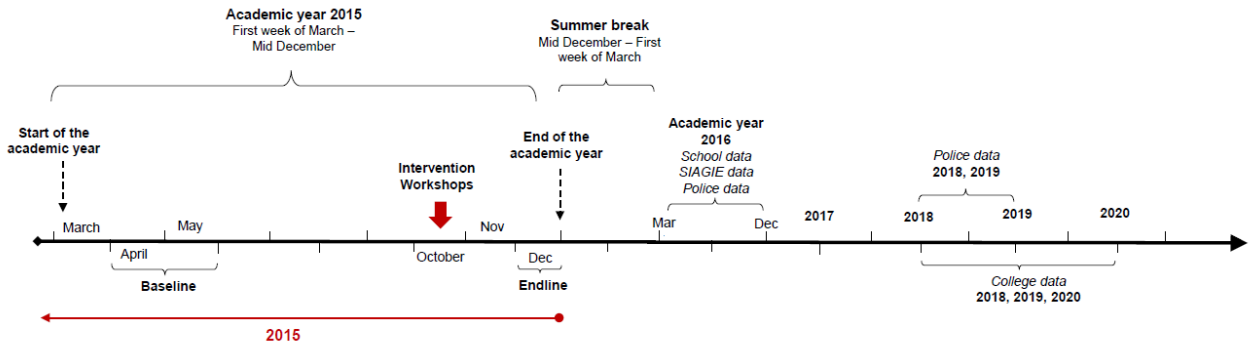
3.5 Adult Crime Records

To identify the effects on adult criminal outcomes, we use confidential national police records from 2018 and 2019, allowing us to match each student using their national ID or full name. Since the dataset includes all detainees who were registered at a police station, we can determine whether a student who was 18 years or older in 2018 and 2019 has been detained at least once at a police station.

As an exploratory analysis, given that school perpetrators are more likely to follow a criminal path, we also examine the heterogeneity of adult crime by school perpetrators in 2015 before the intervention started. We use three definitions of school perpetrator, the first being the self-reported perpetrator. This variable is based on four questions at baseline related to acts committed by the student at school. These questions include whether they have threatened a classmate, teased others, insulted a classmate, or started a fight. If the student reports having committed at least one of these acts, the variable equals 1. The second and third variables are based on a peer nomination. As part of the questionnaire, students were asked to name up to three classmates who are frequently unkind to others, fight with others, damage classmates' belongings, and threaten peers. The second variable indicates whether a student has been nominated as a perpetrator at least once in the baseline survey. If they have been nominated, the variable equals 1. The third variable indicates whether a student has been nominated multiple times, equaling 1 if they have been nominated by more than one classmate as a perpetrator in the baseline survey.

Figure 2 presents the timeline of the intervention and data collection.

Figure 2: Timeline



4 Empirical Strategy

We estimate the following regression with one observation per student:

$$Y_{ij} = \beta_o + \beta_1 Treated_j + \beta_3 X_{ij} + \epsilon_{ij}, \tag{1}$$

where Y_{ij} is the outcome variable measured at the follow-up survey for student i in school j. $Treated_j$ is a binary variable that equals 1 if the school was assigned to the treatment group, and 0 otherwise. Thus, β_1 shows the average effect of the intervention on the outcome. The vector X_{ij} includes a set of control variables—students, schools, and district characteristics—and a regional fixed effect.[13] When the outcome is an index, we include a missing flag for each component. The error term, ϵ_{ij}, is clustered at the school level, which is the level of randomization.

We correct p-values using the adjustments proposed by Westfall and Young (1993), and report the family-wise error rate (FWER). In addition, we estimate two alternative specifications, one without control variables (see Appendix Tables A.5–A.9) and another that includes the baseline analog of the outcome, Y_{ij}^0, as one of the control variables (see Appendix Tables A.10–A.13).

5 Results

In this section, we present three sets of findings. First, we find that the intervention was successful at increasing the reporting of violence and changing attitudes toward reporting. Second, we find a reduction in school violence and surrounding areas in the short and medium term. Third, we find positive long-term effects in dropout rates and lower likelihood of school perpetrators engaging in adult criminal behavior four years after the intervention.

5.1 Incidences of Violence in Schools and Their Surrounding Areas

Our first main finding is that the intervention reduces incidences of violence in schools and their surrounding areas. Table 3 presents the results. Using data from the endline survey, Column (1) shows that treated students are less likely to experience violence at school. These students' school violence index is 0.06 standard deviations lower than those in control schools. Column (2) shows that treated students are also less likely to be exposed to weapons in school, which are usually associated with gang activity. Appendix Table A.16 reports the effects of each of the variables comprising the overall violence index. It shows that the effects are strongest for physical violence, thefts, and threats, with no effects on less extreme forms of violence such as bullying.

Second, using school administrative records, Column (3) shows that treated students are about 40 percent less likely to be involved in physical violence and theft. These results align with those from police data in Column (4), which also shows that within one-year post-intervention, treated schools and their surrounding areas experience a lower number of violent crimes (about 50 percent lower than the control group). These results are robust to the adjustment of p-values and different specifications (see Appendix Tables A.5 and A.10). Finally, in the Appendix to test whether the intervention was able to reduce exposure to gangs, we analyze the effects on drug-related crimes

[13] Control variables include the following: gender, migrant student, separated parents, type of school management, log of enrolled students, number of siblings, poverty proxy, water supply at home, electricity at home, bathroom at home, use of internet, average HDI, and average income per capita at the district level.

which are usually associated with juvenile gangs. Table A.20 shows a large reduction in this category as well.

In sum, the intervention in the short and medium-term reduced the incidence of violence. Moreover, the fact that the effects are robust using different measures beyond schooling records such as police reports provides evidence that the intervention changed student behavior. In particular, in the next section, we analyze whether the effects are driven by changes in attitudes and behaviors toward reporting violence.

Table 3: Primary outcomes: Violence incidence

	School viol. incidence index (1)	Students carry weapons (2)	Violent school behavior (3)	Violent crime (4)
Treatment	-0.060^{***}	-0.015^{***}	-0.013^{***}	-4.653^{***}
	(0.016)	(0.006)	(0.004)	(0.125)
Adj. pval [MHT]	***	**	***	**
Adj. pval [FWER]	***	**	***	***
Control Group Mean	0.00	0.17	0.03	9.14
Control Group Std.	1.00	0.38	0.18	9.80
Observations	19,453	19,242	12,568	18,966

Notes: This Table presents the estimates from Equation 1 on the following outcomes. *School violence incidence index* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on 8 questions related to what had happened to students in their school in the past month. Missing flags for each variable are used to construct the outcome index. *Students carry weapons* equals 1 if students reported that their classmates brought weapons to school. *Violent school behavior* equals 1 if the student has the lowest grade for their behavior due to violent school behavior in 2016, and 0 otherwise. *Violent crime* is the number of thefts and injuries within a 0.22-mile (around 350 meters) radius of the school. On average, each city block measures between 100 to 120 meters in length. The radius covers three blocks around the school. The Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

5.2 Mechanisms: Violence Reporting and Attitudes

Table 4 presents the effects on violence reporting, using data from the school, the online platform, and the endline survey. Column (1) shows that the probability of reporting violence directly to a school authority increases by 2 percentage points (about 6 percent relative to the control group mean). Using data from the online platform, Column (2) reveals that the number of anonymous reports in treated schools has doubled compared to those in the control group.[14] Column (3) further indicates that the intervention reduces bystander behavior among treated students, showing that they are less likely to reinforce violence and more likely to intervene.[15]

[14]Most of the anonymous reports refer to extreme violence such as physical violence and threats. Nevertheless, in Table A.19 in the Appendix, we look by category and we see an increase in reporting for all types of violence, including guns, and violent theft.

[15]Tables A.16 and A.17 show the effect for each variable that comprises the indexes.

Table 4: Effects on actual violence reporting

	Reports incidents (1)	Reports on SiseVe plat. (2)	Bystander behavior (3)
Treatment	0.018^{**}	3.419^{***}	-0.045^{***}
	(0.008)	(0.061)	(0.017)
Adj. pval [MHT]	***	***	***
Adj. pval [FWER]	**	***	***
Control Group Mean	0.32	1.75	0.00
Control Group Std.	0.46	2.86	1.00
Observations	19,185	19,512	19,347

Notes: This Table presents the estimates from Equation 1 on the following outcomes. *Report of incidents* captures whether the student reported to an adult at school that they or a classmate was a victim of violence at school in the past month. *Reports on SiseVe platform* is defined as the number of anonymously reported cases on the SiseVe website starting in December 2015 and a year afterward. *Bystander behavior* captures students' actions when witnessing in-school violence in the past month. Higher values indicate higher levels of violence reinforcement. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Next, we examine whether the intervention changes attitudes toward violence and reporting. Table 5 indicates an improvement in attitudes toward reporting violence, though perceptions of violence acceptability remain unchanged. Treated students showed increased confidence in reporting violence and seeking help from school authorities in the hypothetical case of experiencing or witnessing violence. They also believed the school could help them and there were people they could trust. These results suggest that the intervention is successful in increasing students' trust in the school system for reporting and resolving violence. However, attitudes toward justifying violence do not shift, as Column (2) shows. Finally, Column (3) demonstrates that treated students are more likely to associate school violence and better school practices to deal with incidents with consequences for their educational outcomes.

Our results are consistent with qualitative evidence from MoE reports during the implementation. Therein, participants noted how roleplaying and discussions helped them understand the problems associated with violence and bystander behavior and how having the tools to report violence enabled them to challenge it in the school setting. The intervention allowed students to internalize how to help others and how, by reporting through the new online system, resolutions could be achieved that extend beyond mere punishment. Indeed, by looking at the reports in the online platform, we find that 90 percent of them were resolved within the school.

Taken together, the results provide evidence that the intervention reduces barriers to reporting. This could explain the observed reduction in violence since there is now a proper system in place that addresses such incidents by intervening and resolving them through more effective practices.

Table 5: Effects on beliefs and attitudes regarding violence and reporting

	Attitudes toward reporting (1)	Attitudes toward accept. viol. (2)	Beliefs about viol. and educ. (3)
Treatment	0.102***	−0.005	0.062***
	(0.017)	(0.017)	(0.017)
Adj. pval [MHT]	***	-	***
Adj. pval [FWER]	***	-	***
Control Group Mean	0.00	0.00	0.00
Control Group Std.	1.00	1.00	1.00
Observations	19,394	19,336	19,349

Notes: This Table presents the estimates from Equation 1 on the following outcomes. *Attitudes toward reporting* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on four questions that capture students' willingness to report or seek help when being victimized or witnessing bullying and school violence, and if they would talk to someone at school in the event of a problem. Missing flags for each variable are used to construct the outcome index. *Attitudes toward acceptance of violence* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on six questions that measure student support for violent acts in school. *Beliefs about violence and education* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on two questions that measure if a student believed their learning process would benefit from classmates being less involved in violent acts (including gangs) or if the school did a better job handling incidents. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

5.3 Long-Term Effects on Human Capital

We next explore whether the effects on attitudes and behavior toward violence lead to long-term behavioral changes. To analyze this, we study the intervention's impact on students' probability of dropping out of school, transferring to another school, and applying to college, as well as their scores on the college entrance exam.

Table 6 shows a decline in the probability of treated students dropping out of school or transferring schools. The magnitudes of the effects are large; for instance, the intervention reduces the dropout rate by 25 percent. Moreover, while the intervention did not affect the probability of applying to college four years later, treated students are more likely to receive higher scores on the college entrance exam. In Appendix Table A.13, as an exploratory analysis we also consider safety perception outcomes. We find that treated students are less likely to skip school due to fear, providing evidence that the decline in violence translates into a better environment for these students.

To further understand whether the reduction in violence and behavioral changes among treated students are driving the effects, as opposed to a direct change in the disciplinary methods of school personnel, we analyze the effects on younger and older students who did not receive the intervention. Table A.9 shows that there is no change in their probability of dropping out of school or in mobility. These results suggest that the effects are driven not only by teachers changing their behavior toward fewer suspensions due to the intervention but also by students changing their

behavior. In Table A.14, we also explore if there are differential effects on these outcomes by perpetrators at baseline and we find no evidence of it. These results provide further evidence that effects are not mechanically driven by a change in teachers' behavior toward school aggressors.

These results suggest that changing attitudes and behavior toward reporting perpetrators at baseline and violence can improve the school environment. Specifically, the intervention increases student reporting and improves the school's ability to respond to and manage violence, thereby decreasing the likelihood of students dropping out or changing schools.

Table 6: Long-term effects: School dropout, school mobility, and higher education

	School dropout (1)	School mobility (2)	Applying to college (3)	Stnd. entrance exam score (4)
Treatment	-0.008^{***}	-0.015^{***}	0.000	0.109^{**}
	(0.003)	(0.006)	(0.008)	(0.046)
Adj. pval [MHT]	**	**	-	**
Adj. pval [FWER]	***	***	-	**
Control Group Mean	0.03	0.13	0.42	0.00
Control Group Std.	0.17	0.33	0.49	1.00
Observations	17,225	17,225	17,225	6,827

Notes: *School dropout* is a variable that equals 1 if the student was registered the following academic year in any school in the country, and 0 otherwise. *School mobility* is a variable that equals 1 if the student was registered in a different school the following academic year, and 0 otherwise. *Applying to college* is a variable that equals 1 if the student applied to college right after graduating high school, and 0 otherwise. *Standardized entrance score* is defined as, for those who applied to college, the standardized value of the student's average score on the college entrance exam respect to the control group. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

5.4 Criminal Adult Outcomes

In this section, we analyze the lasting impact of the intervention on violence by examining criminal adult outcomes. One concern is whether increasing reporting during school years might inadvertently raise the likelihood of young individuals having a criminal record. We explore this possibility by exploiting data on those who were reported as perpetrators at baseline in 2015, either through reports by others or self-identification. We then match all treated individuals to administrative police records in 2018 and 2019 to analyze if the intervention affected their probability of being arrested.

Table 7 presents the results and indicates no effect of the intervention on criminal records for the average student. However, there is a significant decline for reported perpetrators at baseline. Specifically, we find about a 45 percent decline in the probability of school aggressors having a criminal record four years after the intervention. These findings are robust to different definitions of aggressors at baseline. Such results not only demonstrate the intervention's success in reducing school violence but also its effectiveness in deterring future criminal behavior among perpetrators. Moreover, they show that the intervention generated meaningful long-term changes in student behavior.

Table 7: Long-term effects: Adult crime

		Police reports (18 years old +)		
	Police Reports (1)	Self-reported perpetrator (2)	Peer-nom. At least once (3)	Peer-nom. More than once (4)
Treatment	−0.040	−0.035	−0.033	−0.036
	(0.037)	(0.036)	(0.037)	(0.036)
Treatment x Perpetrator		−0.069***	−0.062***	−0.059***
		(0.027)	(0.026)	(0.023)
Total effect	-	−0.105**	−0.095**	−0.095**
		(0.046)	(0.040)	(0.040)
Adj. pval [MHT]	-	***	***	***
Adj. pval [FWER]	-	***	***	***
Control Group Mean	0.195	0.195	0.195	0.195
Control Group Std.	3.07	3.07	3.07	3.07
Observations	17,665	17,665	17,665	17,665

Notes: *Police reports* is a variable that equals 1 if the student (18 years old or older) has a police report and 0 otherwise. *Self-reported perpetrator* is a variable that equals 100 if the student self-reports themselves as a perpetrator based on four survey questions at baseline, and 0 otherwise. *Peer-nom: At least once* is a variable that equals 100 if the student is nominated at least once by their classmates as a perpetrator at baseline, and 0 otherwise. *Peer-nom: More than once* is a variable that equals 100 if the student is nominated as a perpetrator by more than one classmate at baseline and 0 otherwise. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

6 Conclusion

This paper illustrates that in developing countries, school interventions focused on changing attitudes toward reporting and providing the school system with effective tools can serve as a cost-effective policy option to reduce violence, lower dropout rates, and deter adult criminal behavior. In particular, the intervention in these settings reduces reporting constraints, such as the school's ability to address violence and students' fear of retaliation or disapproval by peers. We show that schools can effectively change norms related to reporting, which may be harder to achieve at the neighborhood level, where reporting to the police is often met with distrust. Moreover, emphasizing non-punitive approaches benefits both victims and perpetrators by preventing students from acquiring criminal records and participating in future criminal activities.

The findings of this paper carry significant policy implications. We provide experimental evidence that changing students' attitudes toward reporting violence can reduce extreme violence and dropout rates for adolescents in developing countries. Moreover, there is a large decline in the progression of criminal careers among school violence perpetrators. Thus, a relatively simple intervention that targets changing attitudes toward reporting and equips schools with effective tools to address violence may be a cost-effective policy option in such settings.

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Figures

Appendix

A Intervention Activities

Table A.1: Intervention activities

Type	Activities
Workshops, and discussions	Anti-violence workshop for students Anti-violence sessions for school authorities Informative sessions, brochures, campaigns How to use the SiseVe platform sessions
Displays	Posters Bulletin boards School parades Roleplaying, music, and theater Competitions (singing, dancing, drawing, talent show, knowledge of SiseVe platform, pantomime, poetry) Anti-violence day and week festivals Marathon School exhibition Creating an anti-violence song Art exhibits Cultural afternoon with the entire school community

A.1 Workshop and Campaigns

Figure A.1: School involvement



(a) Training school authorities



(b) Campaign by school authorities

Figure A.2: Sessions



(a) Discussions



(b) Video forums: Understanding the consequences of violence

Figure A.3: Interactive activities



(a) Roleplaying



(b) Murals against violence



(c) Campaign against violence

Figure A.4: Interactive activities



(a) Music festival with anti-violence songs composed by students



(b) Marathon against violence

B Protocols

SiseVe designed five specific protocols to handle violent situations between students or between students and school personnel. Violent situations between students could fit into one of two categories: psychological and physical violence (without injuries) or sexual and physical violence (with injuries and/or weapons).[16]

[16]Psychological violence is defined as every action that affects an individual's adequate emotional development via the omission or realization of repeated conducts. Physical violence is defined as any intentional and premeditated action that implies the use of force (with or without physical damage), with the aim of causing any degree of injury, pain, or general discomfort. Sexual violence is defined as actions of a sexual nature that are performed without consent or under duress. These include any action that does not involve any physical contact.

When an incident occurs, the first protocol involves individually contacting each involved student for an interview. Then, information is collected by consulting students, teachers, and school personnel about the indecent. This information is recorded in a registry book and on the SiseVe portal. The following step is to notify the parents of each student, discussing the necessary measures to improve coexistence. If needed, school authorities will guide parents about the available health services for their children. Within the school, students engage in sessions and activities with a program tutor, aimed at preventing future violent instances in the classroom. The incident is closely monitored by program and school authorities, with periodic follow-up meetings with the involved students and parents to assess progress and confirm they are still attending school. A case is considered closed if there is no recurrence of violence among the involved children and a visible improvement in coexistence is observed.

In the second protocol, the school collaborates with the victim and their family to engage local police or public authorities, and a local hospital if needed. If parents cannot be reached, then the school assumes full responsibility for the student. Incidents are recorded in a registry book and on the SiseVe portal. As with the first protocol, the school provides sessions and activities with a tutor to prevent school violence. The follow-up process consists of meetings between program tutors, students, and families to discuss the procedures implemented by the school. In cases of physical violence, the authorities hold periodic meetings with families to communicate the measures being taken to improve coexistence. In cases of sexual violence, parents are informed about the school's prevention measures and the support services provided by specialized units. A case of sexual violence is considered closed once the implemented strategies are proven efficient and there is no risk among the involved students. For physical violence, closure is achieved once the school observes a notable improvement in coexistence and can guarantee the safety of the involved students. In both cases, it is crucial to confirm the students' continued participation in the educational system.

In addressing violence from school personnel toward students, three protocols are established: psychological (third), physical (fourth), and sexual violence (fifth). In cases of psychological violence, immediate action is taken if the aggressor is still in the school. Authorities implement measures to prevent student discomfort, parent meetings are conducted, and a formal complain is lodged to detail the incident and establish protective measures. The school also helps parents in contacting the local police or authorities and medical services if needed. These incidents are communicated to relevant program authorities (UGEL, TOE) and are recorded in the registry book and on the SiseVe portal. Follow-up consists of ensuring the student's assistance and providing emotional and academic support, with periodic parent meetings to update them on the school's actions. A case is closed when the violent act has ended, with the student's protection and attendance guaranteed. This will also consider the student's socio-emotional progress.

The fourth protocol provides immediate medical assistance to the student. Similar to the third protocol, parents are contacted, a complaint is filed along with protection measures (if no formal complaint was issued), and the school helps parents communicate with local police and authorities. The aggressor is supervised to prevent retaliation against the student. These incidents are also reported to the relevant program authorities (UGEL, TOE) and are recorded in the registry book and on the SiseVe portal. Once the situation is initially handled, the school ensures the student's continued attendance and provides emotional and educational support. Parental meetings are held to keep them posted about the situation's progress, and closure occurs once the student's protection and support are guaranteed.

In cases of sexual violence, parents are immediately contacted, a complaint is filed along with protection measures (if no formal complaint was issued), and the reports are sent to local police and authorities. These incidents are communicated to the relevant program authorities (UGEL) and are recorded in the registry book and on the SiseVe portal. The alleged offender is removed from the school and is handed over to the UGEL. Affected students receive support from organizations (UGEL, CEM, DEMUNA) to reestablish coexistence and safety within the school, and parents are referred to a specialized institution depending on the case (CEM, DEMUNA, or others). The case is closed once the student's protection, continued schooling, and emotional support from specialized services are assured.

C Testing for Differential Attrition and Missing Data

Table A.2: Differential attrition

	(1) Attrited	(2) National ID Data	(3) Behavior Score Data
Treatment	−0.014	−0.018	−0.002
	(0.022)	(0.028)	(0.016)
Control group mean	0.07	0.10	0.21
Control group std.	0.25	0.31	0.41
Observations	20,744	19,512	19,512

Notes: *Attrited* equals 1 if a student in the baseline survey (21,379 students) was not in the follow-up one, and 0 otherwise. The match between baseline and follow-up equals 19,512 students. Almost 10 percent of the sample did not have the national ID (DNI) to match with administrative data used for measuring dropout and mobility. *National ID Data)* equals 1 if a student completed the baseline and follow-up survey but had no registered national ID, and 0 otherwise. *Behavior Score Data* equals 1 if a student completed the baseline and follow-up survey and had a registered national ID but had no registry of grades for their school behavior, and 0 otherwise. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.3: Differential attrition

	(1) Attrited [Cl. and FE]	(2) Attrited [Controls, Cl. and FE]
Treated	−0.020	−0.018
	(0.022)	(0.022)
Treated x School vio. incid.	0.008	0.008
	(0.008)	(0.008)
Treated x Reports incidents	−0.004	−0.005
	(0.010)	(0.010)
Treated x Bystander beh.	0.000	−0.001
	(0.005)	(0.005)
Treated x Att. reporting	0.001	0.001
	(0.006)	(0.006)
Treated x Att. accep. viol.	0.003	0.003
	(0.004)	(0.004)
Treated x Beliefs about educ. and viol.	0.007*	0.007*
	(0.004)	(0.004)
School viol. incidence	0.002	0.001
	(0.005)	(0.005)
Reports incidents (1/0)	0.000	0.000
	(0.008)	(0.008)
Bystander behavior	0.002	0.003
	(0.004)	(0.004)
Attitudes toward reporting	−0.002	−0.002
	(0.003)	(0.003)
Attitudes toward acceptance of violence	0.003	0.003
	(0.002)	(0.002)
Beliefs about education and violence	−0.010***	−0.010***
	(0.003)	(0.003)
Constant	0.098***	0.086***
	(0.017)	(0.020)
Observations	20,261	20,261
R-squared	0.366	0.368
Control group mean	0.0743	0.0743
Control group std.	0.262	0.262

Notes: Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.4: Baseline balance of outcome variables: Attrited

	Control	Treatment	Difference (T - C)	p-value (T = C)
School viol. incidence	0.000	-0.086	-0.058	0.667
Willingness to report	0.328	0.328	-0.030	0.412
Bystander behavior	0.000	-0.001	0.048	0.475
Attitudes toward reporting	-0.000	-0.013	0.039	0.498
Attitudes toward acceptance of violence	0.000	0.010	0.088	0.083
Beliefs about violence and education	0.000	-0.018	0.097	0.181

Notes: ***, **, and * indicate statistical significance at the 0.01, 0.05, and 0.10 levels, respectively. *School violence incidence index* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on 8 questions related to what had happened to students in their school in the past month. Missing flags for each variable are used to construct the outcome index. *Report of incidents* is defined as whether a student reported to an adult at school if a classmate was a victim of violence at school in the past month. *Bystander behavior* captures students' actions when witnessing bullying or in-school violence in the past month. The variable is rescaled such that the control group mean is 0 and the standard deviation is 1. *Attitudes toward reporting* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on four questions that capture students' willingness to report or seek help when being victimized or witnessing bullying and school violence, and if they would talk to someone at school in the event of a problem. Missing flags for each variable are used to construct the outcome index. *Attitudes toward acceptance of violence* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on six questions that measure student support for violent acts in school. *Beliefs about violence and education* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on two questions that measure if a student believed their learning process would benefit from classmates being less involved in violent acts (including gangs) or if the school did a better job handling incidents.

D Main Outcomes

D.1 Outcomes without Control Variables

Table A.5: Primary outcomes: Violence incidence

	School viol. incidence index (1)	Students carry weapons (2)	Violent school behavior (3)	Violent crime (4)
Treatment	-0.072^{***}	-0.021^{***}	-0.016^{***}	-5.609^{***}
	(0.015)	(0.006)	(0.004)	(0.123)
Adj. pval [MHT]	***	***	***	**
Adj. pval [FWER]	***	***	***	***
Control Group Mean	0.00	0.17	0.03	9.14
Control Group Std.	1.00	0.38	0.18	9.80
Observations	19,453	19,242	12,568	18,966

Notes: *School violence incidence index* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on 8 questions related to what had happened to students in their school in the past month. Missing flags for each variable are used to construct the outcome index. *Students carry weapons* equals 1 if students reported that their classmates brought weapons to school. *Violent school behavior* equals 1 if the student has the lowest grade for their behavior due to violent school behavior in 2016, and 0 otherwise. *Violent crime* is the number of thefts and injuries within a 0.22-mile radius of the school. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.6: Mechanisms: Effects on actual violence reporting

	Reports incidents (1)	Reports on SiseVe plat. (2)	Bystander behavior (3)
Treatment	0.031^{***}	2.695^{***}	-0.065^{***}
	(0.008)	(0.053)	(0.016)
Adj. pval [MHT]	***	***	***
Adj. pval [FWER]	***	***	***
Control Group Mean	0.32	1.75	0.00
Control Group Std.	0.46	2.86	1.00
Observations	19,185	19,512	19,347

Notes: *Report of incidents* is defined as whether a student reported to an adult at school if a classmate was a victim of violence at school in the past month. *Reports on SiseVe platform* is defined as the number of anonymous reported cases on the SiseVe website starting a year before the intervention and a year afterward. *Bystander behavior* captures students' actions when witnessing bullying or in-school violence in the past month. Higher values indicate higher levels of violence reinforcement. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.7: Mechanisms: Effects on attitudes toward reporting and violence

	Attitudes toward reporting (1)	Attitudes toward accept. viol. (2)	Beliefs about viol. and educ. (3)
Treatment	0.137^{***}	-0.023	0.058^{***}
	(0.016)	(0.016)	(0.016)
Adj. pval [MHT]	***	-	***
Adj. pval [FWER]	***	-	***
Control Group Mean	0.00	0.00	0.00
Control Group Std.	1.00	1.00	1.00
Observations	19,394	19,336	19,349

Notes: *Attitudes toward reporting* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on four questions that capture students' willingness to report or seek help when being victimized or witnessing bullying and school violence, and if they would talk to someone at school in the event of a problem. Missing flags for each variable are used to construct the outcome index. *Attitudes toward acceptance of violence* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on six questions that measure student support for violent acts in school. *Beliefs about violence and education* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on two questions that measure if a student believed their learning process would benefit from classmates being less involved in violent acts (including gangs) or if the school did a better job handling incidents. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.8: Long-term effects: school dropout, school mobility, and higher education

	School dropout (1)	School mobility (2)	Applying to college (3)	Stnd. entrance exam score (4)
Treatment	-0.005^{*}	-0.014^{***}	0.013	0.092^{**}
	(0.003)	(0.006)	(0.008)	(0.039)
Adj. pval [MHT]	*	***	-	**
Adj. pval [FWER]	-	***	-	**
Control Group Mean	0.03	0.13	0.42	0.00
Control Group Std.	0.17	0.33	0.49	1.00
Observations	17,225	17,225	17,225	6,827

Notes: *School dropout* equals 1 if the student was registered the following academic year in any school in the country, and 0 otherwise. *School mobility* equals 1 if the student was registered in a different school the following academic year, and 0 otherwise. *Applying to college* equals 1 if the student applied to college right after graduating high school, and 0 otherwise. *Standardized entrance score* is, for those who applied to college, the standardized student's average score on the entrance exam in comparison to the control group. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.9: Long-term effects: school dropout and school mobility for non-treated grades

	Secondary		Primary	
	School dropout (1)	School dropout (2)	School mobility (3)	School mobility (4)
Treatment	-0.011	-0.002	0.001	-0.024
	(0.009)	(0.002)	(0.007)	(0.015)
Adj. pval [MHT]	-	-	-	-
Adj. pval [FWER]	-	-	-	-
Control Group Mean	0.05	0.01	0.07	0.27
Control Group Std.	0.22	0.09	0.26	0.44
Observations	20,171	19,927	19,195	19,763

Notes: Secondary grades include those who were in 3rd and 4th grade in 2015, we exclude those in 5th grade (final secondary grade) as they would be out of the education system. Only those who repeated stay in the sample. Primary includes all grades, from 1st to 6th grade. *School dropout* equals 1 if the student was registered the following academic year in any school in the country, and 0 otherwise. *School mobility* equals 1 if the student was registered in a different school the following academic year, and 0 otherwise. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

D.2 Controlling for the Baseline Analog of the Outcome

Table A.10: Primary outcomes: Violence incidence

	School viol. incidence index (1)	Students carry weapons (2)	Violent school behavior (3)	Violent crime (4)
Treatment	-0.028^{**}	-0.021^{***}	-0.016^{***}	-5.609^{***}
	(0.014)	(0.006)	(0.004)	(0.123)
Adj. pval [MHT]	***	**	***	**
Adj. pval [FWER]	***	**	***	***
Control Group Mean	0.00	0.17	0.03	9.14
Control Group Std.	1.00	0.38	0.18	9.80
Observations	19,453	19,242	12,568	18,966

Notes: *School violence incidence index* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on 8 questions related to what had happened to students in their school in the past month. Missing flags for each variable are used to construct the outcome index. *Students carry weapons* equals 1 if students reported that their classmates brought weapons to school. *Violent school behavior* equals 1 if the student has the lowest grade for their behavior due to violent school behavior in 2016, and 0 otherwise. *Violent crime* is the number of thefts and injuries within a 0.22-mile radius of the school. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.11: Mechanisms: Effects on actual violence reporting

	Reports incidents (1)	Reports on SiseVe plat. (2)	Bystander behavior (3)
Treatment	0.030^{***}	2.063^{***}	-0.067^{***}
	(0.008)	(0.050)	(0.016)
Adj. pval [MHT]	***	***	**
Adj. pval [FWER]	***	***	***
Control Group Mean	0.32	3.09	0.00
Control Group Std.	0.46	3.21	1.00
Observations	19,185	19,512	19,347

Notes: *Report of incidents* is defined as whether a student reported to an adult at school if a classmate was a victim of violence at school during the past month. *Reports on SiseVe platform* is defined as the number of anonymously reported cases on the SiseVe website starting a year before the intervention and a year afterward. *Bystander behavior* captures students' actions when witnessing in-school violence in the past month. Higher values indicate higher levels of violence reinforcement. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.12: Mechanisms: Effects on attitudes toward reporting and violence

	Attitudes toward reporting (1)	Attitudes toward accept. viol. (2)	Beliefs about viol. and educ. (3)
Treatment	0.130^{***}	-0.028^{*}	0.064^{***}
	(0.015)	(0.015)	(0.016)
Adj. pval [MHT]	***	-	***
Adj. pval [FWER]	***	*	***
Control Group Mean	0.00	0.00	0.00
Control Group Std.	1.00	1.00	1.00
Observations	19,394	19,336	19,349

Notes: *Attitudes toward reporting* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on four questions that capture students' willingness to report or seek help when being victimized or witnessing bullying and school violence, and if they would talk to someone at school in the event of a problem. Missing flags for each variable are used to construct the outcome index. *Attitudes toward acceptance of violence* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on six questions that measure student support for violent acts in school. *Beliefs about violence and education* is rescaled such that the control group mean is 0 and the standard deviation is 1. The index is based on two questions that measure if a student believed their learning process would benefit from classmates being less involved in violent acts (including gangs) or if the school did a better job handling incidents. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.13: Mechanisms: Effects on safety and perceptions

	Skipped school due to fear (1)	Places and fear (2)
Treatment	-0.017^{***}	-0.009
	(0.005)	(0.007)
Adj. pval [MHT]	***	*
Adj. pval [FWER]	***	*
Control group mean	0.11	0.26
Control group std.	0.31	0.44
Observations	19,291	19,321

Notes: *Skipped school due to fear* equals 1 if a student did not attend school due to fear that someone would hurt them, and 0 otherwise. *Places and fear* equals 1 if a student reported there were places on the way to school or on the way home where they did not like to go for fear of someone hurting them, and 0 otherwise. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1. All results are controlling for the baseline analog.

D.3 Long-term effects: Across Perpetrators

Table A.14: Long-term effects: across perpetrators

	Self-reported perpetrator (1)	Peer-nom. At least once (2)	Peer-nom. More than once (3)
A. School dropout:			
Treatment	-0.008^{***}	-0.007^{***}	-0.006^{**}
	(0.003)	(0.003)	(0.003)
Treatment x Perpetrator	0.007	-0.006	-0.021
	(0.010)	(0.010)	(0.014)
Control Group Mean	0.0293	0.0293	0.0293
Control Group Std.	0.169	0.169	0.169
Observations	17,225	17,225	17,225
B. School mobility:			
Treatment	-0.014^{***}	-0.012^{**}	-0.012^{**}
	(0.006)	(0.006)	(0.006)
Treatment x Perpetrator	-0.007	-0.013	-0.035
	(0.021)	(0.018)	(0.023)
Control Group Mean	0.129	0.129	0.129
Control Group Std.	0.335	0.335	0.335
Observations	17,225	17,225	17,225
C. Applying to higher education:			
Treatment	0.000	0.000	0.000
	(0.008)	(0.008)	(0.008)
Treatment x Perpetrator	-0.010	0.015	0.024
	(0.024)	(0.020)	(0.025)
Control Group Mean	0.377	0.377	0.377
Control Group Std.	0.485	0.485	0.485
Observations	19,512	19,512	19,512
D. Stnd. entrance exam score:			
Treatment	0.118^{***}	0.119^{***}	0.106^{**}
	(0.048)	(0.046)	(0.047)
Treatment x Perpetrator	-0.153^{*}	-0.092	0.062
	(0.093)	(0.108)	(0.125)
Control Group Mean	0.00	0.00	0.00
Control Group Std.	1.00	1.00	1.00
Observations	6,827	6,827	6,827
Controls	Yes	Yes	Yes
Fixed effects	17	17	17

Notes: *School dropout* equals 1 if the student was registered the following academic year in any school in the country, and 0 otherwise. *School mobility* equals 1 if the student was registered in a different school the following academic year, and 0 otherwise. *Applying to college* equals 1 if the student applied to college right after graduating high school, and 0 otherwise. *Standardized entrance score* is, for those who applied to college, the standardized student's average score on the entrance exam in comparison to the control group. Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1. All results include control variables.

D.4 Indices: Questions

Table A.15: School violence incidence index

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Treatment	-0.028^{***}	-0.003	-0.024^{***}	-0.007	0.000	-0.029^{***}	-0.007	-0.013
	(0.008)	(0.006)	(0.007)	(0.008)	(0.006)	(0.008)	(0.006)	(0.008)
Adj. pval [MHT]	***	***	**	**	**	**	**	**
Adj. pval [FWER]	***	***	***	***	***	***	***	***
Control Group Mean	0.38	0.15	0.23	0.34	0.17	0.45	0.19	0.32
Control Group Std.	0.49	0.35	0.42	0.47	0.38	0.50	0.39	0.47
All Sample Mean	0.37	0.14	0.22	0.33	0.17	0.43	0.18	0.31
Observations	19,271	19,292	19,237	19,149	19,217	19,144	19,262	19,257

Notes: In each column, the dependent variable is a dummy equal to one if, in the last month, the student experienced: (1) "One or more students pulled or pushed you hard to hurt you." (2) "One or more students punched, slapped, or kicked you." (3) "Some of your belongings were stolen," (4) "Some of your belongings have been broken on purpose," (5) "One or more students insulted you," (6) "One or more students threatened to hurt or hit you." (7) "Some student made fun of you though social media," (8) "One or more students made fun of you at school." Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.16: Bystander behavior index

	(1)	(2)	(3)	(4)
Treatment	-0.011^{**}	-0.021^{***}	-0.011	-0.031^{***}
	(0.005)	(0.005)	(0.007)	(0.008)
Adj. pval [MHT]	**	***	-	**
Adj. pval [FWER]	**	***	-	***
Fixed effects	17	17	17	19
Control Group Mean	0.12	0.13	0.71	0.68
Control Group Std.	0.32	0.33	0.45	0.47
All Sample Mean	0.11	0.13	0.72	0.68
Observations	19,195	19,204	19,150	19,185

Notes: In each column, the dependent variable is a dummy equal to one when: (1)"I celebrated when a student was hitting another student," (2) "I celebrated when students pushed or pulled another student." (3) "I didn't try to defend a student who was being mistreated," and (4) "I didn't inform an adult when a student was being mistreated." Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.17: Attitudes toward reporting index

	(1)	(2)	(3)	(4)
Treatment	0.021^{***}	0.015^{***}	0.017^{***}	0.021^{***}
	(0.006)	(0.004)	(0.005)	(0.005)
Adj. pval [MHT]	**	***	-	**
Adj. pval [FWER]	**	***	-	***
Control Group Mean	0.82	0.94	0.91	0.89
Control Group Std.	0.38	0.23	0.29	0.31
All Sample Mean	0.81	0.94	0.91	0.89
Observations	19,161	19,242	19,209	19,232

Notes: In each column the dependent variable is a dummy equal to one when: (1) "There are people at school I can talk to if I have," (2) "If I tell a teacher that other students bother me, he will help me." (3) "If a student talks about hurting another, I would tell a teacher/school staff," and (4) "If a student brings a weapon to school, I would tell a teacher or school staff." Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

Table A.18: Attitudes toward acceptance of violence index

	(1)	(2)	(3)	(4)	(5)	(6)
Treatment	−0.008	0.002	−0.004	−0.022***	0.006	−0.035***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Adj. pval [MHT]	-	-	-	**	-	***
Adj. pval [FWER]	-	-	-	***	-	***
Control Group Mean	0.43	0.41	0.41	0.36	0.46	0.59
Control Group Std.	0.49	0.49	0.49	0.48	0.50	0.49
All Sample Mean	0.43	0.41	0.41	0.35	0.47	0.60
Observations	19,152	19,151	19,208	19,175	19,110	19,120

Notes: In each column the dependent variable is a dummy equal to one when: (1) "Students harass other students in front of others," (2) "Students make fun of other students on social media," (3) "Students push, pull, or hit other students." (4) "Students have fun watching how some students hit others," (5) "Students do nothing when another student is being mistreated by another," and (6) "Students don't report to the teacher that a student is being hit." Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1.

D.5 Siseve and police reports

Table A.19: Number of reports of the SiseVe platform: Type of Incidence

	Physical Violence (1)	Verbal Violence (2)	Psycho. Violence (3)	Gun Violence (4)	Robberies (5)
Treatment	1.881***	1.952***	1.618***	0.064***	0.136***
	(0.036)	(0.035)	(0.038)	(0.003)	(0.005)
Adj. pval [MHT]	***	***	***	***	***
Adj. pval [FWER]	***	***	***	***	***
Control group mean	1.242	0.503	0.246	0.0294	0.000
Control group std.	2.018	1.043	0.500	0.169	0.000
Observations	19,512	19,512	19,512	19,512	19,512

Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1. Each outcome variable is defined as the number of anonymously reported cases on the SiseVe website by the type of incidence. It is important to notice that a report can be categorized under multiple types. For instance, a single report can be labeled as both physical violence and verbal abuse. Therefore, it would be included in both columns (1) and (2).

Table A.20: Other crimes around school

	Drug-related offenses	
	(1)	(2)
Treatment	-1.449^{***}	-1.383^{***}
	(0.066)	(0.073)
Controls	No	Yes
Adj. pval [MHT]	***	***
Adj. pval [FWER]	***	***
Control group mean	1.441	1.441
Control group std.	5.136	5.136
Observations	18,966	18,966

Clustered standard errors at the school level are in parentheses, and fixed effects are at the regional level. *** p<0.01, ** p<0.05, * p<0.1. *Drug-related crimes*. The number of drug-related offenses within a 0.22-mile radius of the school.

E Procedure for Index Construction

Most of the outcome variables are constructed by aggregating the responses to several individual questions into an index. Then, the index is the weighted average value of the individual variables, with equally distributed weights for each question included in the index, and normalizing the add-up value to have a standard deviation of 1 and a mean of 0. Individual variables use a five- or three-point Likert scale. The five-point Likert scale ranges from "no" to "a lot" or from "never" to "strongly agree," and the three-point scale ranges from "never" to "twice or more."

The raw index P is constructed by adding all individual variables with a weight of 1 for each of them. For *School violence incidence*, the index is based on 8 questions regarding what happened in their school in the past month. The raw score is the sum of 8 items, and each item ranges from 0 to 2. Higher scores indicate higher levels of school violence.

For *Bystander behavior*, the raw score is the sum of the four items, and each item ranges from 0 to 2. Higher scores indicate greater levels of bullying reinforcement. For *Attitudes toward reporting*, the response scale ranges from 0 (disagree) to 4 (agree strongly), and the total raw score ranges from 0 to 16 for a total of four questions. Higher scores indicate a greater willingness to report violent episodes. *Attitudes toward accepting the use of violence* is based on four questions that measure student support for violence in school, with the total raw score ranging from 0 to 8. Higher scores indicate more acceptance of violence. The response scale for *Beliefs about violence and education*

ranges from 0 (disagree) to 4 (agree strongly), and the raw score ranges from 0 to 8 from two questions. Higher scores indicate a better understanding that violence and school management of it have consequences for schooling and the learning process.

If an observation has missing variables, we construct the index using only non-missing items. We weight the non-missing variables by their respective weights and normalize them by the appropriate sum of weights. For example, if *a*, *b*, and *c* are not missing, $S = axw_a + bxw_b + cxw_c$. Let *W* be the sum of the weights for each variable, missing or not. Therefore, $W = w_a + w_b + w_c + w_d$. Let *N* be the sum of the weights of the non-missing variables; therefore, $N = w_a + w_b + w_c$. The index is then calculated as $Sx(W/N)$.

The weighted index is then rescaled such that the control group mean is 0 and the standard deviation is 1. In addition, in our regressions we control for flags for each variable in the index, indicating whether it is missing or not.