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When the State Starts Counting. Sexual Violence Recorded Through Ecuador's Schools, 2014–2025

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Abstract

Administrative registries have become central instruments of education policy against sexual violence in schools, yet their figures reflect both the violence that occurs and the state's capacity to detect it. This study analyses the complete open data series of Ecuador's Violence Registration System (REDEVI) for 2014–2025, comprising 33,020 cases and 34,229 recorded victims, linked to national enrolment records. The analysis combines enrolment-based rates, a segmented quasi-Poisson regression with sensitivity analyses, and comparisons by perpetrator group, date definition, educational level and sex. The recorded rate rose from 11.9 to 109.6 victims per 100,000 students between 2016 and 2018, as the registry was institutionalised, but the annual series cannot distinguish this discontinuity statistically from the start-up trend. Four strands of evidence are consistent with surfacing, namely, the Ministry's own attribution, the retrospective entry of cases in 2018, a shift towards externally perpetrated violence detected by schools and a 56% contraction during school closures, deepest for within-system cases. Recorded victimisation peaked in upper basic education and was 8.8 times higher among students recorded as female. The state's capacity to count school-related sexual violence depends on protocols, in-person schooling and data infrastructure, which makes registry governance a component of education policy.

Keywords: school-related sexual violence; administrative data; education policy; data governance; child protection; interrupted time series; school closures; Ecuador

1. Introduction

Education systems carry a double mandate. They are expected to secure learning and, at the same time, to protect the children who spend a large part of their lives in them. The 2030 Agenda made the second mandate explicit when target 4.a committed to providing safe, non-violent, inclusive and effective learning environments for all (United Nations 2015), and international guidance has since framed school violence, and school-related gender-based violence in particular, as a matter of education policy as well as of child protection (UNESCO 2019; UNESCO and UNGEI 2016; World Health Organization 2016). Across Latin America, ministries of education have translated these commitments into protocols, counselling services and administrative registries, among them the Peruvian SíseVe and the Colombian Unified School Coexistence Information System (Congreso de la República de Colombia 2013; Ministerio de Educación del Perú 2019). Such registries are policy instruments in the sense proposed by Lascoumes and Le Galès (2007), since they organise the relationship between the state and those it governs and carry an implicit theory of the problem they address. They also form part of a broader turn towards governing education through data (Ozga 2009), in which what counts as a problem depends increasingly on what the administration is able to measure.

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Sexual violence against children is a case in which the distance between occurrence and measurement is especially wide. Meta-analyses estimate that around twelve per cent of children experience some form of sexual abuse before the age of eighteen, with a higher prevalence among girls (Barth et al. 2013; Pereda et al. 2009; Stoltenborgh et al. 2011). Stoltenborgh et al. (2011) document a gap of two orders of magnitude between self-reported prevalence, close to 127 per 1000, and the prevalence captured through institutional informants, near 4 per 1000. Administrative figures therefore express the capacity of institutions to detect and record violence as much as its actual frequency, and their variations over time can reflect changes in either. This article refers to increases in recorded figures that result from improved detection and recording, rather than from more violence, as surfacing.

Schools occupy an ambivalent position in this field. They are the public institution in most regular contact with children and a privileged site for detecting violence that happens elsewhere, and they are also settings where sexual violence is committed and concealed. Shakeshaft's (2004) synthesis estimated that close to one in ten students experiences some form of sexual misconduct by school personnel, and later research has refined the scale of educator misconduct and the grooming processes through which it unfolds (Jeglic et al. 2023; McAlinden 2006; Winters et al. 2020). When the alleged perpetrator embodies pedagogical authority, the harm is compounded by institutional betrayal, the wrong an organisation commits against those who depend on it when it fails to prevent or respond to violence within it (Christl et al. 2024; Freyd 1996; Smith and Freyd 2014).

Research on school-related gender-based violence situates sexual violence in schools within gender norms and unequal power relations rather than individual pathology (Connell and Messerschmidt 2005; Heise 1998; Jewkes 2002; UNESCO and UNGEI 2016), and ecological models bring school personnel and perpetrators from the family and community into a single frame of nested risks (Belsky 1993; Bronfenbrenner 1979). Finkelhor's (1984) precondition model adds that abuse depends on overcoming external inhibitors, which in schools rest largely on institutional supervision and response. These perspectives are used here as interpretive lenses for patterns observed in administrative data, which record the sex, role and level of the persons involved but not the social relations that the theories describe.

Ecuador offers a revealing case for examining how education policy shapes what the state is able to count. The Ministry of Education's protocols require school staff to report any suspected case of violence, whether committed inside or outside the institution, and their application is mandatory in public, private and fiscomisional schools, the latter being privately run institutions that receive public funding (Ministerio de Educación 2017, 2020). The Violence Registration System (REDEVI) records these reports. Its series begins in 2014, and it became a computerised system in 2018 (Ministerio de Educación 2023), shortly after the National Assembly's AAMPETRA Commission investigated sexual abuse in schools in 2017. Information on sexual violence in education subsequently became part of the state's obligations. The Inter-American Court's 2020 judgment in Guzmán Albarracín et al. v. Ecuador ordered the state to correct its statistical information on sexual violence in education (Corte Interamericana de Derechos Humanos 2020), and Executive Decree 368 of August 2024 declared the Public Policy for the Eradication of Sexual Violence in the Educational Sphere 2024–2030 a national priority, a policy that includes an explicit axis on the generation of information (Ministerio de Educación 2024; Presidencia de la República del Ecuador 2024). Independent monitoring has nonetheless found that many schools still fail to report abuse or to implement the required protocols (Human Rights Watch 2024).

The recorded series multiplied several times between 2016 and 2018, and the Ministry itself attributes the peak of 2018 to the creation of the computerised system (Ministerio

de Educación 2023). Existing Ecuadorian studies and official information sheets describe the counts and their composition (Human Rights Watch 2024; Martínez-Pérez and Paz Enríquez 2022), but no study has analysed the complete open data series with enrolment denominators, examined how the pattern varies by perpetrator group and date definition, treated the suspension of in-person schooling during the pandemic as a second interruption with a plausible mechanism, or connected the results to the governance of education data. This is where the article seeks to contribute. It asks how much of the recorded pattern can be read as the product of recording itself, and what that reading reveals about schools as an infrastructure of detection within education policy.

The analysis addresses three research questions. The first asks how recorded sexual violence evolved between 2014 and 2025 and whether the annual series allows for the discontinuity observed during the institutionalisation of the registry to be distinguished from its start-up trend. The second asks what the suspension of in-person schooling in 2020 and 2021 reveals about the dependence of recording on the everyday operation of schools. The third asks how recorded violence is distributed by perpetrator group, educational level and sex once enrolment is taken into account. The answers are discussed in terms of their implications for education policy and for the governance of the data on which that policy relies.

2. Materials and Methods

2.1. The Registry and the Data Sources

Under the protocols of the Ministry of Education, which define how school staff identify, report, refer and follow up situations of violence (Ministerio de Educación 2020), any member of the school community who learns of a suspected case must report it to the education district, whether or not the alleged perpetrator belongs to the institution, so the school operates as a channel of detection for violence that occurs in the family and the community as well as within its own walls. REDEVI is the administrative record through which these reports become statistics, and since 2018 the Ministry has also referred to the Prosecutor's Office, on a monthly basis, the cases not yet reported there (Human Rights Watch 2024). The National Institute of Statistics and Censuses lists REDEVI among the administrative records with statistical potential (Instituto Nacional de Estadística y Censos 2026). Given the policy context described in the Introduction, the analysis treats REDEVI as a policy instrument whose outputs depend on protocols, staff capacity and institutional attention.

The study uses three official open data sources published by the Ministry of Education. The REDEVI statistical tables produced by the Directorate of Citizenship, Rights and School Coexistence and the Undersecretariat for Educational Innovation and Integral Development, with a cut-off in February 2026 and downloaded from the Ministry's open data portal on 24 September 2026, provide cases by year of report and perpetrator group, victims by educational level and sex, pregnancies resulting from sexual violence, and annual victims with the official enrolment denominator (Ministerio de Educación 2026a). The REDEVI information sheet with a cut-off in March 2026 provides the series of cases by year of entry into the system for 2018–2026 and the distribution of cases by type of school funding (Ministerio de Educación 2026b). The historical register of the Master File of Educational Institutions (AMIE) provides enrolment by school year, grade, sex and school regime for every institution in the country (Ministerio de Educación 2026c). The time series analysis covers the complete years 2014–2025, while January and February 2026, with 285 cases and 335 victims, are reported descriptively. The Ministry does not publish individual records or monthly series for the whole period, so monthly or quarterly modelling is not possible with the open data.

2.2. Units of Analysis and Definitions

A case is a report of sexual violence received through the education system and entered in REDEVI. A victim is a person identified in a case as having been subjected to the violence, in most instances a child or adolescent enrolled in the education system, and because a single case may involve several victims, victim counts exceed case counts (34,564 and 33,305 respectively for January 2014 to February 2026). The reference date is the date of the report to the education district, which the Ministry uses for statistical purposes because it is usually the closest to the event; it differs from both the date of occurrence and the date of entry into the system. The person identified in each report is referred to as the alleged perpetrator, since REDEVI does not record judicial outcomes. Following the registry's own classification, violence recorded through the education system comprises violence attributed to members of the school community and violence attributed to persons outside it but detected by school staff, and the two groups are distinguished throughout as within-system and external alleged perpetrators. Sex is analysed as recorded in the binary categories of the registry. Table 1 summarises the variables.

Table 1. Variables and definitions.

Variable	Definition	Categories or Unit
Case	Report received through the education system and entered in REDEVI	Count
Victim	Person identified in a case as subjected to the violence	Count
Year of report	Calendar year of the report to the education district	2014–2025 (models); January–February 2026 descriptive
Year of entry	Calendar year in which the case was entered in the system	2018–2026
Perpetrator group	Position of the alleged perpetrator relative to the education system	Within the system; outside the system
Relationship or role	Link of the alleged perpetrator to the victim or institution	Twelve registry categories
Recorded sex	Sex of victim or alleged perpetrator as recorded	Female; male; unknown (perpetrators)
Educational level	Level attended by the victim at the time of the event	Six levels, early education to baccalaureate
Pregnancy	Pregnancy recorded as a consequence of the violence	Count; recorded from age ten
Enrolment	Students enrolled in school year t to t + 1 (AMIE)	Count; denominator

2.3. Numerator and Denominator

The annual rate divides the number of victims in cases reported to the district in year t by total enrolment in school year t to t + 1, a period that spans the two national school calendars, the coastal regime starting in April and the highland regime starting in September. The numerator refers to reports and may include events that occurred in earlier years or outside school premises and hours. The aggregate tables do not allow for the identification of victims who appear in more than one case or year, so each victim is counted once per case, and a case with several victims contributes one case and several victims. The denominator includes all students enrolled in ordinary and special education and in provision for young people and adults with unfinished schooling, across all funding types. This matches the coverage of the registry, since recorded cases originate in public (87%), private (8%), fiscomisional (4%) and municipal (1%) institutions (Ministerio de Educación

2026b). AMIE totals reproduce exactly the official denominators for 2014–2024. For 2025 the official table relied on a provisional estimate of 4,118,165 students, and the final AMIE value of 4,039,650 is used instead.

Rates by educational level and by sex pool victims over the whole period and divide them by the student-years accumulated between school years 2014–2015 and 2025–2026. Grades were grouped as early education (Inicial I and II), preparatory (first grade), elementary basic (second to fourth), middle basic (fifth to seventh), upper basic (eighth to tenth) and baccalaureate (first to third year). Because REDEVI records the level at the time of the event while AMIE does not cross grade by sex, level-specific rates cannot be disaggregated by sex, and the published data do not support age-specific rates.

2.4. Statistical Analysis

The descriptive analysis reports counts, proportions and rates for the magnitude and composition of recorded violence. The temporal pattern was then described with a segmented quasi-Poisson regression of annual victims with the logarithm of enrolment as offset, following the formulation of interrupted time series for count outcomes proposed by Lopez Bernal et al. (2017). The model includes a linear time term, a level-change term and a slope-change term coded zero in the intervention year, so that the level coefficient expresses the immediate change in that year, and an indicator for 2020 and 2021, the years in which in-person schooling was suspended or severely restricted after the closure of schools in March 2020. The intervention was placed in 2017, the first year of the institutionalisation window that runs from the AAMPETRA Commission to the computerisation of REDEVI in 2018, and it marks an intensification of recording rather than the creation of the registry, which already existed. Overdispersion was estimated with the Pearson statistic, and inference used the t distribution with the residual degrees of freedom. With three observations before the intervention, far fewer than segmented regression ordinarily requires (Wagner et al. 2002), the model is interpreted as a structured description of the series and not as a test of a causal effect.

Sensitivity analyses varied the intervention year (2016 and 2018), the definition of the pandemic period (no indicator and 2020 only), the estimator (negative binomial regression) and the outcome scale (ordinary least squares on the rate with conventional standard errors and Newey–West standard errors with one and two lags, the latter corresponding to the usual rule of thumb for twelve observations). Newey–West estimates are reported for comparison only, since they rest on large-sample approximations and the choice of estimator can alter standard errors and statistical conclusions substantially in interrupted time series studies (Newey and West 1987; Turner et al. 2021). A leave-one-out analysis re-estimated the main model excluding one year at a time.

Three complementary analyses address the interpretation of the series. The main model was estimated separately for cases with within-system and external alleged perpetrators, in order to examine where the change in the recorded volume originated and how each group responded to the suspension of in-person schooling. The series by year of report was compared with the series by year of entry into the system to identify the retrospective entry of cases. Rates by educational level and by sex were computed with AMIE denominators. Population-level indicators from other sources are presented as context and are not used to estimate underreporting, because they measure different populations, periods and events. All analyses were carried out in Python 3.12 with statsmodels 0.15 (Seabold and Perktold 2010). The code and the analytic dataset are provided as Supplementary Materials S1 and S2 and deposited in Zenodo (https://doi.org/10.5281/zenodo.23072902).

2.5. Ethical Considerations and Use of Artificial Intelligence

This study is a secondary analysis of aggregated statistics published by the Ministry of Education on its open data portal. The files contain no personal data within the meaning of Ecuador's Organic Law on Personal Data Protection (Ley Orgánica de Protección de Datos Personales 2021), do not allow for the re-identification of any individual and involved no contact with human participants. Because the analysis falls outside the scope of research with human subjects and of personal data processing, ethical review and approval were not required. In the preparation of this study, the author used the generative artificial intelligence tool Claude (Anthropic, San Francisco, CA, USA) to assist with the preparation of figures, the verification of the statistical results and the checking of possible errors, and the correction of grammar and style. The author designed the study, provided and verified the data, checked all analyses and outputs, and takes full responsibility for the content.

3. Results

3.1. Magnitude and Composition of Recorded Violence

Between January 2014 and February 2026, REDEVI recorded 33,305 cases of sexual violence received through the education system, involving 34,564 victims; the complete years 2014–2025 account for 33,020 cases and 34,229 victims. External alleged perpetrators appear in 24,643 cases (74.0%) and within-system alleged perpetrators in 8662 (26.0%). Among the latter, 3864 cases involve teachers and school authorities, equivalent to 44.6% of within-system cases and 11.6% of all cases, and 4501 involve other students. Relatives are the most frequent external alleged perpetrators, with 10,647 cases, 43.2% of the external group (Table 2).

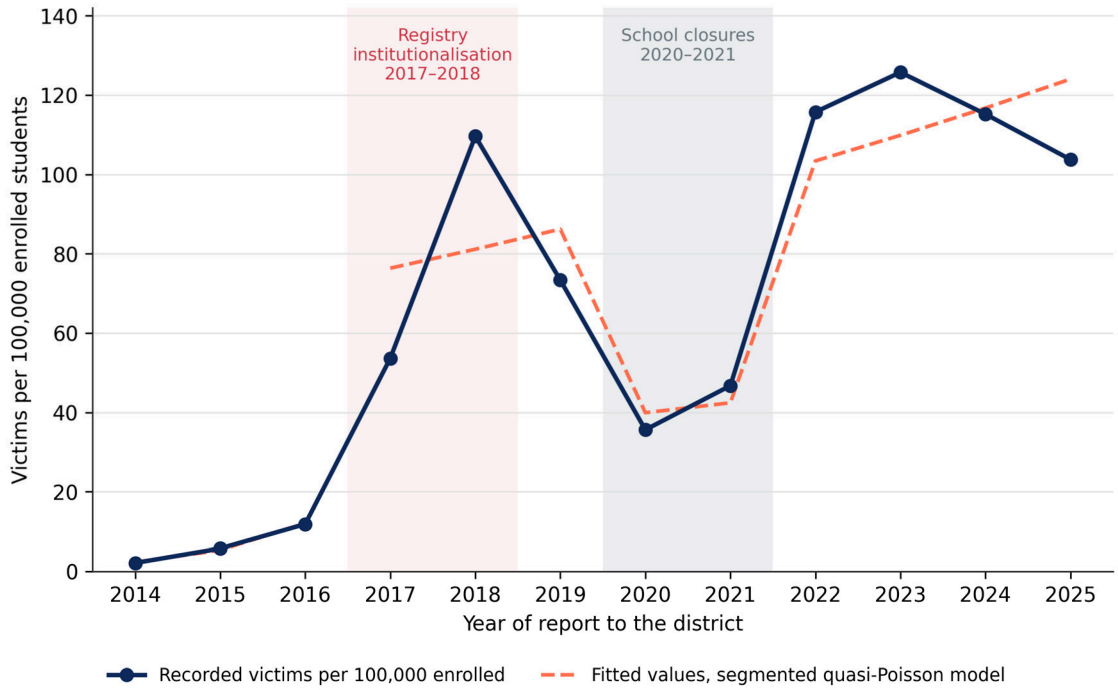
Table 2. Recorded cases by relationship or role of the alleged perpetrator, January 2014 to February 2026. Indented rows are components of the row above.

Relationship or Role of the Alleged Perpetrator	Cases	% of All Cases
Within the education system	**8662**	**26.0**
Teachers and school authorities	3864	11.6
Teacher	3748	11.3
School authority	116	0.3
Administrative and cleaning staff	297	0.9
Students	4501	13.5
Classmate	2625	7.9
Other student at the school	1876	5.6
Outside the education system	**24,643**	**74.0**
Relative	10,647	32.0
Acquaintance, non-relative	5896	17.7
Stranger	4012	12.0
Boyfriend or partner	1325	4.0
School transport driver	108	0.3
Other	2655	8.0
Total	**33,305**	**100.0**

3.2. Temporal Pattern and Composition over Time

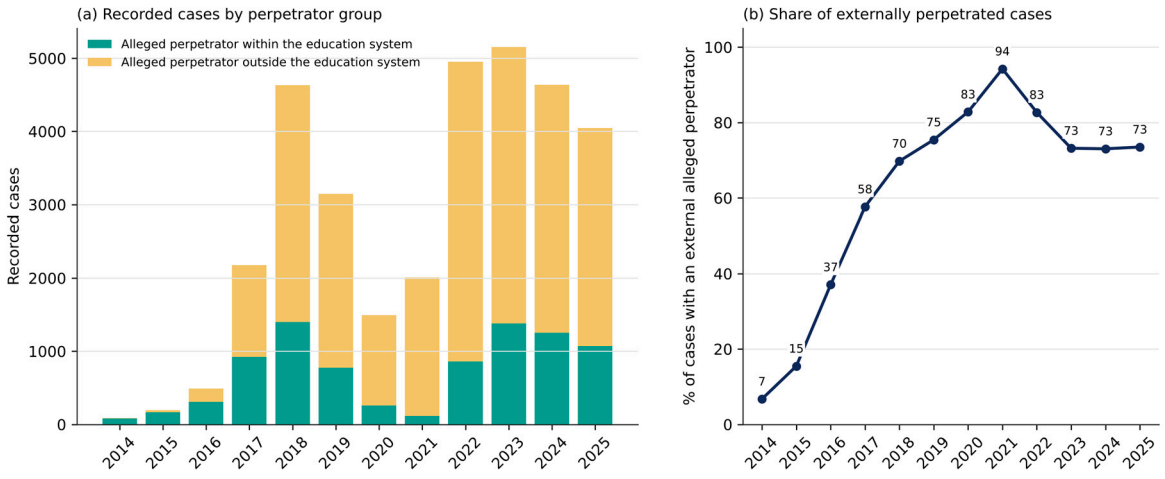
The recorded rate rose from 2.1 victims per 100,000 enrolled students in 2014 to 11.9 in 2016, before reaching 53.6 in 2017 and 109.6 in 2018, a ninefold increase in two years. It fell to 35.6 in 2020 and 46.7 in 2021 and then settled on a plateau between 103.7 and 125.7 from 2022 to 2025 (Figure 1; Table A1). The composition of cases changed along the same path. The share attributed to external alleged perpetrators grew from 6.7% in 2014 to 37.1% in 2016, 57.7% in 2017 and 69.8% in 2018, peaked at 94.2% in 2021 and stabilised around

73% from 2023 onwards (Figure 2), so the increase in recorded volume came mainly from violence detected through schools rather than from violence attributed to school personnel.



Source: author's calculations from REDEVI (cut-off February 2026) and AMIE enrolment records. Model includes a pandemic indicator for 2020–2021.

Figure 1. Recorded victims per 100,000 enrolled students, 2014–2025, with fitted values from the segmented quasi-Poisson model. Shaded areas mark the registry institutionalisation window and the years of school closures.



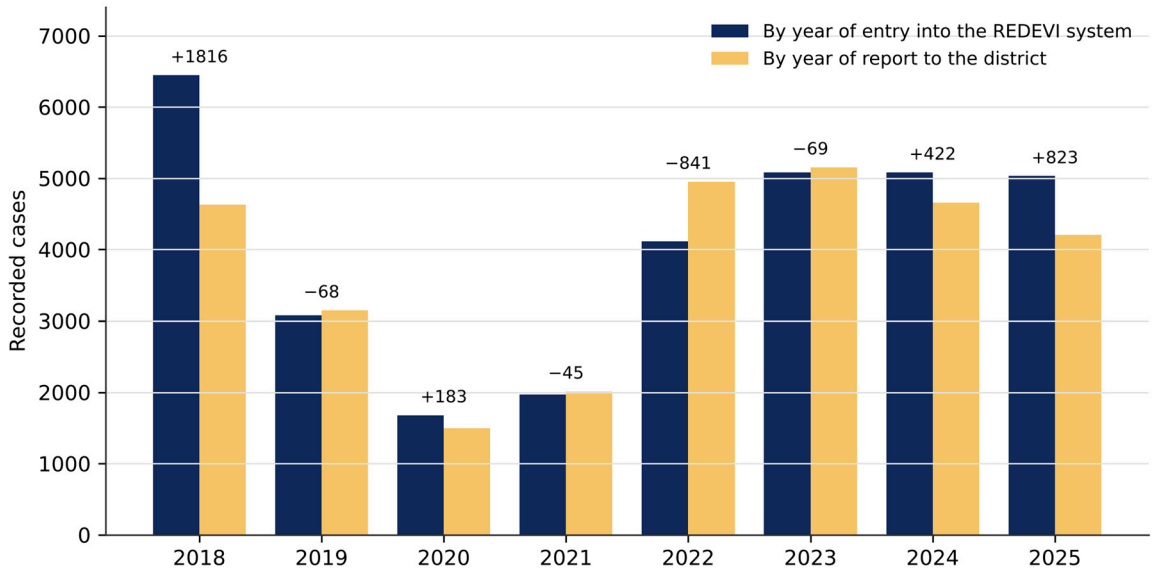
Source: author's calculations from REDEVI (cut-off February 2026). Cases by year of report to the district.

Figure 2. Recorded cases by alleged perpetrator group (**a**) and share of cases with an external alleged perpetrator (**b**), 2014–2025.

3.3. Year of Report and Year of Entry into the System

The comparison of the two date definitions shows that the computerisation of the system involved the retrospective entry of cases. In 2018, 6446 cases were entered in REDEVI while 4630 were reported to the districts that year, an excess of 1816 entries (39.2%), the largest relative difference in the series. In later years the two series diverge in both directions, from −841 to +823 cases, which indicates persistent lags between reporting and data entry (Figure 3). This retrospective entry documents the maturation of the registry,

although it does not by itself explain the increase observed in the series ordered by year of report, which is the series used in the models.



Source: REDEVI information sheet, cut-off March 2026. Figures above the bars show entries minus reports. The entry series starts in 2018.

Figure 3. Recorded cases by year of entry into the REDEVI system and by year of report to the district, 2018–2025.

3.4. Segmented Regression

Table 3 presents the main model. The immediate change in 2017 was positive but imprecisely estimated (rate ratio of recorded victims [RR] 2.79; 95% confidence interval [CI] 0.24 to 31.86; $p = 0.352$), as were the pre-intervention trend (RR 2.27 per year) and the subsequent change in slope (RR 0.47). The pandemic indicator was the only term estimated with precision, with rates in 2020 and 2021 at 0.44 times the level otherwise expected (95% CI 0.25 to 0.75; $p = 0.009$). Dispersion was very high (167.7), which indicates substantial extra-Poisson variation and a degree of model mismatch. The quasi-Poisson scaling widens the standard errors accordingly but does not explain this variation, which reinforces the descriptive reading of the model. Extrapolating the log-linear pre-intervention trend would imply rates above 19,000 per 100,000 by 2025, which suggests that the three initial years reflect the start-up of recording rather than an underlying trajectory.

Table 3. Segmented quasi-Poisson regression of recorded victims with log(enrolment) offset, 2014–2025. $n = 12$; residual df = 7; dispersion = 167.7. CI and p values from the t distribution. RR, rate ratio of recorded victims; SE, standard error.

Term	Coefficient	SE	RR	95% CI	*p*
Intercept	−11.480	1.579			<0.001
Pre-intervention trend (per year)	0.819	0.611	2.27	0.53 to 9.62	0.222
Level change, 2017	1.026	1.030	2.79	0.24 to 31.86	0.352
Slope change after 2017 (per year)	−0.758	0.612	0.47	0.11 to 1.99	0.255
Pandemic years, 2020–2021	−0.830	0.231	0.44	0.25 to 0.75	0.009

None of the alternative specifications changed this picture under conventional inference (Table 4). Moving the intervention to 2016 or 2018 produced imprecise estimates, removing or narrowing the pandemic indicator widened the intervals further, and the

leave-one-out estimates of the level change ranged from 1.83 to 3.38, with p values between 0.180 and 0.878. Ordinary least squares on the rate estimated a level change of 59.3 points ($p = 0.083$). The negative binomial model and Newey–West standard errors yielded smaller p values for 2017, but both rely on large-sample approximations that are not credible with twelve observations. The annual series is therefore consistent with a discontinuity in the institutionalisation window, but it cannot distinguish that discontinuity statistically from the start-up trend.

Table 4. Sensitivity of the level change. All models include the pandemic indicator for 2020–2021 unless stated. Full results in Supplementary Material S2.

Specification	Level Change	95% CI	p
Main model, intervention 2017 (RR)	2.79	0.24 to 31.86	0.352
Intervention 2016 (RR)	3.35	0.00 to 13,526.14	0.741
Intervention 2018 (RR)	0.57	0.22 to 1.45	0.198
No pandemic indicator (RR)	2.28	0.05 to 114.11	0.641
Pandemic indicator 2020 only (RR)	2.57	0.09 to 76.64	0.532
Negative binomial, 2017 (RR; z inference)	2.58		0.001
OLS on rate, 2017 (points)	59.3		0.083
OLS on rate, 2017, Newey–West lag 2 (points)	59.3		<0.001
OLS on rate, 2017, no pandemic indicator (points)	43.5		0.391
Leave-one-out, range of RR	1.83 to 3.38		0.180 to 0.878

3.5. The Suspension of In-Person Schooling

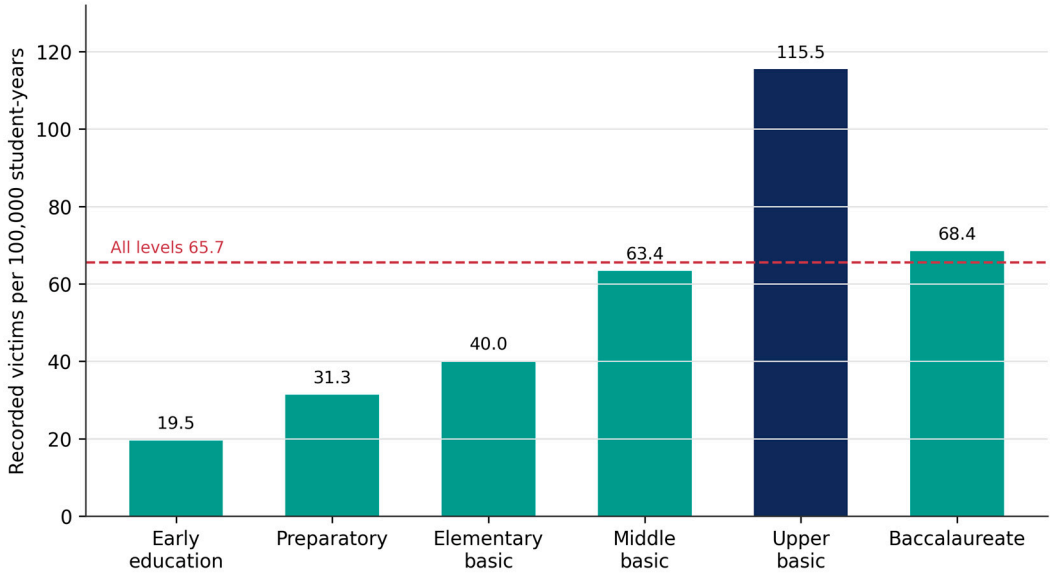
The pandemic years are consistent with a strong dependence of recording on school operation. Recorded victims fell to 0.44 times the expected level in 2020 and 2021, a reduction of 56%. The contraction was much deeper for cases with within-system alleged perpetrators (RR 0.17; 95% CI 0.07 to 0.45; $p = 0.003$) than for cases with external alleged perpetrators (RR 0.55; 95% CI 0.30 to 1.04; $p = 0.062$), whereas the level change in 2017 was imprecise in both groups. The decline in cases with external alleged perpetrators is consistent with the disruption of detection, although the data cannot exclude changes in the occurrence of violence during the closures. Recording recovered once in-person schooling resumed, with the rate above 100 per 100,000 in every year from 2022 to 2025.

3.6. Distribution by Educational Level, Sex and Role of the Alleged Perpetrator

Adjusted for enrolment, recorded victimisation increased with each level up to upper basic education and declined thereafter (Table 5; Figure 4). Upper basic, which covers the eighth to tenth grades, recorded 115.5 victims per 100,000 student-years, 1.76 times the rate for all levels (65.7), whereas the baccalaureate rate (68.4) was close to the overall figure despite its large absolute count. Victims recorded as female accounted for 30,987 of 34,564 victims (89.7%), with a rate of 118.7 per 100,000 female student-years against 13.5 for victims recorded as male, a ratio of 8.8. Alleged perpetrators were recorded as male in 98.0% of cases with known sex (Figure 5). Figure 6 completes the picture by ordering the relationships and roles of alleged perpetrators summarised in Table 2, with relatives, acquaintances and strangers as the largest external groups and teachers and other students as the largest within-system groups.

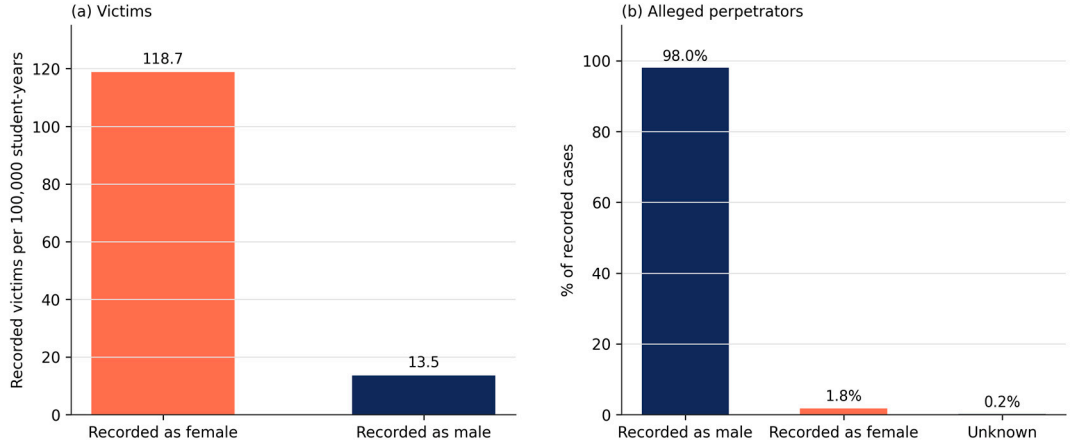
Table 5. Recorded victims per 100,000 student-years by educational level and recorded sex. Numerators January 2014 to February 2026; denominators school years 2014–2015 to 2025–2026. Rate ratios relative to all levels.

Group	Victims	Student-Years	Rate Per 100,000	Rate Ratio
Early education	768	3,936,807	19.5	0.30
Preparatory	1113	3,555,703	31.3	0.48
Elementary basic	4486	11,215,052	40.0	0.61
Middle basic	7221	11,398,000	63.4	0.96
Upper basic	13,646	11,811,417	115.5	1.76
Baccalaureate	7330	10,712,871	68.4	1.04
All levels	**34,564**	**52,629,850**	**65.7**	**1.00**
Recorded as female	30,987	26,098,024	118.7	
Recorded as male	3577	26,531,826	13.5	



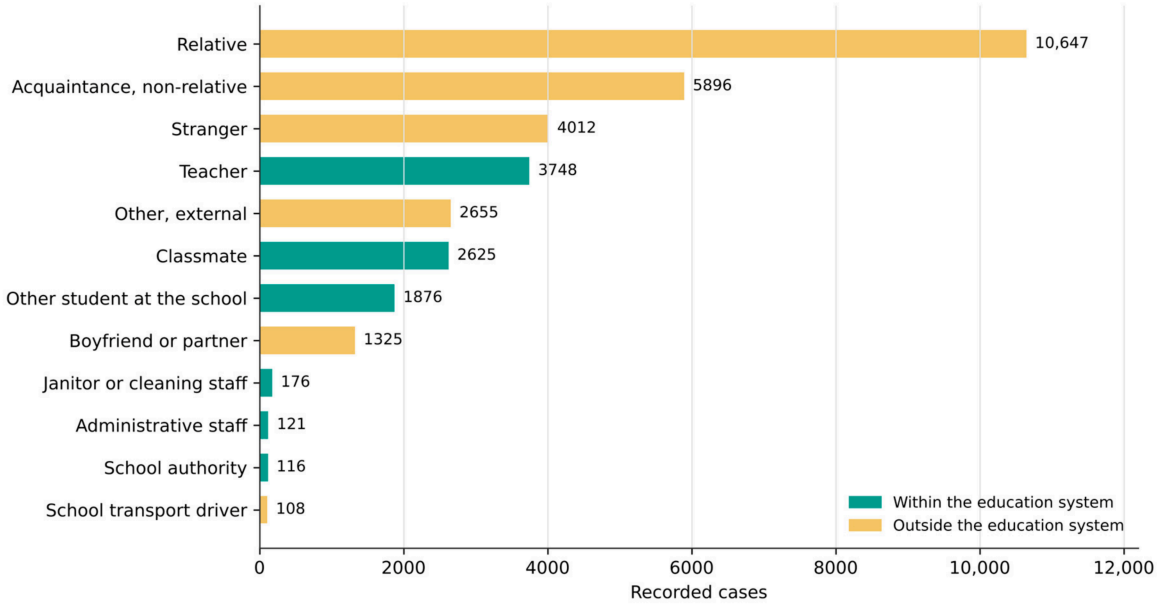
Source: author's calculations. Numerators from REDEVI (January 2014 to February 2026); denominators from AMIE, school years 2014–2015 to 2025–2026.

Figure 4. Recorded victims per 100,000 student-years by educational level. The dashed line marks the rate for all levels.



Source: author's calculations from REDEVI (January 2014 to February 2026) and AMIE. Sex as recorded in binary categories.

Figure 5. Recorded victims per 100,000 student-years by recorded sex (**a**) and recorded sex of alleged perpetrators (**b**).



Source: REDEVI (January 2014 to February 2026). Relationship or role of the alleged perpetrator as recorded.

Figure 6. Recorded cases by relationship or role of the alleged perpetrator, January 2014 to February 2026.

3.7. Pregnancies Resulting from Sexual Violence

REDEVI recorded 1494 pregnancies resulting from sexual violence, equivalent to 4.8% of victims recorded as female. By level, they represented 3.6% of female victims in middle basic (234), 7.2% in upper basic (924) and 4.9% in the baccalaureate (336). The registry records these pregnancies from the age of ten, and the published data provide no age-specific denominators, so these proportions describe recorded cases and do not estimate risk.

3.8. Population-Level Indicators

Other official sources situate the registry within a wider field of violence without allowing for a direct comparison. The 2019 national survey on gender-based violence against women estimated that 7.0% of women had experienced sexual violence in the educational setting over their lifetime (Instituto Nacional de Estadística y Censos 2019). The Prosecutor's Office recorded 86,962 complaints of offences against sexual integrity between 2015 and 2025 across all ages and settings (Fiscalía General del Estado 2025), and vital statistics registered 1621 live births to mothers aged ten to fourteen in 2024 (Instituto Nacional de Estadística y Censos 2025), an indicator of sexual violence against girls that is not specific to schools. These magnitudes measure different populations and events and are therefore reported as context rather than as estimates of underreporting.

4. Discussion

4.1. What the Registry Lets the State See

The recorded rate multiplied ninefold between 2016 and 2018 and then settled on a plateau interrupted only by the pandemic. The segmented model describes this path, but with three pre-intervention observations it cannot separate the discontinuity of 2017 from the start-up trend of the registry, and the sensitivity analyses confirm that no reasonable specification does so under conventional inference. The interpretation of the pattern therefore cannot rest on a single estimate. It rests instead on four strands of evidence that, with different degrees of directness, point in the same direction. The Ministry itself

attributes the 2018 peak to the creation of the computerised system (Ministerio de Educación 2023). In that year the registry entered 39% more cases than were reported to the districts, which shows that the system was maturing and absorbing earlier reports, although this retrospective entry does not directly account for the rise in the series ordered by year of report. The increase came mainly from violence attributed to external alleged perpetrators and detected by schools, whose share rose from 7% to 70% between 2014 and 2018. Finally, the suspension of in-person schooling coincided with a sharp contraction that reversed when schools reopened, a pattern consistent with the dependence of the recorded figure on the operation of the detection channel.

These strands make surfacing the most consistent reading of the discontinuity, although they do not rule out a simultaneous change in underlying incidence. A rise in the propensity to report after the public attention generated by the AAMPETRA Commission would, moreover, be indistinguishable from administrative surfacing in these data. The broader literature supports caution in the other direction as well. If registries capture a small fraction of prevalence (Stoltenborgh et al. 2011), a stable plateau after 2022 is compatible with a detection ceiling as much as with a stable incidence. Population indicators such as the lifetime prevalence of sexual violence in educational settings reported by women (Instituto Nacional de Estadística y Censos 2019) or births to girls aged ten to fourteen (Instituto Nacional de Estadística y Censos 2025) signal magnitudes that differ in kind from registry counts, and they are better read as reminders of the field the registry does not reach than as measures of what it misses.

4.2. Schools as an Infrastructure of Detection

The composition of the registry shows that its main function in practice is to channel violence that occurs outside schools, since three in four recorded cases involve external alleged perpetrators and relatives are the largest single group. This reflects a policy design in which school staff act as mandated reporters for violence in any setting (Ministerio de Educación 2020). The pandemic years make the consequences of that design visible. When in-person schooling was suspended, recorded victims fell to less than half of the expected level. The contraction was deepest for cases attributed to school personnel and students, which is consistent with reduced exposure as well as reduced detection, but it also reached cases attributed to external perpetrators, whose recording depended on school attendance. This decline is consistent with the disruption of detection, although it cannot exclude changes in the occurrence of violence during the closures, which may have increased exposure to some perpetrators while reducing exposure to others. The same logic is likely to apply to the later school closures caused by insecurity, which followed the return to in-person schooling (Human Rights Watch 2024). Detection also depends on compliance with reporting duties beyond schools, as the gap between the number of pregnant girls under fourteen attended by the health system and the number of complaints it filed illustrates (Consejo Nacional para la Igualdad de Género 2021).

For education policy, this means that decisions about school operation carry protection costs that are rarely counted. Closures, reduced timetables and the substitution of remote provision interrupt a channel of detection on which the wider child protection system relies, and continuity plans for emergencies would need to include alternative routes for identifying and referring violence. It also means that the capacity of schools to detect depends on the people who staff them, particularly teachers and the student counselling departments, and on the training and time they have to act on the protocols.

4.3. Violence Attributed to School Personnel

One in four recorded cases involves an alleged perpetrator within the education system, and 3864 cases involve teachers and school authorities. These figures engage with international evidence on educator misconduct and grooming (Jeglic et al. 2023; McAlinden 2006; Shakeshaft 2004; Winters et al. 2020) and with regional data, since close to half of the cases reported in the Peruvian system involved school personnel acting against students (Ministerio de Educación del Perú 2019). The concept of institutional betrayal clarifies why these cases matter beyond their number, because the harm is aggravated when the institution entrusted with protection fails to prevent or respond (Christl et al. 2024; Smith and Freyd 2014). The Inter-American Court's judgment in Guzmán Albarracín placed this failure at the centre of the state's obligations (Corte Interamericana de Derechos Humanos 2020). The registry also has a blind spot in this domain, since externally contracted staff such as school transport drivers are not classified as within-system perpetrators (Human Rights Watch 2024), which understates the share of violence linked to the school environment. Vetting, codes of conduct, teacher education on professional boundaries and effective administrative sanction belong to the same policy field as recording.

4.4. Recorded Victimisation by Sex and Educational Level

Adjusted for enrolment, the rate of recorded victimisation among students recorded as female was 8.8 times that among students recorded as male, and alleged perpetrators were recorded as male in almost all cases with known sex. The registry measures recorded sex and not gender relations, so these asymmetries do not demonstrate a gendered mechanism by themselves. They are nonetheless consistent with the literature that explains school-related sexual violence through gender hierarchies and hegemonic forms of masculinity (Connell and Messerschmidt 2005; Jewkes 2002; UNESCO and UNGEI 2016), and that interpretation is offered here as a theoretical reading of the pattern.

The rate by level qualifies a common reading of the counts. Once enrolment is considered, the concentration lies in upper basic education, the eighth to tenth grades that correspond broadly to ages twelve to fourteen, where the rate is 1.76 times the average, whereas the baccalaureate is close to the average despite its large absolute count. This is also the level in which pregnancies represent the highest proportion of female victims, in an age range for which the inter-American standard treats pregnancy as evidence of sexual violence (Mecanismo de Seguimiento de la Convención de Belém do Pará 2016). The pattern may reflect greater exposure during early adolescence, the power asymmetries that the critique of adult-centrism identifies in pedagogical relationships (Lay-Lisboa and Montañés 2017), and a greater capacity or opportunity for disclosure at these ages, and the data cannot separate these explanations.

4.5. Data Governance as Education Policy

The central implication of the study is that the governance of education data is a component of education policy in its own right. The registry does more than describe violence, since its design determines which violence becomes an object of public action, a feature that the literature on policy instruments and on governing education through data anticipates (Lascoumes and Le Galès 2007; Ozga 2009). The Inter-American Court recognised this when it included the correction of statistical information among the measures of non-repetition (Corte Interamericana de Derechos Humanos 2020), and the policy adopted through Executive Decree 368 of 2024 incorporated an axis on the generation of information (Ministerio de Educación 2024; Presidencia de la República del Ecuador 2024).

The analysis identifies concrete steps that would strengthen that axis. Publishing individual or monthly records with separate dates of occurrence, report and entry would

allow for the analysis of change over time that annual aggregates cannot support. Stable victim identifiers would allow for cases to be distinguished from persons across years. Separate reporting of violence committed within schools and violence detected through them would align public statistics with the two policy problems the registry actually covers. The routine linkage of REDEVI with enrolment records would enable rates by level, sex, age, type of funding and territory, and the linkage with the Prosecutor's Office and the national violence registry would allow for cases to be followed through the justice system, in line with the call for a unified inter-institutional registry made by earlier Ecuadorian research (Martínez-Pérez and Paz Enríquez 2022). These recommendations are relevant beyond Ecuador for education systems that rely on similar registries, including those of Peru and Colombia (Congreso de la República de Colombia 2013; Ministerio de Educación del Perú 2019).

4.6. Limitations

The study has several limitations. The annual series contains twelve observations and only three before the institutionalisation window, which precludes causal inference about the effect of the registry and explains why the segmented model is interpreted descriptively. The reference date is the report to the district rather than the date of occurrence, the aggregate tables do not allow victims to be followed across cases or years, and the registry is subject to continuous revision, as the small differences between the February and March 2026 releases show. The pandemic indicator approximates a period in which closures and reopenings varied between school regimes and territories, and later closures linked to insecurity were not modelled. Sex is recorded in binary categories, level-specific rates cannot be disaggregated by sex and age-specific rates cannot be computed with the published data. Enrolment-based rates include events that occurred outside school, so they describe the volume detected through the education system relative to its population and not the risk of victimisation in schools. Finally, the population indicators used as context refer to different populations and events and cannot be used to estimate underreporting.

5. Conclusions

This study examined the complete open data series of sexual violence recorded through Ecuador's education system between 2014 and 2025. The recorded rate multiplied ninefold during the institutionalisation of the registry, but the annual series cannot distinguish that discontinuity statistically from its start-up trend. The Ministry's own attribution, the retrospective entry of cases as the registry matured in 2018, the shift towards violence detected by schools and the contraction during school closures are together consistent with surfacing as the most plausible interpretation, although none of them excludes a simultaneous change in incidence. The contraction during the suspension of in-person schooling is consistent with a strong dependence of the recorded figure on the everyday operation of schools, particularly for violence attributed to school personnel. Once enrolment is taken into account, recorded victimisation is concentrated among students recorded as female and in upper basic education, and a quarter of cases involve alleged perpetrators within the system, including teachers and school authorities.

For education policy, the findings suggest that protection and data infrastructure belong to the same field of action as teaching and learning. The continuity of in-person schooling, the capacity of teachers and counselling departments to apply protocols, the prevention and sanction of violence by school personnel and the design and openness of the registry jointly determine what the state is able to count and therefore what it is able to address. Strengthening REDEVI through disaggregated and linked data, and treating the registry as a policy instrument subject to evaluation, would bring Ecuador closer to

the obligations established by the Inter-American Court and to the commitment to safe learning environments of the 2030 Agenda. Future research could draw on individual records, if they become available, to model monthly change, follow victims through the justice system and examine territorial variation, and could combine registry data with qualitative evidence on how schools decide to report.

Supplementary Materials: The following supporting information can be downloaded at: https://www.mdpi.com/article/10.3390/socsci15100698/s1. Supplementary Material S1. Python code for the aggregation of enrolment records, the statistical analyses and the figures. Supplementary Material S2. Workbook with the annual series and all model estimates.

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Institutional Review Board Statement: This study is a secondary analysis of aggregated statistics published by Ecuador's Ministry of Education on its open data portal. The files contain no personal data, do not allow for the re-identification of any individual and involved no contact with human participants. Because the analysis falls outside the scope of research with human subjects and of personal data processing, ethical review and approval were not required.

Informed Consent Statement: Not applicable.

Data Availability Statement: The REDEVI statistical tables and the AMIE historical enrolment register analysed in this study are publicly available from Ecuador's Ministry of Education at https://educacion.gob.ec/informacion-educativa/ and https://educacion.gob.ec/datos-abiertos-minedec/ (accessed on 24 September 2026). The analytic dataset and code are openly available in Zenodo at https://doi.org/10.5281/zenodo.23072902 and as Supplementary Materials S1 and S2.

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Appendix A

Table A1. Annual values used in the models, 2014–2025. Cases by year of report to the district; victims and enrolment as defined in Section 2.3.

Year	Cases Within	Cases External	Share External (%)	Victims	Enrolment (AMIE)	Rate Per 100,000
2014	83	6	6.7	101	4,728,582	2.1
2015	164	30	15.5	266	4,627,946	5.7
2016	309	182	37.1	543	4,581,883	11.9
2017	921	1254	57.7	2422	4,516,067	53.6
2018	1400	3230	69.8	4904	4,473,021	109.6
2019	773	2373	75.4	3233	4,407,030	73.4
2020	257	1239	82.8	1537	4,314,777	35.6
2021	116	1895	94.2	2014	4,309,139	46.7
2022	857	4095	82.7	5002	4,322,138	115.7
2023	1382	3770	73.2	5285	4,202,798	125.7
2024	1251	3388	73.0	4731	4,106,819	115.2
2025	1072	2973	73.5	4191	4,039,650	103.7

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