

The Impact of Community Violence on Educational Outcomes: A review of the literature

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THE IMPACT OF COMMUNITY VIOLENCE ON EDUCATIONAL OUTCOMES: A REVIEW OF THE LITERATURE

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KEY FINDINGS AND RELATED RECOMMENDATIONS

- 1. A large share of the literature connecting violence and children’s educational outcomes focuses on school settings and bullying, overlooking how violence in families, on the way to school, and in communities, also affects these outcomes. Using a systematic approach, a review of the literature on the impacts of community violence on education outcomes yielded a total of 1,711 articles. Of these, only 29 articles met the inclusion criteria established. Two main bodies of research on community violence and education were identified: one on the impact on learning processes and the other on attendance or school enrolment. Overall, **the evidence of the short-term impacts of community violence exposure on academic achievement, dropout and enrolment is clear. The evidence for the long-term impacts is less well documented.****
- 2. The country context is important to determine which source of violence has a greater impact on children’s learning process.** In places of high violence, such as the Northern Triangle countries of Latin America (El Salvador, Guatemala and Honduras), community violence could have a more significant impact on education outcomes, and constitute a more significant concern than bullying and other forms of school-related violence. Consequently, policy efforts must focus not only on violence that occurs at school, but also violence that occurs in communities (and on the way to and from school).
- 3. It is necessary to identify good practices that can help to understand how schools are responding in the midst of violent communities** and to identify what lessons can be learned for the creation of “safe spaces” in other contexts where violence is prevalent. **It is important to support children with poor academic performance and at risk of dropout**, who are more likely to be victims of community violence but who could also perpetrate crime where the opportunity exists. Practitioners and policymakers also need to consider gender differences in violence and their impacts in order to focus on differentiated strategies.

1. INTRODUCTION

In recent decades, violence in and around schools has become a serious concern in Latin America and the Caribbean (LAC).¹ However, peer violence and bullying is widespread across all countries – not just in LAC – and is known to have a negative impact on learning. As evidenced by many papers, this is not a new or isolated phenomenon, nor is it limited to certain schools or countries (Abramovay and Rua, 2005; Berger, Karimpur, and Rodkin, 2008; Plan International, 2008; Román and Murillo, 2011; Richardson and Fen Hui, 2018). There is also an abundance of research that points to a strong correlation between bullying and lower test scores (Abramovay and Rua, 2005; Deole, 2018; Eriksen et al., 2014; Holt et al., 2007; Konishi et al., 2010; Mullis et al., 2012; Nakamoto and Schwartz, 2010).

A large share of the literature connecting violence and schools has focused on bullying, overlooking how violence in other environments, in families and in communities, affects children's education and their learning outcomes. In LAC particularly, a region that is home to 9 out of the 10 countries with the highest rates of violence (measured through homicides) in the world (UNODC, n.d.)² – the prevalence of bullying in schools is one of the lowest in comparison to other regions,³ (Know Violence in Childhood, 2017; Richardson and Fen Hui, 2018), suggesting that this is not the most concerning form of violence impacting children's educational experiences.

The aim of the present literature review is to summarize existing evidence on the impacts of community violence on academic achievement as well as on other educational outcomes – including but not limited to dropping out, absenteeism, truancy, enrolment and attendance. Although this paper originally intended to centre on the evidence from countries of the LAC region with high rates of community violence (Brazil, El Salvador, Guatemala, Honduras and Jamaica), the dearth of evidence exclusive to this region led to a broader geographical search.

This literature review adopts a systematic method and is in six sections. The second section presents the methodology used, specifying the inclusion criteria, search strategy, process for screening and general results. The third section summarizes the main features of the evidence base. The fourth section organizes the findings of the review, highlighting several main themes. The next section specifies the limitations of the evidence base and is followed by a concluding section with policy and research implications.

1 For example, a recent paper showed that bullying in schools is widespread in LAC countries and associated to poorer reading outcomes (Chávez et al., forthcoming).

2 In 2015, the countries ranked as having the highest global homicide rate per population of 100,000 were (in order from first to tenth) El Salvador (108.6), Honduras (63.7), Venezuela (57.2), Jamaica (43.2), South Africa (34.2), Trinidad and Tobago (30.8), Brazil (26.7), Colombia (26.5), Guyana (19.4), and Mexico (16.4).

3 Such as the West and Central Africa region where the estimated prevalence of bullying victimization was 53.1 per cent of school aged children. In LAC, the corresponding estimate was 34.2 per cent and in OECD/EU countries, the figure 34.1 per cent (Richardson and Fen Hui, 2018).

2. METHODOLOGY

This review adopts a systematic approach for searching and screening literature, and focuses on primary and secondary studies, including peer-reviewed academic articles and grey literature, policy reports and others. The subsection below expands on the inclusion criteria, search strategy and process for screening.

2.1 Inclusion criteria

The articles included were evaluated on the basis of their scientific validity, the coherence of their methodology, and their conceptual framework. All articles included had well-defined research questions and variables and these were linked with their conceptual framework. Regarding the methodology of the studies, relevant data and appropriate methods have been used to address research questions, and the sample and time period were clearly stated. These studies are considered scientifically valid because they contained the necessary statistical information regarding their models and robustness tests, and their results were coherent with their interpretations. Studies that included a primary data-collection process or used sensitive secondary data demonstrated that they had properly addressed ethical considerations. In addition, the selection process considered the population covered (children), the explanatory or independent variable (community violence), a series of educational outcomes (including dropout and learning achievement) and period of publication. These are detailed below.

This review also included additional papers that did not necessarily meet the inclusion criteria established for literature selection. While this could be a shortcoming of traditionally unbiased systematic reviews, which discuss only material meeting the inclusion criteria, the addition of these papers strengthened the discussion and provided complementary evidence.

Population

School-aged children: This review focuses on the impacts of violence on primary and secondary school-aged children.

Explanatory variable

Community violence: The review focuses on literature that explores the impacts of community violence on education outcomes. Community violence is defined as a series of deliberate acts intended to cause physical harm against a person in the community (Cooley-Strickland et al., 2009) where children live and/or go to school. Armed violence and drug-related violence that occurs in communities where children live and/or go to school was also considered in the definition of community violence due to its pervasive presence in the LAC countries that the authors originally targeted.

Educational outcomes

For inclusion, studies had to explore the impact of community violence on at least one of the following educational outcomes, as defined by UNESCO (2020; UNESCO-UIS, 2016) and the Cambridge Dictionary (Cambridge University Press, 2007).⁴ The authors recognize that these concepts might be defined differently across countries:

- ***Dropping out:*** Refers to a situation when students leave school permanently in a given school year.
- ***Absenteeism:*** Refers to a situation when a student does not attend school (for any reason).
- ***Truancy:*** Refers to absenteeism without a valid reason such as being sick.

⁴ UNESCO only has the operational indicator definition for enrolment and attendance.

- **Enrolment:** Refers to inclusion on an official list of students at primary or secondary level, regardless of age.
- **Attendance:** Refers to the physical presence of students in school during the academic term, when classes are in session.
- **Learning/achievement:** Understood as school grades⁵ or a standardized testing on a variety of subjects.

Period of publication

This review considered studies from January 1999 to January 2019. The initial planned period was extended because the first decade of the twenty-first century saw a marked increase of publications on this topic – partly as a result of high crime rates in the United States in cities such as New York and Chicago.

2.2 Search strategy

The literature was first surveyed using Web of Science (WoS), which contains peer-reviewed academic articles in the areas of social sciences, economics, humanities and development. The search strategy used the terms detailed in Table 1. Searches were run twice, the first focusing on global literature with the second focusing on the LAC countries specified⁶ in Table 1. To complement the research through WoS, which focuses on peer-reviewed scientific articles, Google Scholar and libraries' search engines from two UK universities (Cambridge and York) were also used to find policy papers and grey literature. Finally, a snowball strategy was used to locate additional resources by scanning through authors' reference lists from identified WoS papers.

Table 1. Search terms used for the selection of papers

The following search terms were used for the review of the global literature:

1. **TS=** (outcome OR effect* OR impact* OR attain* OR enrol* OR attend* OR progress* OR achiev* OR result OR results OR complet* OR improve* OR assess* OR perform* OR test* OR mark OR marks OR marking OR learn* OR exam OR examination* OR graduat OR absen* OR truan* OR "drop out" OR "drop-out" OR "dropped out" OR qualif* OR "academic performance" OR "educational achievement" OR "school difficulty" OR "academic quality" OR education* attainment OR "school truancy" OR "academic achievement" OR school enrollment OR "test score" OR "cognitive performance" OR read* test OR "math test" OR "test score")
2. **TI=** (child* OR adolescent* OR elementary school OR young children OR schoolchild OR "primary school" OR "secondary school" OR children OR student OR "school-aged children")
3. **TI=** ((crime OR violence OR gang OR homicide OR shoot* OR "street violence" OR delinquency OR high-risk) near (Neighborhood* OR community OR local OR school OR Impact OR effect* OR exposure))

The following terms were added for a review of the literature in Latin America and the Caribbean:

4. **CU=** ("El Salvador" OR Brazil OR Brasil OR Jamaica OR Honduras OR Guatemala OR "Latin America and the Caribbean" OR "Latin America")

Both searches used the following terms of exclusion:

5. **TI=** (sexual violence OR family violence OR domestic violence)

5 The use of the term "grades" in this paper is understood as learning scores/marks and not as a class (e.g. Grade 2).

6 These include countries of the region with the highest homicide rates globally, with rates of 52, 27.4, 43.9, 38.9 and 22.5 homicides per 100,000 population in El Salvador, Brazil, Jamaica, Honduras and Guatemala, respectively. To put this into perspective, in 2018 El Salvador had the highest homicide rate in the world considering countries for which data was available, followed by Jamaica and Honduras. Brazil and Guatemala ranked seventh and ninth on this list (UNODC, n.d.).

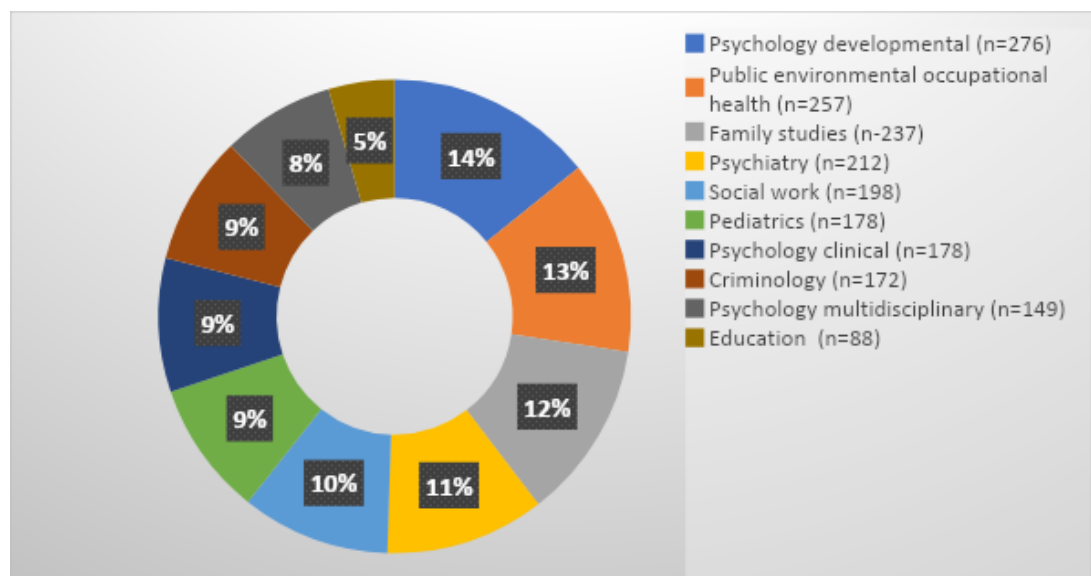
2.3 Screening process

For the search using WoS, the screening process was carried out by the authors of this paper. Once the search terms were developed and placed in WoS, the results generated were split equally between the two, who reviewed all the titles in their entirety. The titles were used to determine whether the document met the inclusion criteria established for passing to the next phase, which was a review of the abstract. When a title was unclear, or not illustrative of the study's aims, the abstract was reviewed for decision on inclusion. Once the selection of relevant literature was completed, articles were reviewed in full. For the second search, using Google Scholar and university repositories, the same process was used. Documents such as dissertations, documentaries, news articles, works in progress were excluded from the review, as well as research published after January 2019.⁷

2.4 Search results

From WoS, 1,689 peer-reviewed articles were identified – including systematic reviews and original research articles. The articles were mainly concentrated in the category of developmental psychology with only 5 per cent in the education research category (see Figure 1).

Figure 1. Academic categories of research results



Source: WoS search results.

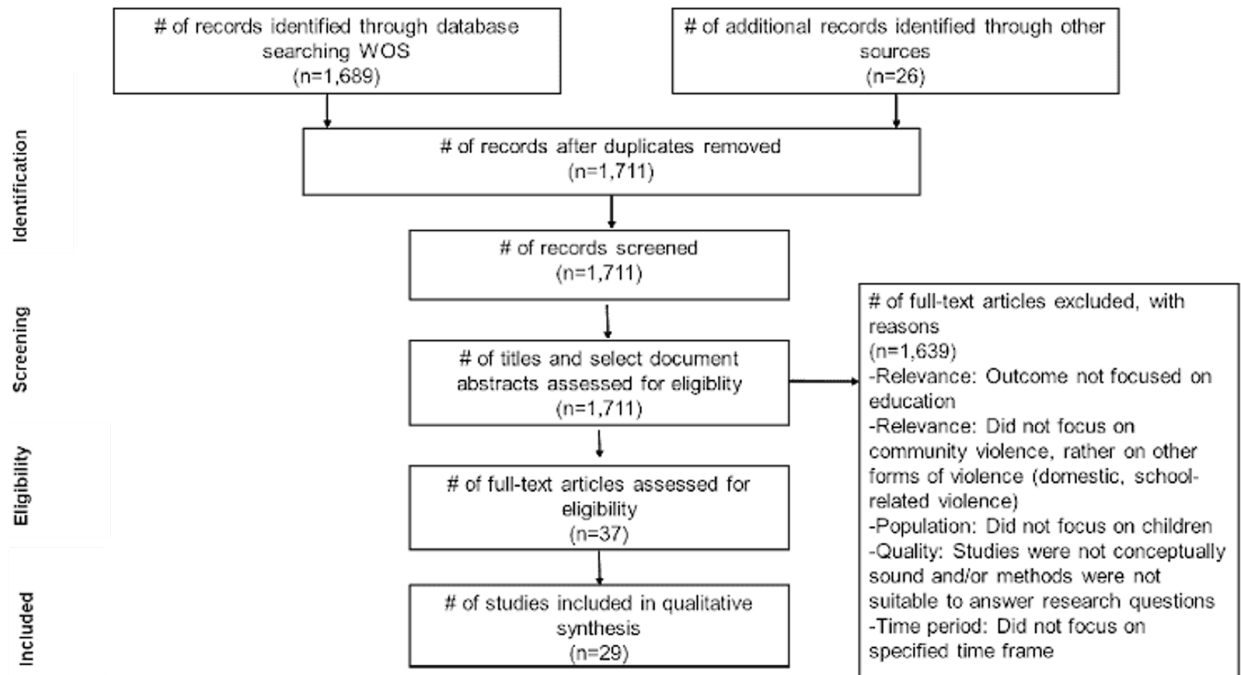
After adding the non-WoS resources, 1,711 articles were screened. Of these, only 29 articles met the inclusion criteria.⁸ Out of the 29, only five were from international organizations and development agencies.⁹ The remaining 24 documents were peer-reviewed academic articles. The flow chart below (Figure 2) outlines the process used and summarizes the reasons for exclusion. The main characteristics and key findings of the included studies are provided in the annex.

⁷ Other documents excluded from the review were studies that explored the impacts of other forms of violence such as family or school related violence. In addition, studies exploring the impacts of civil wars and their effects of education and human capital were excluded, mainly because these imply large-scale destruction of infrastructure that does not necessarily characterize community violence. In addition, literature focusing on the impacts of community violence on other outcomes, such as aggressive behaviours, delinquency and other developmental outcomes, as well as studies targeting a population in tertiary education (i.e. not children) was also excluded. Studies that focused on interventions to mitigate impacts of violence were also removed.

⁸ Articles were excluded for the next reasons: **Relevance:** Outcomes were not focused on education or community violence; rather, they focused on other forms of violence like domestic or school-related violence. **Population:** Articles did not focus on children. **Quality:** Studies were not conceptually coherent and/or methods were not suitable to answer research questions. **Time period:** Articles were published out of the time frame specified.

⁹ This includes the Inter-American Development Bank (1), ILO (1), USAID (1), Theirworld (1), and the World Bank (1).

Figure 2. PRISMA diagram

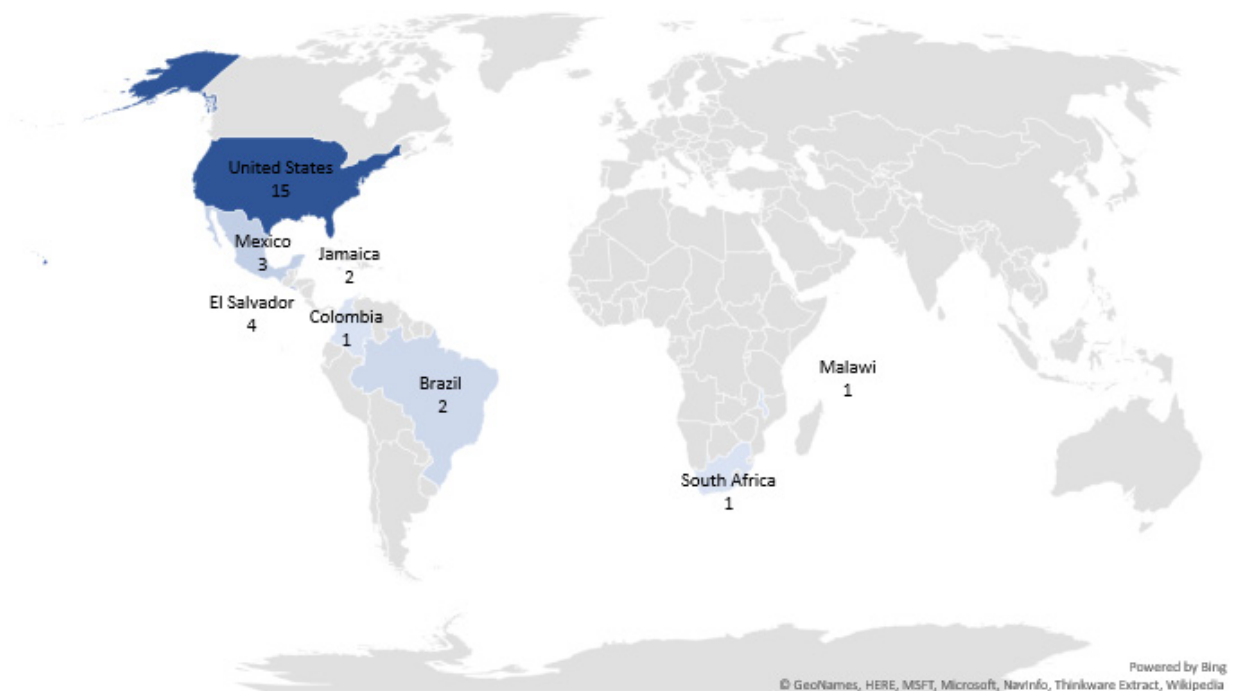


Source: Authors' search results.

3. FEATURES OF THE EVIDENCE BASE

There are some general characteristics of the research that the literature search revealed. First, 15 of the documents included in the review on the impact of community violence on educational outcomes were concentrated in United States, especially confined to cities that have had historically high rates of community violence (e.g. Baltimore, Chicago and New York). Two studies outside the Americas (Malawi and South Africa) were also selected (Figure 3). When including search terms for the countries of Latin America and the Caribbean that were heavily affected by community violence, documents for El Salvador (4), Mexico (3), Jamaica (2), Brazil (2), and Colombia (1) were identified.

Figure 3. Geographic concentration of studies



Source: Authors' search results.

Note: The intensity of colours ranges from concentration of studies (dark blue) to zero studies (grey). This map does not reflect a position by UNICEF on the legal status of any country or territory or the delimitation of any frontiers.

The second general feature of the literature relates to the empirical strategy and methodologies used. An overwhelming majority of the studies was quantitative (25 articles), and made use of different econometrics techniques, where community violence was the independent variable and educational outcomes were the dependent variables. Of these, 10 articles used a fixed-effects (FE) model as violence usually concentrates in some municipalities, making this particular approach useful for exploring whether violence affected educational outcomes. To measure community violence, seven articles used homicide as a measurement of community violence, while the remaining studies used primary data-collection for their analysis, relying mostly on self-reported experiences of community violence, while educational outcomes were measured using either surveys where students self-reported academic performance, or through the use of standardized test scores (math and language, primarily). Only one article used a qualitative analysis, describing student experiences in high-risk schools.

4. FINDINGS

Even if the current literature on the impact of community violence on educational outcomes of children is not abundant, a few central messages emerge:

The review identified literature confirming a stronger relation between community violence and academic performance in comparison to violence that stems from the school setting. For instance, Bowen and Bowen (1999) compared the danger stemming from different environments,¹⁰ and found that neighbourhood danger was more predictive of education outcomes than measures of school danger. Bowen and Bowen (1999) also analysed students' reports of exposure to violence in the community and the school, and its effects on school attendance, school behaviour and grades. They found that neighbourhood and school experiences with danger explained a greater share of the variance in school attendance and avoiding trouble at school; more so than the variation in grades (1999).

These results suggest that experiences of insecurity in the community are more relevant to explaining education outcomes than school experiences, a finding that is echoed in a study on Latin America and the Caribbean. In a recent paper on bullying in the region, LAC countries were separated into four categories according to their homicide rate. The study found that, not only was the prevalence of bullying lower in countries with high rates of homicide, bullying had only a very low association to lower grades in these violent countries (Trucco and Inostroza, 2017). This could indicate that, in countries of the region with a high prevalence of community violence, children may be suffering from the impacts of the form of violence that is more pervasive. The impacts of other forms of violence, such as bullying, may not be as relevant in settings of high community violence.

The review also found that there two main bodies of research exploring the impact of community violence on educational outcomes. The first, and larger share, explores the negative effects of violence on learning processes when children are enrolled in school, analysing how children's exposure to violence influences their academic performance through two main variables: school behaviour and grades. The second body of research, less abundant, looks at whether community violence affects other educational outcomes, such as enrolment rates.

Studies exploring the effect of community violence on learning

In an early study using students' self-reports, Schwartz and Gorman (2003) found a strong relation between community violence and poor academic outcomes in Los Angeles.¹¹ In a more recent study of a school in Baltimore, Milam et al. (2010) used a violence risk score composed of seven variables from the Neighborhood Inventory of Environmental Typology (NifETy)¹² instrument,¹³ to examine the effect of the school and neighbourhood climate on academic achievement. They found that, for every one-unit increase in an estimated violence risk score, there was a decrease in test scores in math and reading of between 4.2 per cent and 8.7 per cent among primary school grades, with the highest exposure recorded for students from fifth grade.

10 Authors used hierarchical multiple regressions.

11 Authors used structural equation modelling (SEM).

12 The Neighborhood Inventory of Environmental Typology (NifETy) instrument includes 172 items operationalized within seven areas: physical layout, structures on the block, dwelling type, youth and adult activity, physical order and disorder, social order and disorder, and the presence of violence, alcohol and other drugs (VAOD) indicators (for ex. presence of alcohol bottles, obvious signs of drug selling, etc.) (Furr-Holden et al., 2008).

13 Which includes the presence of blood in the street, shell casings, police tape, memorials, people yelling, people swearing, and people fighting.

Another study on the impact of community violence in Chicago high schools found that violent crime had a negative effect on standardized test scores of both reading and math (Burdick-Will, 2013). Taking into consideration a broader objective measure than just the test scores, Ratner et al. (2006) included IQ, reading and mathematics tests, and Grade Point Average (GPA) to assess children's exposure to community violence on school performance in Detroit.¹⁴ After controlling for poverty, the main finding was that children who reported the most violent experiences were the ones who performed worse on any of the academic measures.

Using a similar approach, Sharkey (2010) tested children's exposure to a homicide in a Chicago community at different times (sometimes months later) in order to evaluate the effect of this exposure on their cognitive performance. Results show that, irrespective of whether a child witnessed violence directly or indirectly, the impact of the homicide, especially if it had occurred near the student, significantly reduced the performance on vocabulary and reading assessments by 0.5 and 0.7 points, respectively (2010).

A very similar result was found in a more recent paper by Sharkey et al. (2012) where the impact of a local homicide on preschool-aged children residing in Chicago was examined. The authors, who considered the time in which a homicide took place, found that it affected children's test performance. Sharkey et al. (2014) found similar results for New York, showing that the geographical proximity of a violent crime (i.e., the block where the student lives) had a negative short-term effect on student's standardized test performance on language skills (but not on mathematics).¹⁵

The above findings suggest that exposure to community violence is associated to short-term impacts, but not necessarily to impacts in the long term, where the evidence is more scarce. In a rare study addressing the long-term effects of community violence on education achievement, Borofsky et al. (2013) tested variables of community violence¹⁶ on school engagement and GPA. In this model, school engagement was the way to link the effect of violence on academic achievement over time and it concluded that community violence affected both variables – engagement and GPA. It also found that community violence not only had a direct effect on academic performance, but also a cumulative effect due to psychological reactions (Borofsky et al., 2013). Additional studies on the long-term effects of community violence found that violent crime in the neighbourhood predicted a decrease in academic achievement in Chicago (McCoy, Roy, and Sirkman, 2013) and other settings (Bergen-Cico et al., 2018; Hardaway et al., 2014).

In sum, all studies that were reviewed concluded that exposure to community violence (self-reported or otherwise) is associated with lower academic achievement, usually measured through standardized testing. In addition, the evidence on the short-term impacts of community violence exposure is clear, while the evidence on the long-term impacts has not convincingly been established.

Although an important share of the evidence on impacts of community violence on educational outcomes is centred in the United States, **recent literature has begun to document the impacts of community violence in several LAC countries.** In a study of Mexican schools using panel data, Orraca-Romano (2018) found that a one-unit increase in the homicide rate could reduce a child's test score from between 0.14 per cent to 0.35 per cent. The highest effect was attributable to time between the day

14 Community violence exposure was self-reported by children, and included items asking children whether they had seen or heard gunshots, seen dead bodies, and included questions on protective factors.

15 This study used a linear probability model, where the key variable was the timing between a local homicide and the performance on a test to compare students' scores.

16 Authors used hierarchical multiple regressions.

that homicide occurred and the test date, reinforcing some of the findings that this has a significant association with worse test performance. Additionally, students were more likely to fail a grade if they were exposed to higher homicides rates (Orraca-Romano, 2018).

In another study on Mexico, Caudillo and Torche (2014) found that an increase in the local homicide rate resulted in an increase in school failure. By applying a variety of causal inference techniques to explore the impact of local homicides on children's early educational achievement in Mexico between 1990 and 2010, the authors concluded that homicide rates at the municipal level had a significant effect on the probability of failing a grade in elementary school in Mexico. According to the authors, the effect was driven by heightened fear and anxiety, which threatened mental stability – coupled with changes in parenting practices.

In a related study on Brazil, Monteiro and Rocha (2016) explored the effects of armed conflict between drug gangs in Rio de Janeiro's favelas on educational outcomes of children attending schools located in and around conflict areas. Violence was measured through a dummy variable, which captured if the school was exposed to violent events¹⁷ or not. They found that students from schools who were exposed to violence performed worse on standardized math exams, and that the effect of violence increased with conflict intensity and duration. In Jamaica, a cross-sectional study of 1,300 children in the parishes of Kingston and St. Andrew looked at different types of exposure to violence – including aggression among peers at school, punishment at school, and community violence – and evaluated their relationship with academic achievement. They found that irrespective of the type of violence, children who reported moderate or high levels of exposure performed more poorly in reading, spelling and mathematics standardized tests (Baker-Henningham et al., 2009). The findings of the literature in Latin America and the Caribbean are therefore similar to those in the United States, with evidence pointing to an association between community violence and poorer performance in school.

There are several mechanisms that explain how community violence can affect performance and other education outcomes. According to Cooley-Strickland et al. (2009), the reason behind the impact of community violence on academic achievement is that it interrupts cognitive development (Cooley-Strickland et al., 2009). Students who have been repeatedly exposed to violent events have a low level of concentration due to distracting and intrusive thoughts concerning those events (Horn and Trickett, 1998). Milam et al. (2010) found that, in Baltimore, young people's perception of safety in school routes was associated with academic success, as being constantly worried about security made students unable to focus on academic achievements.

Burdick-Will (2013), who explored the relation of changes in a violent crime rate among school locations with the changes in school outcomes, found that psychological problems associated to witnessing violence or knowing someone who was involved in a violent incident had a negative effect on students' test performance, mainly because these events affected memory and caused cognitive distractions. In general, the literature showed that the impact of violence on children's school behaviour was correlated with stress, anxiety, depression, disruptive and aggressive behaviour, and substance use, which may have an impact on educational outcomes and long-term effects on children's development (Cooley-Strickland et al., 2009).

¹⁷ Based on the number of days with a recorded report of gang conflict.

Studies exploring the effect of violence on other education outcomes – dropout and attendance

In relation to the second body of literature identified in the review, **there is supporting evidence on the association between community violence and truancy and absenteeism.** According to Kirk and Sampson (2011), in the United States, missing school for fear of one's safety occurs among more than five per cent of public and private high school students, who admit skipping school at least once a month because they feel unsafe at school or on their way to school. In Chicago, which was notorious for its high homicide rate in the 1990s, 12 per cent of students skipped school one or more times each month out of fear for their safety (2011). In a cross-sectional survey of sixth grade students in the United States which aimed to understand whether there was an association between absenteeism and suspension¹⁸ and a multidimensional measure of violence,¹⁹ Ramirez et al. (2012) found that the strongest associations with absenteeism were among children exposed to weapons-related violence.

The evidence from Latin America also points in a similar direction. This indicates that community violence – and particularly armed and gang violence, which is pervasive in some countries of the region – negatively affects dropout and attendance. High homicide rates associated to the presence of armed groups in some countries of the LAC region means that exposure to community violence is more likely, more pervasive and not only threatens educational outcomes, but children's lives too. In the Northern Triangle countries of Central America (El Salvador, Guatemala and Honduras), the violent context has been reported as a factor that discourages students from attending school regularly, especially children from disadvantaged households who cannot afford to avoid the violence and have to walk to school using routes with a high presence of gangs (Fiszbein and Stanton, 2018).

The extent of the problem has been highlighted in the new edition of the yearly nationally representative survey of the Americas Barometer (Vanderbilt University, 2018)²⁰ which has added an item exclusively for Northern Triangle countries asking: "Still thinking of the past 12 months, have you prevented your children from going to school out of fear for their safety?" Depending on countries, between one fifth and one third of parents had prevented their children from going to school out of fear for their safety in 2018. In El Salvador, additional data from MINED (El Salvador, 2016) indicates that 45 per cent of school principals nationally – the largest share – consider gangs as an external threat to the security of schools. Children in El Salvador can be recruited by gangs on the way to and from schools, and they can even be murdered for stepping into another gang's territory (Organización Internacional del Trabajo, 2018). In Guatemala, one third of the population reported in 2017 that they had kept their children at home due to fear of crime victimization (Raderstorff et al., 2017). In general, the high levels of insecurity and the high risks associated to school access have been reported as contributing to an increase in dropout rates (Fiszbein and Stanton, 2018).

In Brazil, a study by Koppensteiner and Menezes (2017) found that close to nine per cent of ninth grade students had stopped going to school at least once in the month before the survey due to not feeling safe on the way to school. In their study exploring the effect of exposure to violence on schooling outcomes, these authors found that homicides that occurred close to schools led to an increase in dropout and a reduction of attendance (2017).

In El Salvador, a representative survey at national schools reported by the Ministry of Education found

18 Understood as a student temporarily being prohibited from going to regular classes and/or school.

19 Which included weapons-related violence, verbal, and physical violence.

20 This can be found in the Americas Barometer Core Questionnaire for 2017.

that in 2016, 24 per cent of schools reported that students dropped out due to gang violence, the third most frequent cause (El Salvador, 2016), and according to a report by USAID, schools in municipalities with the highest levels of violence were also those with the highest rates of dropout (USAID and ECCN, 2016). The constant threats from gangs to children forces safety – not learning – to be a priority, for both students and parents, and also for school’s authorities (Organización Internacional del Trabajo, 2018). After a student was killed in 2015 near a school located on the front lines of two different gangs, enrolment at this school dropped by 200 students, showing that gang violence and territorial control by gangs contribute directly to dropout (USAID and ECCN, 2016). According to this same report, “50 of the 262 municipalities that make up the country accounted for 66 per cent of the total number of homicides in El Salvador in 2014, and these same municipalities accounted for 83 per cent of all school withdrawals” (2016: p.16).

Márquez-Padilla et al. (2015) explore the impact of the “war on drugs” in Mexico on educational outcomes²¹ and found very small effects of homicide rate on enrolment. The small effects were explained due to internal displacement in the country. Rather than taking children out of school – the authors explained – parents migrated to a new municipality and enrolled children there, which means that the probability of being enrolled in school was not affected.

In sum, although the evidence is less consistent, a share of the literature does suggest that violence experienced in LAC is associated to dropout and lower attendance.

The **decision to drop out of school or not to attend may rest on parents more than on children**. It is crucial to realize that decisions on school attendance can be highly dependent on the risk that children face on the way to, or in, schools. Moreover, parents’ decisions on their child’s school attendance can vary from one day to the next; especially so if there is a perception that the child’s life is at risk. The theory explains that parents use “bounding techniques” to protect their children by keeping them in check in certain areas and by reducing social interactions when they perceive a high risk of violence (Caudillo and Torche, 2014).

This rationale of parents is relevant in both in areas of conflict due to war and in urban areas that suffer high levels of gang and organized criminal violence. For example, before the conflict, almost all Syrian children were enrolled in primary school and literacy rates were at 95 per cent. Six years later, enrolment is among the lowest in the world, with almost three million children no longer in school. Comparatively, in a non-warzone country, the number of children out of school at primary level in Guatemala increased by 62 per cent to nearly 300,000 between 2008 to 2016 (UNESCO, 2018a). A recent report found that close to 60 per cent of students in Guatemala are afraid to go to school, with at least 23 per cent of students and 30 per cent of teachers reporting that they, or someone they knew, had been victims of gang violence as they left or entered school. Understandably, individuals go to extreme lengths to avoid the risk of children being kidnapped or murdered; and there are reports that young people and their families lock themselves inside their homes to avoid any contact with gangs (Theirworld, 2019).

Like a circle effect, poor academic performance can be linked to dropout and can constitute a cause for community violence. School failure due to poor academic performance leads to early dropout rates (UNESCO, 2012), increasing the risk that out-of-school young people will participate in community violence (Olate et al., 2012). For instance, in a study on El Salvador, Olate et al., (2012) used a cross-sectional survey of youth from 10 urban and semi-urban neighbourhoods located in four municipalities

21 Authors used a fixed-effects model.

within San Salvador and found that educational difficulty and school expulsion – as well as having delinquent peers – were some of the most significant risk factors for violence and delinquency in youth gang members.

The links between school disengagement, dropout and delinquency has been explored widely. Many quantitative studies in western contexts have shown the relationship between dropping out of school and delinquency (Henry and Huizinga, 2007; Lochner and Moretti, 2004; Weerman, Harland, and van der Laan, 2007). Another strand of the literature signals that the disengagement factors leading to school dropout may be more salient in explaining delinquent behaviour than dropping out itself. For example, in an assessment of risk factors leading to gang membership, Thornberry et al. (2006) found that low levels of attachment to teachers and of commitment to school were significant antecedents to gang membership.²² Henry et al. (2012) argue that dropping out of school is only the end point in a process of school disengagement, which usually begins in the early stages of education (Burdick-Will, 2013). This shows that educational experiences can lead to dropout and contribute to insecurity in communities, especially so in spaces where opportunities exist to engage with gangs and other groups of a similar nature.

²² Another study by Booth et al. (2008) found that students who showed higher levels of disrespect and emotional disinvestment in school reported significantly higher levels of serious delinquency.

5. GAPS AND LIMITATIONS OF EXISTING LITERATURE

Some reflections can be drawn on the limitations of the evidence base, in particular in two main areas: coverage and scope, and methods.

5.1 Coverage and scope

Studies on the causal impact of crime on education outcomes are rather scarce, especially for Latin American countries (Dahbura, 2018). A large share of studies identified has taken place in the United States – and particularly in cities that experience or have historically experienced high levels of crime, such as Baltimore and Chicago. Furthermore, only one of the studies reviewed had a comparative perspective or explored the effects of violence beyond a single context (Sherr et al., 2016). The high levels of homicide in the LAC region in the last decades mean that more academic attention to this issue is needed.

5.2 Methods

The first limitation is the lack of studies using dropout as a main outcome (or dependent) variable. Instead, a large bulk of the research focuses on the impacts of violence on enrolment rates or test scores.

A second limitation is that the majority of the studies that look at the negative effect of violence on learning processes mainly rely on children's self-reported exposure to violence. There is a high risk of bias in these measurements, as children can easily be influenced to underreport or overreport their perceptions of violence (Schwartz and Proctor, 2000).²³ Incorporating other estimates of exposure – such as regional crime and homicide rates statistics – could be an avenue to consider in future research (Lynch and Cicchetti, 1998; Márquez-Padilla et. al, 2015).

Thirdly, and in relation to the previous point, few studies in LAC used a municipal-level analysis of crime and homicide statistics. Most studies applying a very accurate local-level analysis using georeferenced data are largely concentrated in the United States.²⁴ Such a level would be particularly relevant for LAC countries, as children in the poorest communities, with their families unable to afford transportation fees to schools in distant locations, go to schools near where they live (Monteiro and Rocha, 2016).

Fourthly, most of the work produced uses a quantitative approach, with mixed methods, and qualitative approaches are largely absent from the scientific literature. Qualitative studies that provide in-depth insights as to what precisely is driving the relationships between community violence and educational outcomes are needed.

A final shortcoming is that existing studies largely focus on school children and rarely include insights from children and adolescents who are out of school and contribute actively to insecurity in their communities. Relatedly, the literature mainly focuses on short-term effects of community violence, without evaluating the long-term impacts.

²³ For example, aggressive children may be more likely to report exposure to violence because they tend to frequently access situations involving violence or aggressive behaviours (Dodge and Schwartz, 1997).

²⁴ One study in Brazil using this type of data was identified.

6. CONCLUSIONS AND IMPLICATIONS FOR POLICIES AND FURTHER RESEARCH

What do the findings mean for policies?

- In general terms, policy efforts must focus not only on the violence that occurs in school – but also violence that occurs in communities (and on the way to and from school), understanding that the latter has an important relationship to performance in school and other educational outcomes.
- The country context is important to determine which source of violence has a greater impact on children's learning process. For instance, in areas of high violence, such as the Northern Triangle countries, community violence could have a more significant impact on education outcomes, and constitute a more significant concern than school-related violence, and therefore the former needs to be prioritized. However, in other countries, with lower levels of community violence, such as Argentina and Chile, bullying has been found to have a strong association to standardized test scores; therefore these countries need to continue focusing on the reduction of school bullying.
- Identifying good policy practices can help to understand how schools are responding in the midst of violent communities and understand what lessons can be learned for the creation of “safe spaces” in other contexts where violence is prevalent. It may include:
 - Identifying “resilient schools” and “safe spaces”, meaning schools where, despite high rates of community violence, students feel safe and encouraged to learn, and where dropout and enrolment are unaffected.
 - Understanding the practices in “resilient schools” and exploring how they can be replicated in other areas with high levels of violence.
 - Understanding how to deal with significant stress and psychological impacts on children that have been exposed to chronic community violence.
- Practitioners and policymakers need to consider gender differences in violence and their impact in order to focus on differentiated strategies. For instance, community violence impacts boys and girls differently, with adolescent and young boys – in general – constituting a large share of victims. Efforts must be made to ensure that programmes that aim to mitigate the impacts of violence, whether in school or in communities, include actions for reducing the school dropout rate of boys as they disproportionately contribute to insecurity in communities.
- In order to prevent community violence, it is important to support children with poor academic performance and at early risk of dropout, who are more likely to be victims of community violence and also become perpetrators where criminal opportunity structures exist.

What do the findings mean for further research?

- More high-quality qualitative research is needed for identifying causal mechanisms and finding out the “how” and “why” significant associations between violence and poor educational outcomes are observed.

- Additional research that expands beyond developed country contexts is recommended, especially in those countries that suffer from high levels of community violence. And relatedly, more comparative work across several countries is needed.
- More analysis of the differentiated impacts of violence by gender and age groups would also be valuable.
- Improving the data-collection of homicides, in order to be more accurate about their location could improve the quality of research about the violence community effects.
- Assessing the long-term effects of community violence on educational outcomes is also an evidence gap that should be addressed.

ANNEX: MAIN CHARACTERISTICS OF STUDIES MEETING THE INCLUSION CRITERIA

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Ahn, Tom and Justin G. Trogon, 'Peer Delinquency and Student Achievement in Middle School' <i>Labor Economics</i> , vol. 44, no. C 2017, pp. 192–217.	Study the relationship between peer delinquency and student achievement through math and reading test scores.	Peer-reviewed academic article	<p>Methods: Quantitative; fixed effects</p> <p>Sample: sixth grade students</p> <p>Location: North Carolina, US</p> <p>Data sources: Administrative data of North Carolina public schools; for test scores and delinquency.</p>	Peer delinquency negatively and significantly impacts a student's math test scores (results are not significant for reading test scores). Specifically, an increase by 10 per cent in the average number of major (suspension-resulting) delinquent acts by peers results in a 6.2 per cent of a standard deviation decrease in math test scores.
Baker-Henningham, Helen, et al., 'Experiences of Violence and Deficits in Academic Achievement among Urban Primary School Children in Jamaica', <i>Child Abuse & Neglect</i> , vol. 33, no. 5, May 2009, pp. 296–306.	Examine the relationships between children's experiences of three types of violence and academic achievement on a standardized test among primary school children in Kingston, Jamaica.	Peer-reviewed academic article	<p>Methods: Quantitative; multilevel regression analysis</p> <p>Sample: N=1300 children in grade 5</p> <p>Location: Kingston, Jamaica</p> <p>Data sources: Secondary data for achievement assessed using the Wide Range Achievement Test; primary data for children's experiences of three types of violence assessed by self-reporting using an interviewer administered questionnaire</p>	<p>Children's experiences of the three types of violence were independently associated with poorer achievement levels.</p> <p>Children experiencing high levels of all three types of violence were functioning, on average, over two grade levels below their peers experiencing little or no violence in spelling and nearly one grade level below in reading and mathematics.</p> <p>Children experiencing moderate levels of all three types of violence were functioning on average over one grade level below their peers experiencing little or no violence, in spelling and half a grade level below in reading and mathematics.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Bergen-Cico, Dessa, et al., 'Community Gun Violence as a Social Determinant of Elementary School Achievement', in <i>Social Work Public Health</i> , vol. 33, no. 7-8, 17 November 2018, pp. 439-448.	Article examines the association between community gun violence and elementary students' academic achievement.	Peer-reviewed academic article	<p>Methods: Quantitative; step-wise linear regression</p> <p>Sample: N=2,127 gunshots, scores for 19 elementary schools, focused on third grade children</p> <p>Location: Syracuse, NY, US</p> <p>Data sources: Gunshot data from the Syracuse Police Department; standardized test scores from the Syracuse City School District online report cards</p>	<p>Each one-step increase in mean shots per school area was associated with a 12.5 unit increase in the English Language Arts (ELA) failure rate.</p> <p>Each one-step increase in mean shots per school area was associated with a 12.3 unit increase in the math failure rate.</p> <p>The results from this study indicate that children's failure to achieve grade-level competence in reading and math is due at least in part at least to community-based violence, which affects not only people who are physically harmed by the violence, but also individuals who live nearby.</p>
Borofsky, Larissa A., et al., 'Community Violence Exposure and Adolescents' School Engagement and Academic Achievement OverTime' in <i>Psychology of Violence</i> , vol. 3, no. 4, 1 October 2013, pp. 381-395.	Examine the relationships between community violence exposure and two related academic outcomes: school engagement and academic achievement (GPA).	Peer-reviewed academic article	<p>Methods: Quantitative; hierarchical multiple regression analyses</p> <p>Sample: N=118 youths</p> <p>Location: US</p> <p>Data sources: Primary data collected using a Survey of Children's Exposure to Community Violence; for GPA, secondary data</p>	Earlier community violence exposure inversely predicted later school engagement, but earlier school engagement did not predict later community violence exposure. School engagement mediated the association between community violence exposure and school GPA.

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Bowen, Natasha K. and Gary L. Bowen, 'Effects of Crime and Violence in Neighborhoods and Schools on the School Behavior and Performance of Adolescents' <i>Journal of Adolescent Research</i> , vol. 14, no. 3, 1 July 1999, pp. 319–342.	Focus on students' reports of their exposure to neighbourhood and school danger; and the effects of exposure on three educational outcomes: attendance, school behaviour and grades.	Peer-reviewed academic article	<p>Methods: Quantitative, hierarchical multiple regressions</p> <p>Sample: N=2,099 middle and high school students male and female, White, African American, Hispanic, and other students</p> <p>Location: USA</p> <p>Data source: Data collected using the School Success Profile (SSP), a self-administered survey instrument designed for use by participants in the Communities in Schools programme.</p>	<p>Regression analysis revealed that crime and violence in the neighbourhood as well as in the school affected student school functioning.</p> <p>Neighbourhood and school experiences with danger explained about 14 per cent of the variance in attendance, 17 per cent of the variance in trouble avoidance, and 5 per cent of variance in grades.</p>
Burdick-Will, Julia, 'School Violent Crime and Academic Achievement in Chicago', <i>Sociology of Education</i> , vol. 86, no. 4, 14 July 2013, pp. 343–361.	Compare changes over time in achievement within the same school to changes in the crime rates and in measures of school climate.	Peer-reviewed academic article	<p>Methods: Quantitative; FE models using longitudinal data</p> <p>Location: Chicago, US</p> <p>Data sources: Incident reports generated by the Chicago Police Department; student demographic variables from Chicago Public School administrative files from 2002 to 2009</p>	<p>Changes in school violent crime have a direct negative impact on student learning. Authors found that school violent crime has a negative effect on both reading and math standardized test scores. The size of this effect was relatively small considering the full range of student achievement in the district; however, even these small standardized effect sizes represent non-trivial reductions in student learning, especially in math.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Caudillo, Mónica L. and Torche, Florencia, 'Exposure to Local Homicides and Early Educational Achievement in Mexico', <i>Sociology of Education</i> , vol. 87, no. 2, 6 March 2014, pp. 89–105.	Explore the impact of local homicides on children's early educational achievement in Mexico between 1990 and 2010.	Peer-reviewed academic article	<p>Methods: Quantitative; causal inference strategies for panel data; FE model</p> <p>Sample: Elementary school children in first and sixth grade</p> <p>Location: Mexico</p> <p>Data sources: School Census from the Ministry of Education (SEP) and homicide rates from INEGI</p>	<p>An increase in the local homicide rate results in an increase in school failure; this result is consistent across models. Authors conclude that homicide rates at the municipal level have a significant effect on the probability of failing a grade in elementary school in Mexico.</p> <p>The effects are not trivial: an increase in local homicides of 1 per 10,000 from 2009 to 2010 would have resulted in between 2,306 and 3,074 more children failing primary school.</p> <p>The effects are more pronounced among children in first grade in comparison to those in sixth grade.</p>
Dahbura, Juan N. M., 'The Short-Term Impact of Crime on School Enrollment and School Choice: Evidence from El Salvador', <i>Economía</i> , vol. 18, no. 2, May 2018, pp. 121–145.	Evaluate the short-term impact of homicides and extortions on the education choices of Salvadorian households.	Peer-reviewed academic article	<p>Methods: Quantitative; multinomial probit model with panel data</p> <p>Sample: 262 municipalities in El Salvador from 2005</p> <p>Location: El Salvador</p> <p>Data sources: Secondary, using household survey microdata along with data on homicides</p>	<p>Reduction in homicide rates in El Salvador due to a truce between rival gangs were associated with a migration within the education system, from public to private institutions, among boys aged 15 to 22.</p> <p>The fluctuations in homicide rates were also associated with a lower school attendance for girls aged seven to 14 years, especially due to a lower public school enrolment. No significant association between fluctuations in extortion rates and education choices was observed.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Gerardino, Maria. P., 'The Effect of Violence on the Educational Gender Gap', Universitat Pompeu Fabra, Barcelona (n.d.)	Looks at the impact of gang and organized crime violence on human capital investment decisions; particularly, the relationship between male and female homicide rate differences and the gender gap in education.	Peer-reviewed academic article	<p>Methods: Quantitative; fixed effects</p> <p>Sample:</p> <p>Location: Colombia</p> <p>Data sources: Census data from the Colombia Population Census, which has information on school enrolment and family characteristics for 1985, 1993 and 2005; homicides from the statistics department (DANE)</p>	<p>Municipalities facing faster increases in violence experienced an enlargement of the gender gap in school enrolment, to the detriment of boys. This is particularly the case for children of secondary school age.</p> <p>When the risk of homicide is higher for males, families are more likely to support girls' education.</p> <p>At the upper-secondary school age, an increase of one standard deviation in the level of male-biased violence leads to a 1.1 percentage point increase in the enrolment gap.</p> <p>Differential effect of violence is also significant for years of school completed.</p>
Hardaway, Cecily R., Cynthia A. Larkby, and Marie D. Cornelius, 'Socioemotional Adjustment as a Mediator of the Association between Exposure to Community Violence and Academic Performance in Low-Income Adolescents', <i>Psychology of Violence</i> , vol. 4, no. 3, 2014, pp. 281–293.	Examine whether community violence exposure is related to academic performance through mediating factors of depression and delinquency.	Peer-reviewed academic article	<p>Method: Quantitative, longitudinal design</p> <p>Sample: N=318 mothers and their children at ages (6, 10, 14 and 16)</p> <p>Location: Pittsburgh, USA</p> <p>Data sources: Primary data-collection</p>	<p>Exposure to community violence was negatively correlated with academic performance (as self-reported by students and mothers) and positively correlated with anxious/depressed symptoms and delinquent behaviours. Also, delinquent behaviours, but not anxious/depressed symptoms, were found to be negatively correlated with academic performance.</p> <p>Predictors in the model explained 21 per cent of the variance in anxious/depressed symptoms, 34 per cent of the variance in delinquent behaviours, and 27 per cent of the variance in academic performance.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Harriott, Anthony D., and Marlyn Jones, <i>Crime and Violence in Jamaica</i> , Inter-American Development Bank, Washington, D.C.	Gathers available data from multiple sources in order to provide a diagnosis of the size, characteristics, and changing nature of crime in Jamaica over the last decade.	Report	Methods: Descriptive analysis of crime situation in Jamaica Data sources: Secondary data; multiple sources, including Jamaica Constabulary Force (JCF), Economic and Social Survey of Jamaica	Jamaica has experienced declining but still very high rates of homicide, with gang violence accounting for most homicides and serving as the main engine of the homicide rate. According to the JCF, in 2013, gang-related motives accounted for 79 per cent of all murders. Schools currently exhibit increasing levels of violent behaviours such as extortion, gang-related activities, bullying, wounding, stabbing, and deaths perpetrated by both male and female students against other students or against teachers. The emergence of gangs in schools is the most significant phenomenon.
Holt, Melissa K., David Finkelhor, and Glenda K. Kantor, 'Multiple Victimization Experiences of Urban Elementary School Students: Associations with psychosocial functioning and academic performance', <i>Child Abuse & Neglect</i> , vol. 31, no. 5, May 2007, pp. 503-515.	Evaluated whether multiple victimization was associated with greater psychological distress and lower academic performance.	Peer-reviewed academic article	Methods: Quantitative; cluster analysis Sample: N=689 fifth grade students from an urban school Location: USA Data sources: Primary data collected through a survey, and secondary data from the US Census Bureau	Youth with multiple victimizations experienced more psychological distress and earned lower grades than their peers.

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Koppensteiner, Martin F. and Livia Menezes, <i>Afraid to Go to School? Estimating the Effect of Community Violence on Schooling Outcomes</i> . Unpublished.	Estimate the causal effect of exposure to violence on schooling outcomes and achievement through test scores, repetition, dropout and school progression.	Peer-reviewed academic article	<p>Methods: Quantitative, regression analysis, fixed effects</p> <p>Sample: 1.8 million students a year in 3,164 schools</p> <p>Location: São Paulo, Brazil</p> <p>Data sources: Homicide from Brazilian Ministry of Health; schooling outcomes from the Brazilian Ministry of Education and São Paulo State's Secretariat of Education</p>	<p>Find that homicides close to schools lead to a substantial deterioration of educational performance, as measured by standardized test scores in math and language (although they are not significant for language), as well as on repetition, dropout and school attendance. Specific findings include:</p> <p><i>Attendance:</i> One additional homicide in the year increases the number of absences by 1.4 per cent.</p> <p><i>Gender:</i> The effect of violence on test scores and attendance for boys is larger in comparison to girls.</p> <p><i>Repetition:</i> Positive coefficients for all types of violence exposure on grade repetition but significant only at the 10 per cent level.</p> <p><i>Dropout:</i> Find consistent positive coefficients for violence exposure and dropout, but figures are larger in magnitude for exposure in the school path.</p> <p><i>Transfers:</i> There is also an effect of violence exposure on school transfers, increasing transfers to alternative schools in the following year.</p>
Márquez-Padilla, Fernanda, Francisco Pérez-Arce, and Carlos Rodríguez-Castelán, <i>The (Non-)Effect of Violence on Education: Evidence from the War on Drugs in Mexico</i> . Policy Research Working Paper no 7230, 2015, World Bank.	Identify the effects of violence on educational outcomes.	Working paper	<p>Methods: Quantitative; fixed effects</p> <p>Sample: Panel data with 2,457 municipalities followed over the 1994–2010 period, yielding a total of 41,769 observations</p> <p>Location: Mexico</p> <p>Data sources: Secondary data; the analysis combines homicides data from official statistics reported by the Mexican Technical Secretariat of the National Public Security Council (SNSP); official education enrolment data from the National Institute of Statistics, INEGI</p>	<p>The effect of an increase of eight homicides per 100,000 individuals on the enrolment rates of 15–17 year olds is smaller than 0.032 per cent.</p> <p>The small effect on the number of enrolled students but null impact on the rate of enrolment is explained by an impact on migration. This is corroborated by showing that increases in violence are associated with outmigration: municipalities with higher increases in homicide rates observed relative reductions in their population size.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
McCoy, Dana C., Amanda L. Roy, and Gabriel M. Sirkman, G. M. 'Neighborhood crime and school climate as predictors of elementary school academic quality: A cross-lagged panel analysis', <i>American Journal of Community Psychology</i> , vol. 52 nos. 1–2 14 June 2013, pp. 128–140.	Explore reciprocal relationships between neighbourhood crime and school-level academic achievement.	Peer-reviewed academic article	Methods: Quantitative; longitudinal analysis and cross-lagged panel Sample: N=500 urban schools Location: Chicago, USA Data sources: Secondary data	Higher neighbourhood crime (and particularly violent crime) predicted decreases in school academic achievement across time.
Milam, Adam J., C. Debra Furr-Holden, and P.J Leaf, 'Perceived School and Neighborhood Safety, Neighborhood Violence and Academic Achievement in Urban School Children', <i>The Urban Review</i> , vol. 42 no. 5, 3 November 2010, pp. 458–467.	Examines the effect of the school and neighbourhood climate on academic achievement among a population of third–fifth grade students in an urban public school system.	Peer-reviewed academic article	Methods: Quantitative; linear regression models Sample: 447 sampled residential blocks Location: Baltimore, Maryland, USA Data source: Secondary, for neighbourhood violence, used data from the NIfETy Method. Data on perceived school and community safety were obtained from the Baltimore City Public School System's annual School Climate Survey. Academic performance assessed using the Maryland School Assessment (MSA)	Increasing neighbourhood violence was associated with statistically significant decreases from 4.2 per cent to 8.7 per cent in math and reading achievement, among primary grades. Increasing perceived safety was associated with significant increases in achievement in math and reading from 16 per cent to 22 per cent.

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
<p>Monteiro, Joana and Rudi Rocha, 'Drug Battles and School Achievement: Evidence from Rio de Janeiro's favelas', <i>Review of Economics and Statistics</i>, vol. 99, no. 2, May 2017, 213-228.</p>	<p>Explore the effects of armed conflict between drug gangs in Rio de Janeiro's favelas on educational outcomes of children attending schools located in and around conflict areas.</p>	<p>Peer-reviewed academic article</p>	<p>Methods: Quantitative; regression analysis, fixed effects</p> <p>Sample: N= 736 schools, fifth grade students</p> <p>Location: Rio de Janeiro, Brazil</p> <p>Data sources: For violence, authors built a novel data set aggregating thousands of anonymous reports of drug gang conflicts to a police hotline over the period between 2003 and 2009. For education, used three educational databases – Secretaria Municipal de Educaçao (SME); main outcome variable of student scores drawn from Prova Brasil, a national standardized exam</p>	<p>Students from schools which are exposed to violence perform worse on standardized math exams. The result for language test scores is negative but not significant.</p> <p>The effect of violence increases with conflict intensity and duration, and when the conflict occurs in the months just before exams. The effect rapidly decreases with the distance between the school and the conflict location.</p> <p>Schools located within 250 metres of favelas exposed to conflicts have an average score 0.067 standard deviations lower than students from schools which are between 250 and 500 metres from favelas with conflicts.</p> <p>Although short-run impacts are identified, no evidence that the effect of violence persists over time is found.</p>
<p>Olate, René, Christopher Salas-Wright, and Michael G. Vaughn, M. G. 'Predictors of Violence and Delinquency among High Risk Youth and Youth Gang Members in San Salvador, El Salvador', <i>International Social Work</i>, vol. 55, no. 3, 2 April 2012 pp. 383-401</p>	<p>Examine the effects of key risk factors derived from several interrelated domains in a population of high risk and gang-involved youth in the Greater San Salvador Metropolitan Area.</p>	<p>Peer-reviewed academic article</p>	<p>Methods: Quantitative, Multiple logistics regression</p> <p>Sample: 174 of high-risk youth and youth gang members</p> <p>Location: El Salvador</p> <p>Data sources: Primary data: This investigation utilized a cross-sectional survey of young people (aged 13-24) from a non-probability sample (N= 174) of 10 urban and semi-urban neighbourhoods located in four municipalities within the Greater San Salvador Metropolitan Area</p>	<p>Low future orientation, low empathy, educational difficulty, school expulsion, delinquent peers, gang membership, and low social support were found to be significant risk factors for violence and delinquency</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Organización Internacional del Trabajo, <i>Nuevas formas de trabajo infantil: Utilización y reclutamiento de niños, niñas y adolescentes para la realización de actividades ilícitas en las pandillas de El Salvador</i> , San Jose, El Salvador, 2018.	Analyse new categories of the “worst forms of child labour” in El Salvador and identify ways that children and adolescents are being recruited to carry out illicit activities in gangs.	Report	Methods: Literature review, descriptive analysis Sample: National Location: El Salvador Data sources: Reports, academic papers, grey literature	Gangs forcibly recruit boys, girls and adolescents to sustain their criminal structures. Children and adolescents in gangs suffer from labour exploitation in the face of activities that damage their health, safety and morals.
Orraca-Romano, Pedro Paulo, ‘Crime Exposure and Educational Outcomes in Mexico’ [Violencia y desempeño académico en México] in <i>Ensayos Revista de Economía</i> , vol. 37 no. 2, October 2018, pp.177–212.	Examine the effect of students’ exposure to local homicides on educational outcomes (test scores and grade failure rates) in Mexico.	Peer-reviewed academic article	Methods: Quantitative; fixed effects Sample: Location: Mexico Data sources: Standardized test scores from the National Assessment of Academic Achievement in Schools (ENCLACE); homicide data at the municipality level from the State and Municipal System of Databases (SIMBAD)	Results show that an increase of one unit in the number of homicides per 10,000 inhabitants reduces average standardized test scores between 0.0035 and 0.0142 standard deviations. This effect is larger in secondary schools, grows stronger if the homicide occurs closer to the examination date, and is relatively stable when using either total homicides or drug-trade related homicides to measure crime exposures. Higher homicide rates are also associated with an increase in the rate of grade failure. In 2011, 7.2 per cent of students in Mexico reported that they stopped going to school due to fear of being victim of a crime.

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Ramirez, Marizen et al., 'Youth Violence across Multiple Dimensions: A study of violence, absenteeism, and suspensions among middle school children', <i>Journal of Pediatrics</i> , vol. 161 no. 3, September 2012, pp. 542–546. e2.	Determine how multidimensional measures of violence correlate with school absenteeism and suspensions among middle school youth.	Peer-reviewed academic article	<p>Methods: Quantitative; cross-sectional analysis</p> <p>Sample: N=28,882 sixth graders from an urban school district.</p> <p>Location: United States</p> <p>Data sources: Data were collected on role (witness, victim, perpetrator) and mode (verbal, physical, weapons) of past-year violence exposures, and absences and suspensions over one academic year. Associations between violence and absenteeism and suspension were estimated using generalized linear models.</p>	<p>Considering all modes of violence exposure, all roles in violence exposure were found to be associated with increased absenteeism.</p> <p>Odds ratios were lower for witnesses and victims than for perpetrators and victim-perpetrators.</p> <p>Boy victims and witnesses of physical violence had similar absenteeism patterns as those unexposed to physical violence.</p> <p>For children experiencing weapons-related violence, odds ratios for absenteeism increased for those witnessing violence in comparison to those perpetrating violence and then increased for those who were victimized.</p> <p>Odds ratios for suspension increase for those who witness violence in comparison to those who are victimized. Odds ratios for suspension increase for those who perpetrate violence.</p> <p>Among those exposed to weapons, victims had similar or slightly higher results for absenteeism than perpetrators.</p> <p>Of all exposed girls, victim-perpetrators had the highest odds ratios for absenteeism.</p>
Ratner, Hilary. H., et al., 'Violence Exposure, IQ, Academic Performance, and Children's Perception of Safety: Evidence of protective effects', <i>Merrill-Palmer Quarterly: Journal of Developmental Psychology</i> , vol. 52 no. 2, April 2006, pp. 264–287.	Examine the relations among community violence exposure (CVE), feelings of safety, and cognitive outcomes.	Peer-reviewed academic article	<p>Methods: Quantitative; longitudinal study</p> <p>Sample: N=656 eligible children were located in the Detroit area at age 6–7 years, born to women receiving prenatal care.</p> <p>Location: Detroit, USA</p> <p>Data sources: Primary and secondary data obtaining measures of child community exposure, IQ, reading, standardized school achievement, and grades</p>	<p>Greater violence exposure and victimization were related to poorer child outcomes; however, feelings of safety were positively related to most of the cognitive measures, and positive caregiving was related to more optimal cognitive functioning.</p> <p>Increased feelings of safety may allow children to focus on critical school tasks.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Schwartz, David, and Andrea H. Gorman, 'Community Violence Exposure and Children's Academic Functioning', <i>Journal of Educational Psychology</i> , vol. 95, no. 1, 2003, pp. 163–173.	Examine relations between CVE and academic difficulties, as indexed with objective indicators of academic functioning obtained from review of children's school records (i.e., classroom grades, achievement test scores).	Peer-reviewed academic article	Methods: Quantitative; cross-sectional investigation, using structural equation modelling (SEM) Sample: N=237 children, from an elementary school located in an urban section of Los Angeles Location: Los Angeles, USA Data sources: Primary data; children completed the Community Experiences Questionnaire (CEQ), a self-report questionnaire	Found that there are links between exposure to violence in the community and academic difficulties at school.
Sharkey, Patrick, 'The Acute Effect of Local Homicides on Children's Cognitive Performance', <i>Proceedings of the National Academy of Sciences</i> , vol. 107 no. 26, 29 June 2010, pp. 11733–11738.	Estimate the acute effect of local homicides on children's cognitive performance, as measured by two assessments of vocabulary and reading skills.	Peer-reviewed academic article	Methods: Quantitative; fixed effects Sample: Block group on 2,294 assessments. Location: Chicago, USA Data sources: Secondary data; data on all reported homicides occurring in Chicago from 1994 through 2002 are merged with data from a survey of children and families in Chicago conducted over the same time frame, the Project on Human Development in Chicago Neighbourhoods	Among African-Americans, the strongest results show that exposure to a homicide less than a week before assessment reduces performance on vocabulary and reading assessments by between a standard deviation of 0.5 and 0.66, respectively.
Sharkey, Patrick T. et al., 'The Effect of Local Violence on Children's Attention and Impulse Control', <i>American Journal of Public Health</i> , vol. 102 no. 12, December 2012, pp. 2287–2293.	Examine whether the burden of violence in a child's community environment alters the child's behaviour and functioning in the classroom setting.	Peer-reviewed academic article	Methods: Quantitative; fixed effects Location: Chicago, US Sample: N= 496 children Data sources: Secondary data from the Chicago Police Department; primary data relative to the timing of interview assessments conducted as part of a randomized controlled trial with preschoolers in Head Start programmes from 2004–2006, the Chicago School Readiness Project	When children were assessed within a week of a homicide that occurred near their home, they exhibited lower levels of attention and impulse control and lower preacademic skills. The analysis showed strong positive effects of local violence on parental distress, suggesting that parental responses may be a likely pathway by which local violence affects young children.

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
Sharkey, Patrick et al., 'High Stakes in the Classroom, High Stakes on the Street: The effects of community violence on student's standardized test performance', <i>Sociological Science</i> , vol.1, 27 May 2014, pp. 199–220.	Identify the effect of exposure to community violence on children's test scores by comparing students exposed to an incident of violent crime.	Peer-reviewed academic article	<p>Methods: Quantitative; linear probability models</p> <p>Sample: N=691,159 students from New York City public schools</p> <p>Location: New York, USA</p> <p>Data sources: Secondary data from the New York City Department of Education and point specific crime data from the New York City Police Department from 2004 to 2010</p>	<p>Exposure to violent crime reduces performance in ELA assessments and has no effect on math scores.</p> <p>The effect of exposure to violent crime is most pronounced among African Americans and reduces the passing rates of black students by approximately three percentage points.</p>
Sherr, Lorraine, et al., 'Exposure to Violence Predicts Poor Educational Outcomes in Young Children in South Africa and Malawi', <i>International Health</i> , vol. 8 no. 1, January 2016, pp. 36–43.	Explore impact of domestic and community violence on school enrolment, progress and attendance of young children.	Peer-reviewed academic article	<p>Methods: Quantitative; logistic regressions, linear regressions</p> <p>Sample: N=589 children aged 4 to 13 attending community-based organizations</p> <p>Location: Malawi and South Africa</p> <p>Data sources: Data from the Child Community Care Study</p>	<p>Did not find a relationship between community violence and school enrolment, attendance or grade progression.</p> <p>While no violence measures were significantly associated with school enrolment and attendance, experiencing physical violence as a form of discipline was associated with a lower odds of being in the correct classroom (measure for progress).</p>
Theirworld, 'Safe Schools Report: The hidden crisis, the huge challenges and the actions needed to educate every child', Theirworld, London.	Document the scale and impact of unsafe schools globally.	Report	<p>Methods: N/A</p> <p>Sample: N/A</p> <p>Location: Global</p> <p>Data sources: N/A</p>	<p>While the number of children living in warzones has been increasing, children and young people in urban areas worldwide are also affected by the homicidal violence of gangs and other armed groups.</p> <p>Some regions, such as Central America and Latin America as a whole, are no longer seen as priority areas for aid despite the significant challenges they face: they rarely qualify for humanitarian aid even though violence is higher in some countries than in recognized war zones.</p>

Citation	Research aim	Type of document	Study Methods, sample size, location and data source	Key findings
US Agency for International Development and Education in Crisis and Conflict Network, <i>Rapid Education and Risk Analysis El Salvador: Final report</i> , USAID.	Show how education interacts with key risks – gang violence, insecurity, and, to a lesser extent, natural disasters –with a focus on selected municipalities and schools.	Report	<p>Methods: Qualitative; interviews, focus group discussions (FGDs)</p> <p>Sample: 232 interviews and FGDs in eight schools with teachers, students, community members and principals</p> <p>Location: El Salvador</p> <p>Data sources: Combined secondary data and primary data from key informant interviews, FGDs</p>	<p>Respondents in all schools sampled considered themselves safer inside their schools than in their external environments, but they also cited gang presence and influence over internal school affairs.</p> <p>Schools located on the “front lines” of gang territorial confrontation witnessed more insecurity than those located well within a particular gang’s territory.</p> <p>Gang violence, intimidation, and territoriality constrain access to all schools in the sample and are reported as key drivers of school dropout.</p> <p>Adolescent, male students are most at risk of gang violence and intimidation – including recruitment.</p>

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