

**The Economic Impact of
School Violence:
A Report for Plan International**

June 2010

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* Disclaimer: The views presented in this paper are those of the authors and do not necessarily represent the views of ODI or Plan International¹.

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Suggested citation: Pereznieto, P., Harper, C., Clench, B. and Coarasa, J. (2010) The Economic Impact of School Violence. London: Plan International & Overseas Development Institute. Available at plan-international.org/learnwithoutfear

We are grateful to, Shea McInahan, Eliana Villar and Carlotta Tincatti for contributions made to this paper.

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List of acronyms

AAUW	American Association of University Women
ACPF	African Child Policy Forum
ACRWC	African Charter on the Rights and Welfare of the Child
ADA	Average Daily Attendance
AIDS	Acquired Immune Deficiency Syndrome
CBO	Community-Based Organisation
CDC	Centres for Disease Control and Prevention
CIDA	Canadian International Development Agency
CRRECENT	Child Research and Resource Centre
DALY	Disability-Adjusted Life Year
DFID	Department for International Development
DHS	Demographic and Health Survey
ECLAC	Economic Commission for Latin America and the Caribbean
EFA	Education for All
ESL	Early School Leaving
FAWE	Federation of Women Educationalists
FDRE	Federal Democratic Republic of Ethiopia
GDP	Gross Domestic Product
GNI	Gross National Income
GSHS	Global School-Based Student Health Survey
HBSC	Health Behaviour in School-aged Children
HIV	Human Immunodeficiency Virus
HRW	Human Rights Watch
IADB	Inter-American Development Bank
ICRW	International Center for Research on Women
IRC	International Rescue Committee
MDG	Millennium Development Goal
MICS	Multiple Indicator Cluster Survey
MSI	Management Systems International
NCDS	National Child Development Study (UK)
NEET	Not in Education, Employment or Training
NFP	Nurse-Family Partnership
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
QALY	Quality-Adjusted Life Year
PHR	Physicians for Human Rights
ROSA	Regional Office for South Asia (UNICEF)
SCMH	Sainsbury Centre for Mental Health
SHPPS	School Health Policies and Programs Study
SRGBV	School-Related Gender-Based Violence
SSP	Safe Schools Programme (Ethiopia)
STI	Sexually Transmitted Infection
UK	United Kingdom
UN	United Nations
UNCRC	UN Convention on the Rights of the Child
UNESCO	UN Educational, Scientific and Cultural Organization
UNFPA	UN Population Fund
UNGEI	UN Girls' Education Initiative
UNICEF	UN Children's Fund
US	United States
USAID	US Agency for International Development
WHO	World Health Organization

Glossary

Correlation (positive and negative)	The predicted relationship between factors. Positive correlations move in the same direction. For example, if an individual is given a salary raise, her/his net income increases: both salary and income move up so this is a positive correlation. If an individual is taxed at a higher rate, her/his net salary decreases. This is a negative relationship: as one variable increases the other decreases.
Cost analysis methodology	Cost analysis methodology, also known as cost-benefit analysis, is an analytical tool that allows for the comparison of the value of outcomes with the value of resource needs to achieve outcomes.
Cross-sectional survey	Cross-sectional surveys use cases (e.g. firms, individuals, organisations, etc), which are studied at one point in time and represent a section of the greater interest group. For example, if interested in collecting information on all secondary schools in a community, a researcher may apply cross-sectional methodologies by surveying a smaller proportion of schools and collecting information for them in one period of time.
Data sources (primary and secondary)	A primary data source is evidence produced at the time of study. In an interview written up in an article, the interview would be primary data. However, if information from previous articles was referred to, that source would be considered secondary, as it existed before the time of study and was not produced by the author. Primary data, especially those required for larger studies, may have higher constraints, including time and cost.
Economic impact (direct and indirect)	<p>Economic impact measures changes in the relative cost of a good or service which is explained by changes in demand, supply, policy or other resources.</p> <p>Direct economic impact is much easier to measure and link to changes in the cost of a good or service, for example attending school results in school fees. Indirect impacts are more difficult to measure as they are often non-monetary and may interact with a host of other impacts, for instance the impact of bullying on well-being.</p>
Frictional cost	Frictional cost is used to estimate direct monetary costs to different actors as a result of violence.
Gender-based violence	The UN defines violence against women as any act of gender-based violence that results in, or is likely to result in, physical, sexual or mental harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life.
Gross domestic product (GDP)	A measure of a country's economic performance calculated by adding the total value of the country's output in goods and services over one year.
Gross national income (GNI)	A measure of a country's economic performance. GNI reflects the average income of citizens of a country.
Human capital	Human capital can be measured on an individual level, which is represented in the skills an individual brings to her or his profession and acquires through training and experience. This concept is also used in an educational context to estimate returns to education for individuals or the broader economy, allowing for an assessment of the loss in returns through lower education.

Incidence-based approach	Based on models that assess current and lifetime costs incurred by all new incidents that occur in one year.
Institutionalised violence	Violence that is embedded in, or results from, institutional objectives, for example corporal punishment mandated by an educational institution.
Longitudinal data	Data collected over a long period of time at different intervals.
Macro-level	Economy-wide phenomena.
Micro-level	Individual market-, household- and firm-level phenomena.
Monetary costs	Relating to money, in contrast with non-monetary costs, which include time, skills, education, etc.
Panel surveys	Panel surveys are conducted over a long period of time where cases (e.g. firms, individuals, organisations, etc) are studied repeatedly over a period of time, often over a number of years.
Prevalence-based approach	Based on models that focus only on a specific one-year period and look at all costs incurred by all new incidents, plus ongoing costs from previous incidents.
Purchasing power parity (PPP)	A method for calculating the tangible value of a currency which may be different from the actual market exchange rate. PPP says that all goods and services should be equal in cost when measured in a common currency.
Quality-adjusted life years (QALYs) or disability-adjusted life years (DALYs)	Alternative approaches to estimating non-monetary costs of violence that individuals may incur, primarily used in the health sector, sometimes to assess the cost benefit of interventions.
Return to education	The potential to increase productivity and/or earnings as a result of an additional year of schooling.
Social capital	Social capital, also understood as community 'trust' or 'spirit', is usually represented through membership in community associations, clubs, organisations or other social networks. Although disputed, it is often said that a higher level of community trust results in higher economic productivity. This is based on the theory that people are more likely to work together and take economic risks together when there is community cohesion and trust.
Sexually transmitted infection (STI)	An STI can be transmitted between people through sexual contact. Some STIs can also be transmitted by other means, including intravenous drug use, blood transfusion, childbirth or breastfeeding. STIs are also known as sexually transmitted diseases and venereal diseases.
Sunk costs	Costs which have been incurred and which cannot be returned. For example, building a new school is a sunk cost as the cost of the building will not be reversed regardless of its final productivity. Given the irreversibility of sunk costs, they are often considered a 'barrier to entry' or a 'barrier to exit': once the investment has been made it becomes difficult to back out of the project.
Truancy	Any intentional unauthorised absence from compulsory schooling.
Willingness to pay	A model that measures non-monetary costs by calculating how much individuals would be willing to pay for having avoided the act of violence.

Executive summary

This report builds on existing research in the field of school violence with a focus on its economic effects on victims, schools, communities and governments as well as the economy as a whole. The study allows for an economic perspective that complements human rights approaches while recognising that the rationale behind school violence prevention is fundamentally the right of children to be safe at school, independently of the cost of this.

School violence negatively affects students all around the world. It not only represents a violation of the rights of a child but also acts as a significant barrier to the achievement of international goals, including the Millennium Development Goals (MDGs) and Education for All (EFA) objectives.

Looking at the three main types of school violence (corporal punishment, sexual abuse and bullying), this research provides an overview of approaches that estimate the cost of violence, outlines the consequences of school violence and summarises good practice interventions in prevention while highlighting the associated costs of these.

While the body of evidence supports the hypothesis that school violence has cost implications, it is difficult to produce quantifiable estimates of these. There are several reasons for this. School violence is notoriously underreported, because of children's fear and because of the institutionalisation of the violence. Further, even when reported, it is difficult to infer causality between violence and low performance or attainment, as there is a very limited amount of quantitative data available on the linkages from which researchers can draw conclusions. Despite the availability of a variety of relevant tools, these challenges constrain the implementation of costing exercises.

The report finds that each different type of violence has its own variety of impacts. As such, the analysis is framed in terms of three factors that need to be understood for each case: who is economically impacted, the greater context with regard to where the acts of school violence occur and finally the degree of impact, which is dependent on the severity of the incident.

These factors feed into the extensive results of violence, which include effects on educational attendance, attainment and performance, on physical health, on psychological health and emotional well-being as well as on social capital and the larger economy.

School violence has been shown to discourage children's attendance, whether because of their parent's decision or their own. Further, children who study in a violent environment achieve lower academic results than those who do not. These findings point to overall lower educational attainment rates because of truancy or dropout resulting from violence. Lower educational attainment rates have generational impacts: for example, low female education is correlated with higher fertility rates, lower health rates for themselves and their children and a worse overall household economy.

The effects of violence on children's health are also significant. Further, the economic implications of acute abuse and pregnancy or sickness as a result of rape are evident. Health concerns also include deteriorated emotional and psychological well-being, which can have lifelong personal and economic consequences.

Social capital, which is positively correlated with economic growth, is also at risk in the context of school violence. In fact, lower levels of community trust and social capital can be indicators of violence within communities.

School violence can also be a deterrent to investment within the community where the violence is prevalent. This can lead to a general economic deterioration of such communities.

The widespread and varied character of these impacts demonstrates that preventative measures are not only urgently needed but also require a multifaceted approach from different sectors and levels, with attention to the different types of prevalent school violence. Prevention strategies shown to be universally effective are those that are instituted early, that are developmentally appropriate, comprehensive and longer term, that develop student social and environmental competence, that are participatory, that take into account the impact and victimisation effects of violence and that integrate violence-related issues in teacher training.

While such interventions do not need to be costly, they do require adequate funding, without which their sustainability and breadth is placed at risk.

The report focuses on five country case studies to provide a more contextualised analysis of how the estimate of economic impacts of school violence can be undertaken by using country specific data, highlighting the limitations of not having complete data in some countries, for which such estimates could therefore not be calculated. Where data was available, the case studies include an estimate of the foregone benefits to society resulting from early secondary school leaving (ESL) caused by school violence (including through lower potential earnings, lower contribution to growth, lower contribution to tax revenue and the higher likelihood that victims will need to use the social safety net relative to those who stay in school). This is based on evidence that suggests that one of the consequences of school violence is dropout. The case studies also provide a brief analysis of best practice examples of prevention, including data on their costs (where available). This highlights that, despite the need for more rigorous cost-benefit analysis of school violence preventive measures, investment in prevention of school violence is economically and socially more efficient than paying for its individual, social and public (government) consequences.

This overview and analysis leads to two sets of policy recommendations. The first set relates to the need to raise awareness and provide support on prevention of school violence, using a holistic and contextualised approach that involves government and non-governmental stakeholders, educational authorities, schools and civil society, while empowering children and households to play a significant role. Such interventions would include: developing context-specific codes of conduct for schools; broadening school curricula to include learning on gender equality, conflict resolution and child rights; investing in child protection systems beyond the reach of schools; and promoting public spaces for dialogue and conflict resolution and safe child spaces where students can develop relationships and social capital outside of schools as well as in them.

The second set is related to the need for more research and includes a methodological framework developed to undertake primary data collection and strengthen the limited body of quantitative literature on the economic impact of school violence (as outlined in this research).

In conclusion, this report advocates for the integration of school violence indicators in existing cross-sectional surveys and the generation of quantitative data to better estimate the economic impacts of school violence and understand the burden of costs on services resulting from it. The lack of quantitative data cannot deny the clear significant cost implications of educational violence, but it is nonetheless important to gain such data to enable policy, by directing policymakers towards appropriate and cost-effective interventions advocated through evidence-based policy options.

1. Introduction

School violence has been identified as a critical problem for students of all ages around the world. It represents a violation of the right of each child to go to school in a safe and protected environment and, given that it causes many children to stop going to school, it poses a real threat to the achievement of international goals such as the Millennium Development Goals (MDGs) and the Education for All (EFA) objectives. Painful and humiliating forms of abuse remain a reality for millions of children: it is estimated that, each year, 150 million girls and 73 million boys across the world are subjected to sexual violence and between 20% and 65% of schoolchildren report being verbally or physically bullied.¹ Almost 90 countries have not yet prohibited corporal punishment in schools, despite the UN Committee on the Rights of the Child calling for a universal ban.²

School violence can be grouped into three main types: corporal punishment, sexual abuse and bullying. Within this classification, the levels of school violence are manifested in a range of ways: from sporadic verbal abuse or harassment to physical harm in the form of rape or beating. The consequences, and therefore the impacts, including economic impacts, are mediated by a range of factors. These include, for example, the type of violence, the child's resilience, frequency, the context in which the victim lives and the type of attention or treatment the student receives (from counselling to pregnancy-related care).

There is considerable international research on school violence, carried out by research institutes, international organisations, non-governmental organisations (NGOs), academics and schools/school authorities. This reflects recognition of school violence as a problem that affects both the developed and the developing world. Most research on the subject to date has been qualitative, exploring different dimensions of the problem, including some of the conditions that foster school violence and its effects on students. Plan International's Learn Without Fear Campaign, supported by extensive analysis of this research and of experiences recorded through its country offices, has already published a comprehensive report encapsulating key information on the subject.

The aim of this report is to build on existing research and explore a field related to school violence which has been neglected: its economic impacts on victims, schools, communities, governments and even the economy as a whole, through its impacts on human capital accumulation. Because this dimension of the problem is largely unexplored, the report draws on methodologies that have been developed to explore the costs of other forms of violence, which are based on primary data collection or on secondary data that enable calculations to be made.

As a first approach, this report is based on secondary data. This implies important limitations, given the quantitative data that exist on the subject, and makes it difficult to generate an accurate estimate of the economic costs. Very little research assesses the problem of school violence using quantitative methodologies. Even fewer studies have collected nationally representative data that would be useful for the type of assessment we set out to do. This had a bearing on the breadth and robustness of the data analysis we were able to undertake, allowing us to estimate only a small fraction of the economic costs related to school violence (as a proxy of its economic impact).

Nevertheless, by exploring potential methodologies and extensively researching the available datasets, the report contributes towards building new knowledge on the consequences of school violence. It also adds value to the literature by identifying the data gaps that need to be filled, the methodological approaches that can best be used and the areas in which the economic impacts are likely to occur, to give a sense of the need to quantify them for a more robust estimate through future research. It clearly illustrates that, although it may not be possible to accurately quantify elements of these costs, this does not mean the effect is not taking place and the costs are not being incurred. In fact, the analysis provides an initial approximation of the problem and suggests

that the economic impact can be significant, with impacts on individuals, their families, communities and society as a whole, even though data limitations prevent us from estimating these costs in a comprehensive way.

The implication is that, for policymakers who consider social and human development problems primarily in relation to cost-benefit analysis or in terms of balancing the budget by analysing the cost of interventions, we need to express as best we can what 'costs' mean and how they are incurred, without quantifiable data. We also need to propose ways to develop primary data sources that can illustrate and provide evidence about the economic implications of school violence. This is important because the scale of the costs underscores the fact that prevention of school violence is cheaper than paying for its direct and indirect costs. Along with this, however, the rationale behind school violence prevention is essentially that children have the right to be safe at school, independent of the costs of this. Thus, this reports aims to promote debate around more long-term and effective decisions in protecting children.

With regard to the methods used, the first part of this report draws on an extensive revision of the international literature on school violence, with a specific focus on analysing its consequences and the ways in which these can generate costs for victims, perpetrators, schools, communities, service providers and the government. We also consulted numerous studies on the costs of other forms of violence, in order to draw on elements of their methodologies to inform our analysis of the economic impact of school violence. The initial analysis derived from the literature review was complemented by interviews with 18 experts (12 international and six national). These experts shared their knowledge and ideas on different dimensions of the problem (school violence, health impacts, education impacts, violence, cost analysis methodology, entry points for advocacy) as well as providing us with leads to pursue. We then revised numerous international datasets containing useful information to enable us to quantify the costs of school violence, as well as datasets and figures identified in the five case study countries: Brazil, Ethiopia, India, Sierra Leone and the US. Based on these data, we make some initial estimates of the costs of school violence.

Although the focus is on the economic impact of school violence, which can be significant, the study recognises that this approach can only be complementary to a human rights approach. This latter focuses on eliminating school violence as a matter of human and child rights, a legal and moral imperative that cannot be quantified. As such, we acknowledge that, although states that are signatories to international conventions, such as the UN Convention on the Rights of the Child (UNCRC), are bound to protect these basic rights, violations are still occurring, for which governments as duty-holders need to guarantee a response. However, we also recognise that the policymaking process is inherently political and responds largely to economic imperatives, particularly with respect to the allocation of funds for different policies and programmes. As a result, the aim of the analysis here is to provide some economic arguments that could contribute towards leveraging more political, policy and budgetary support for investing in school violence prevention actions. In acting as a complement, it does this without undermining the human rights imperative of ensuring that children enjoy learning without fear in schools, safe from violence.

This study is structured as follows.

Section 2 explores the consequences and related economic impact of school violence. It first provides an overview of the approaches that have been used to estimate the costs of other forms of violence, to see which elements can be used to estimate school violence. These include domestic violence, interpersonal violence, violence against children, conflict and violence and gender-based violence. It also considers the constraints in the data related to school violence and how these thereby limit measurement of economic impact. It then goes on to look at the different consequences of school violence in terms of educational attainment and performance, physical health, psychological health and emotional well-being and social capital, exploring the possible economic implications of the consequences in each of these categories. Based on data availability,

it provides some examples of the costs of forms of violence to which school violence can be related indirectly, for example domestic violence, youth violence and child abuse.

Section 3 focuses on mapping some of the main types of school violence prevention mechanisms and providing some information on their costs, to enable a comparison between the costs of prevention and some of the potential and actual costs of school violence.

Section 4 looks in more depth at five case study countries: Brazil, India, the United States, Sierra Leone and Ethiopia. The section provides a more detailed analysis of the situation of school violence in each country, the research and data available in relation to school violence and explores some best practice examples of prevention in each country, providing information regarding the costs of such interventions. In three of the countries, Brazil, India and the United States, given the availability of data, one important dimension of costs was calculated: the economic costs of early school leaving resulting from school violence. In the case of Sierra Leone and Ethiopia, where data was not forthcoming to estimate this cost, we indicate what data was available and what is still required to be able to estimate these costs. This section also explains the choice of methodology to estimate such economic impacts, and includes a table with estimated economic costs of school violence using this same methodology for ten countries where Plan International works.

Section 5 draws some insights from Sections 2-4, including providing a proposed methodology to undertake primary data collection to obtain better data to estimate the costs of school violence.

Lastly, Section 6 provides some policy recommendations and suggested next steps.

2. Consequences and economic impact of school violence

2.1 Overview of approaches estimating the cost of violence

Interest in estimating the economic impacts of different forms of violence to individuals, society and government budgets has resulted in a number of studies utilising a variety of methodologies to calculate its costs. Each methodology has been developed in relation to the data available and the type of phenomenon being studied – domestic violence, interpersonal violence, gender-based violence, crime and common violence – and each has its own strengths and weaknesses.

Models for constructing economic costs vary according to how they attempt to estimate losses: whether these are monetary costs that are fairly direct and easy to measure, for example the cost of paying for medical treatment in the case of injury, or whether they are indirect and more difficult-to-measure non-monetary-based costs, for example the loss of well-being resulting from increased feelings of fear and anxiety. Additionally, models vary as to what is considered an economic cost and how resultant welfare losses to society are estimated. For instance, some models include only short-term costs and not long-term costs; others focus on costs to individuals and not to society. Despite these important differences, the objectives of the studies are similar: to illustrate the level of economic impact of violence on individuals, communities, government and other actors and thereby contribute an additional argument to measures to promote violence prevention.

2.1.1 General concepts to inform selection of an approach and types of cost

Methodologies to estimate costs begin by adopting either an incidence- or a prevalence-based approach. Incidence-based models assess current and lifetime costs incurred by all new incidents that occur in one year. Prevalence-based models focus only on a specific one-year period and look at all costs incurred by all new incidents and ongoing costs from previous incidents.³ Use of either incidence or prevalence is often determined by data availability and how this feeds into other conceptual considerations of the model being built to a specific purpose. An incidence approach is useful for modelling, for example, the progress of an illness and its costs over time. It is less useful in assessing domestic violence, because there is no typical pattern, either of the nature of the abuse or in the types and frequency of services used. In this case, a year-on-year analysis is more pertinent. Therefore, most domestic violence studies use a prevalence approach.⁴

Given that this study is based on secondary data, the choice of instruments has been influenced profoundly by data availability. It was a challenge to adapt a methodology to enable us to assess some of the costs incurred as result of school violence. Use of prevalence rather than incidence data was chosen because of the type of data obtained, from cross-sectional rather than panel surveys. Data required for an accurate estimation of quantified long-term effects are insubstantial and almost non-existent.

Longitudinal studies documenting the long-term effects of exposure to violence are few in number. In the case of those looking at violence against children, most provide evidence of exposure to child abuse in the early years of life and deal with domestic child abuse rather than school violence.⁵ Other studies focus specifically on children identified as having behavioural problems in schools, addressing specific psychological characteristics and their long-term consequences and not relating this directly to acts of violence. These studies therefore do not provide evidence that can be used for the robust quantification of school violence-related economic impacts.⁶ The longitudinal survey we use, from the Young Lives Study on Childhood Poverty, has data relevant for analysing school violence only in its last round, which means that for now the data on school violence remain cross-sectional.

Studies estimating the costs of violence consistently distinguish between different kinds of consequences, to reflect the different methods needed to estimate them. One useful distinction, used repeatedly in World Health Organization (WHO) and World Bank analysis of the costs of violence,⁷ identifies direct and indirect costs. This reflects a distinction between costs that need to be 'paid', for example the direct cost of medical treatment for injuries resulting from violence, and costs that relate to impact on a person's life, on society or on the economy and that are mediated by other factors.

In these studies, direct costs include: those linked to compromised labour, such as temporary replacements or sick pay; those to the individual resulting from absenteeism from work; medical expenses for the individual; legal fees if perpetrators are prosecuted; and counselling in cases where the victim (or the perpetrator) seeks psychological support. They also include more service-specific costs, such as: costs to the private or public sector (depending on the context); the burden on health services if parties need medical attention; the costs of public prosecution; and other costs that may be incurred by public services in dealing with incidents of violence.

Indirect costs can be classified as those that are absorbed by individuals, occur later down the line or might be mediated by other factors. For example, evidence suggests that an indirect cost of school violence is linked to the cost of youth violence and crime, which is mediated by dimensions of household and community violence, security and economic contexts in which perpetrators live, among a range of other factors. Such indirect costs can also accrue, depending on the circumstances, to victims, perpetrators, communities, private sector investment and, importantly, the state, through public sector spending and related losses in economic potential.

Indirect economic impacts to the state of school violence can be significant, depending on the scale of the problem and the severity of its impacts. For example, in most developing countries the drive towards EFA has implied a significant increase in investment of public resources in education. Loss of educational attainment by students who stop learning, are unable to concentrate, miss days of school or even drop out as a result of any of the three forms of school violence⁸ implies an important economic cost resulting from 'wasted' investment. Some estimates of this loss for Brazil and the US are provided in the case study section.

At a macro level, the literature on human capital discusses at length the relevance of education to economic growth.⁹ Human capital in its broadest sense encompasses a population's education, health and nutrition levels. Despite some uncertainty surrounding the results of cross-country empirical studies, human capital (proxied by education or health level) is generally considered one of the key determinants of growth. For example,¹⁰ educational investment is crucial to increased productivity, rapid technological adaptation and innovation, all essential to sustained growth.¹¹ Growth-centred models talk of the benefits of a skilled labour force, where higher educational attainment results in higher productivity, less unemployment and higher-value economic activity.¹² The impacts of school violence that result in worse education outcomes, such as higher dropout rates, increased absenteeism and lower educational attainment, directly lower human capital trajectories, with further behavioural impacts lowering life opportunities. This incurs economic losses for the individual as well as macroeconomic costs for societies. This economic impact is, of course, not homogenous, and depends greatly on a country's level of return to education: lower quality education, lower aggregate wealth and lower potential income for an individual over the lifetime affect the potential level of economic growth to which they contribute.

2.1.2 Methodological approaches to estimate the economic impact of violence

Numerous studies estimate the costs or economic impacts of different forms of violence, including domestic violence, child abuse and interpersonal violence. However, several additional constraints in the case of school violence – mainly data related – prevent calculation of most of its direct and indirect costs:

- School violence is underreported. Many children do not speak up, either from fear or because of a relative social acceptability of some forms of violence in school, such as corporal punishment. Meanwhile, quantitative studies of school violence are seldom nationally representative and do not include a complete set of questions that would enable an analysis of economic impact. For example, only a few surveys include a question about the extent to which violence was a cause for school abandonment: none of the quantitative studies on school violence consulted reported on the rate of dropout;¹³ qualitative studies cite that school dropout occurs but do not quantify it rigorously using a representative sample;¹⁴ questionnaires for the Young Lives study, which focuses on child poverty, have some data linking school violence to drop out. Similarly, questionnaires on school violence have no questions about the direct costs incurred, either medical (particularly relevant in severe cases of sexual abuse, bullying and corporal punishment) or related to lost income resulting from missed work days in a case where the child or adolescent contributed to household income in addition to going to school. Additionally, there has not yet been an assessment of the burden on public services of school violence-related incidents, partly because of underreporting and the fact that service providers do not necessarily register place of occurrence, and partly because in many countries such services are not provided. Many of these studies provide useful qualitative analysis but virtually no 'quantifiable' data.
- It is difficult to infer causality and isolate the significance of school violence as a factor contributing to school dropout, truancy or poor performance when many other variables also contribute.¹⁵ For example, an important body of mainly qualitative research suggests that school violence is significant in poor academic performance. Victims report an inability to concentrate and lost interest in learning, and have lower grades.¹⁶ This information clearly points to a loss of educational attainment and thus low returns to public and private investment in schools, but the impact is difficult to measure, given other mediating factors, such as quality of education. More specific analysis of educational attainment for victims and non-victims that would allow for comparison, as well as the inclusion of questions on experiences of school violence in longitudinal surveys, would help in obtaining more robust data.
- Additionally, as explained above, there is limited quantitative data showing the contribution of violence to the decision to miss or abandon school. Surveys that inquire about the impacts of school violence on schooling record that the greatest is on enthusiasm, courage to attend school and capacity to concentrate. Only a very small percentage of victims mention having dropped out of school as a result of violence.¹⁷ This is important, given that loss in returns to education can be most adequately measured in relation to years of school lost. Therefore, existing quantitative evidence does not consistently suggest that dropout is significantly caused by school violence, even if this is the case. This is partly because most school violence surveys are school based and thus do not include children and adolescents who have dropped out as a result of violence.
- Although there is a growing body of data estimating the occurrence of school violence, there is virtually no quantitative data, particularly with respect to physical and psychological impacts, monitoring severity and the need for treatment – medical or psychological – where appropriate. That is, although qualitative research provides evidence that these impacts occur, with important effects on the well-being and mental health of victims, the dearth of data on the severity of the impacts prevents an estimation of related costs. Although some quantitative surveys¹⁸ do record an emotional and psychological impact of school violence on victims, follow-up questions about the extent or severity of this impact are not included.
- Evidence collected specifically on school violence (including studies on violence against children that ask about occurrence of violence in schools) are useful to generate an understanding of some aspects of it, such as perceptions about school violence, characteristics of victims and perpetrators, types of violence, prevalence of violence, etc. However, they fail to ask students questions necessary to arrive at robust estimates of the economic impact, primarily on victims but also on services. First, whereas some surveys (for example Plan Brazil's survey on bullying) ask students directly about their experiences of maltreatment, others focus on students' perceptions and whether they 'know of' cases of

school violence. Focusing on perceptions does not produce actual data about how much violence there is and therefore may fail to reflect the reality. Second, most surveys ask about occurrence of violence and type of violence inflicted but do not systematically pursue this if a student reports being a victim of violence. What form of violence is it? What have been the impacts on schooling (specifically including dropout as a possible answer, which means that out-of-school children need to be interviewed as well)? What have been the impacts on your health? Have you sought treatment? Did you become pregnant as a result of the abuse (in cases of sexual abuse)? Do you know how much you have spent on health services as a result? How many times have you gone to the clinic? Did you have to stop working as a result of school violence (in cases where the student was also working)?¹⁹

In summary, although methodological and data constraints restrict the implementation of costing exercises, some positive conclusions can be drawn concerning: the types of methods most useful in estimating the costs of school violence; the measurements possible using existing data sources; the types of empirical data to be collected in future; and the ways in which these data can most positively be utilised. In Box 1 below, we describe these methods and data sources. This reading is highly recommended for a fuller appreciation of both the data available and the data constraints, as well as the way in which this report draws conclusions.

Box 1: Methods to measure the economic impacts of violence

A measurement of the cost to **human capital** allows an estimate of losses to earnings or wages over a given period or a lifetime, either to an individual, when assessing lost returns to education, i.e. the loss of potential earnings accrued by an additional year of education, or to the economy, when the aggregate effect is measured. For the purpose of this study, assessing **returns to education** (defined as the potential to increase productivity and/or earnings as a result of an additional year of school) has been a more manageable route to estimate one of the economic costs of school violence on individuals, considering the economic losses from early school leaving. Information exists in some countries about the number of students who have dropped out of school because of school violence, but these data are not available in most surveys, largely because most school violence studies draw on school-based research. We found a few surveys and studies that do provide data on how school violence impacts on drop out. For example, this link was found explicitly in the Young Lives project on childhood poverty questionnaires, in which school violence is a possible answer to the question about why children have dropped out of school.²⁰ More systematic collection of these data would be useful to calculate the extent to which lower levels of education attained as a result of school violence could potentially impact future possible earnings.

Frictional cost methods typically use an accounting approach to estimate costs or losses incurred by individuals, employers, the public sector and other economic actors, who incur direct costs to compensate for the lost activity of the victim. For example, with respect to the economic impact on health resulting from injury, frictional costs would include those associated with treatment and rehabilitation of the victim, whether through public services or through private health facilities²¹. For example, in the case of school violence,^{22,23} provides a useful formula to calculate the financial cost associated with absenteeism by multiplying the rate of trancies in a given school year by a school's reimbursement rate (in most states, this is defined as the average daily attendance (ADA) rate) to compute the average financial loss from truancy for that school. This is a useful methodology to estimate financial costs to schools, when precise information is known about the financial resources that the schools would fail to receive as a result of students missing classes. Frictional cost approaches are suitable for estimating monetary-based economic costs but have little effect in estimating public value or social costs, which are mostly indirect costs.

Two approaches have been used in studies to determine the costs of other forms of violence to more accurately address issues of social costs as well as non-monetary-based estimates. The **willingness to pay** approach estimates the cost that individuals would pay for the counterfactual.²⁴ This type of calculation accounts for the fact that other factors come into play to affect the result, so it aims to isolate the effect of the target variable, in this case violence. The willingness to pay approach can be used as a tool to assess very micro-level effects, such as the price people are willing to pay to avoid an incident of violence, or public opinion on different policy options to realise different public policy outcomes, such as the value of preventive measures against violence.

As a measure of individual preference, the methodology requires primary data collection, which can be a constraint. Meanwhile, the approach has been very useful in addressing non-monetary-based costs but remains dependent on social norms and societal values, which might value costs of violence differently, leading to different perceptions among respondents about what they would be willing to pay for it to be avoided.²⁵ For example, in the case of school violence, local social norms may be at odds with human rights approaches (which would argue against school violence): willingness to pay approaches in countries where corporal punishment is accepted may find that people would be willing to pay very little or nothing to reduce this problem in schools, where many believe that this is a useful form of discipline. In India, around 30% of children agree that corporal punishment is necessary, and most parents and government officials agree that children should be punished physically both at home and in schools.²⁶ Similar issues arise in Sierra Leone, where 85% of women believe that a husband is justified in beating his wife.²⁷ In Ethiopia, community perceptions are that physical punishment of children is acceptable, and sexual violence is tolerated within the form of traditional practices deemed locally as appropriate.²⁸ In such instances, the willingness to pay approach will reflect a different value of preventing school violence. For this reason, and given that we are not collecting primary data, this approach has not been used in this study, but it is an approach that could be used for future research, provided that it takes into account contextual factors that might influence the 'willingness to pay'.

Quality-adjusted life years (QALYs) or disability-adjusted life years (DALYs) are an alternative approach to estimating non-monetary costs that individuals may incur, and have been widely used by the health sector as estimates of the cost benefit of interventions. QALYs are used to measure an individual's future longevity and the quality of the individual's health during that time.²⁹ DALYs measure the years of life lost owing to premature mortality and the years of healthy life lost through pain and suffering. DALYs are then converted to a dollar figure by assigning a value to a statistical life year.³⁰ Although these methodologies are useful because they allow for quantification of loss in quality of life and can easily be compared across contexts and with other categories of violence and disease, they are data intensive and also involve complex methodologies.³¹

These QALY and DALY methodologies could be used to estimate the economic impacts of severe injuries or rape resulting from incidents of school violence. However, we are not able to use them because the type of information required to measure the physical and psychological impacts of school violence is not reported in existing school violence datasets. Different primary data collection would be needed to estimate the impact on quality of life and health expectancies resulting from injuries caused by school violence. The QALY method could potentially be adapted to measure how the loss of years of schooling triggered by school violence could impact on life expectancy. This assumes that lower education is related to health risk factors (such as poorer access to information about preventive health, lower incomes that might result in lower capacity to access quality health care, higher risk of being involved in violence, etc) that can have an impact on life expectancy.³² In addition to results from research that measures the impact of educational attainment in general on health outcomes, in order specifically to measure the impact of diminished education resulting from school violence on health outcomes, it would be necessary to have longitudinal data to analyse these links over time. To the best of our knowledge, based on an extensive review of datasets and interviews with experts, this information is currently not available.

Table 1: Summary of methods for quantifying costs and relevance to estimating the economic impact of school violence³³

Methodological approach	Use	Applicability to school violence
Frictional cost	Estimating direct 'monetary' costs to different actors as a result of violence	This methodology is potentially applicable to many aspects of school violence, but data limitations prevent use to estimate a range of costs. For example, quantitative data on health-related impacts of school violence are not available. However, the approach can be used to estimate some education-related costs, particularly loss in public sector spending on education resulting from absenteeism directly linked to school violence. The case studies from Brazil and the US use this approach.
Human capital	This approach can be used to estimate returns to education for an individual	Because school violence can impact on the level of education acquired by individuals by triggering dropouts, we can estimate the impact of lower returns

Methodological approach	Use	Applicability to school violence
	or, at the aggregate level, to the economy, so also allows for an assessment of the loss in returns through lower education.	to education resulting in lower levels of human capital accumulation through lower years of school completed. This approach is used in the case studies from Ethiopia, India and Sierra Leone, where data exist directly linking school violence with school dropout. It could also potentially be used to estimate human capital accumulation losses through poorer learning outcomes triggered by school violence. In the datasets explored for this research, this has not yet been measured quantitatively.
QALYs/DALYs	These are alternative approaches to estimating non-monetary costs of violence that individuals may incur, primarily used in the health sector, sometimes to assess the cost benefit of interventions.	These would be very useful approaches in the case of school violence to 'quantify' non-monetary costs, such as impacts on mental health and emotional well-being, which qualitative research suggests are among the most important consequences. However, quantitative data do not provide enough information to enable such quantification (there are useful databases on the mental health impacts of child abuse in general but no breakdown of its occurrence in schools; most data report that most registered cases of abuse take place at home).
Willingness to pay	Another useful impact to estimate non-monetary costs, this calculates how much individuals would be willing to pay for having avoided the act of violence. It requires primary data collection.	Two limitations to using this approach for this study are: 1) the need for primary data collection (which could be done in future research); 2) its dependence on social norms and societal values, which might value the costs of violence differently, leading to different perceptions among respondents about what they would be willing to pay for it to be avoided. For example, where corporal punishment is a social norm, individuals may not be willing to pay to avoid it.

2.2 Consequences of school violence

Violence in schools poses considerable risks to children during important development stages in life. A greater understanding of the range of consequences of violence in schools can contribute to stronger evidence-based calls to end violence in schools and create safe learning environments for all students. The analysis in this section identifies the types of costs that can accrue from school violence to individuals (victims), perpetrators, schools, the community as well as the government. This latter might be in terms of public spending to mitigate the consequences of school violence or through lost investment of public spending on basic education (primary and secondary school) when children drop out of school or fail to learn as a result of school violence. The analysis begins to unpick some of the economic impacts related to the consequences of school violence, in order to provide an economic rationale for why it is important to invest in prevention of school violence, not only in terms of the human rights imperative to do so but also because it makes economic sense. Actual cost estimates of economic impact are found in the case study section (Section 4).

It is very important to point out that different forms of school violence have different types of impacts. As such, when analysing direct and indirect costs of school violence related to these impacts, three important factors need to be taken into account:

1. Whom the economic impact accrues to: a complete mapping of economic impacts would analyse the costs to victims, perpetrators, schools, communities, the government and/or other services providers and the overall economy. These costs vary depending on the nature, form and severity of school violence.

2. The context where acts of school violence occur: this defines the type of response to school violence and has implications for the potential costs. For example, in a developed country, in the case of a severe case of bullying or sexual abuse, the state could incur the costs of prosecuting the perpetrator and the school or welfare services could provide support services to victims and perpetrators. Direct costs could include providing psychological support to the victim and peers, educating excluded children with tutors or in special schools, paying for property damage and, in some cases, paying legal compensation to the victim.³⁴ There are clearly important costs attached to the provision of such services. For example, a study was conducted on 227 youths in the US who were removed from school as a result of their violent behaviour and enrolled in special behavioural units.³⁵ The study estimates that, from the ages of 12 to 22, these youths cost the US government more than \$10 million, or at least \$45,472 an individual – and the authors consider this is an underestimation. The figure includes costs such as police work, court appearances, property damage, custody costs, mental health and drug rehabilitation treatment and housing for ‘unemployable’ youths, but not some professional costs such as social workers and educational psychologists. In other contexts, particularly in poor countries where service provision is already weak, a school, community or service provider might not directly incur any costs related to the violent incident, often not even firing or expelling the identified perpetrator.³⁶ This is a problem in itself, denoting a significant lack of accountability by education authorities, schools (public and private) and national and local governments in general. These are failing to provide support systems to victims or to rehabilitate perpetrators to avoid the continuation of their abusive behaviours. However, it is likely that, as countries develop services, such costs will increasingly be incurred. Thus, it would be cost effective, based on what we know of costs of providing such services in other countries, to prevent these costs from occurring.
3. For every form of violence, the degree of impact depends on the severity of the incident. For example, registered incidents of bullying and sexual abuse can range from sporadic verbal abuse to physical assault – beating up a child or rape, as some of the extreme manifestations. Corporal punishment is by definition always physical, but it can range from a small reprimand to whacking with a board on the back or arms, causing injury – with recorded cases of death resulting from injuries from beating or weapon aggression.³⁷ Cases that cause severe or permanent injuries are less frequent than those that cause the more regular cuts and bruises, but they are still relevant.³⁸ In either case, corporal punishment has an important psychological and emotional impact,³⁹ including fear, stress, anguish, loss of self-esteem, difficulty in concentrating). This cannot easily be measured but evidence suggests it incurs costs, as highlighted in the analysis below.⁴⁰

2.2.1 Effects of school violence on educational attendance, attainment and performance

School violence has been shown to discourage children from attending school as well as to discourage parents from sending their children to school.⁴¹ Many among those who continue to attend school suffer from difficulty concentrating and distraction and, as a result, perform worse academically than they otherwise would have. Some severe forms of school violence have also been directly responsible for children dropping out of school, reduced school attendance, lower class participation and lower educational attainment. The manifestations vary significantly in different country contexts, with school dropout much less common in developed countries, where data suggest that school violence tends to cause more truancy than dropout. However, this might be partly because of the mainly school-based nature of surveys and interviews (excluding those who have already dropped out)⁴² and partly because dropout rates in developing countries are higher, given the greater number of variables that affect children’s decisions to stay in schools.

Truancy as a consequence of school violence directly undermines children’s learning through less time in school and less contact time with teachers. As a result, educational attainment suffers, sometimes leading to repetition and even eventual dropout. For the individual, there is evidence to suggest that lower educational attainment lowers the possibility of having access to better work

opportunities and earnings.⁴³ It also has other broader economic repercussions, as will be discussed in more detail below. High levels of school violence have been shown to be a critical factor in truancy. Evidence from a recent national-level study in the US, using a representative sample, showed that 5.5% of students had missed at least one day of school in the month preceding their being surveyed because they felt unsafe.⁴⁴ According to a small but nationally representative study in Ethiopia (1268 students, 761 girls and 507 boys in all nine regional states),⁴⁵ over 40% of parents said that school violence would have a high impact with regard to discouraging them from sending their daughters to school. In this study, 60% of girl students and 42% of boy students surveyed estimated that violence had a high impact on girls' absenteeism from school. In Brazil, a nationally representative survey on bullying indicated that 33 of 5396 students (0.6%) in the sample had missed classes at some point during the school year as a direct result of an incident of bullying and mistreatment.⁴⁶

More severe effects on children's education are characterised by **dropping out** altogether. Dropping out as a result of school violence limits the number of years of schooling children receive, and this has been shown to have a direct effect on potential long-term income level through lower human capital accumulation. In Organisation for Economic Co-operation and Development (OECD) countries, there is a growing consensus that the private returns from extra education range from 5% to 15%.⁴⁷ That is, an extra year of schooling will, on average, result in individuals being able to earn wages 5% to 15% higher than they would have without the extra year of schooling. It can also have important economic costs. For example, the loss in potential earnings from early school leaving in Egypt is estimated at equivalent to 6.94% of gross domestic product (GDP).⁴⁸ Using a similar methodology, the forgone benefits to society from early secondary school leaving have been estimated for most Latin American countries.⁴⁹ Argentina was estimated to be losing 11.4% of GDP as a result of early school leaving. The figure was 58.8% of GDP in Guatemala, where the rate of dropout is higher.

Box 2: Costs of youth not in education, employment or training in the UK⁵⁰

A recent report by the UK's Audit Commission reports that young people not in education, employment or training (NEET) at 16-18 have poorer life chances than their peers and are more likely to be a long-term cost to the public purse. National estimates for 2009 show 9.2% (183,200) of young people aged 16-18 were NEET. The 2008 NEET cohort will cost an estimated £13 billion in public finance costs and £22 billion in opportunity costs over their lifetimes. Young men who were NEET are three times more likely to suffer from depression and five times more likely to have a criminal record than their peers. This research found that a quarter of young people were NEET at some point during a two-year period, but most get into education, employment or training. However, 10% young people remain NEET for six months or more.

Pupils who fall behind by age 11 find it hard to catch up later. Failure at school and failure by school (unauthorised absences, exclusion, truancy, poor relations with teachers and unsuitable teaching approaches) are all associated with being NEET at age 16. **Young people who are bullied at school are twice as likely to be NEET at age 16 than their peers.** 60% of young people who were NEET at 16 had expected to progress to education or training when asked three years before.

According to the study, schools can identify the early risks of being NEET. Literacy and numeracy support in primary schools can prevent later obstacles to work and learning, as can support with the move to secondary school. Better targeting and collaboration can reduce lifetime costs and increase well-being. Significantly, prevention through low-cost interventions can bring large savings: £4000 of short-term support to a teenage mother can be repaid 20 times over through net lifetime tax contributions. The same successful intervention can reduce public service costs by nearly £200,000 over a lifetime. Financial payback from some interventions is visible at the age of 25 through reduced public finance costs. Payback for most interventions is in the medium term, when young people have been in employment for longer and made tax and national insurance contributions.

As highlighted above, numerous qualitative studies on school violence indicate that this can be linked to school dropout. The abovementioned study on sexual violence against girls in schools in Ethiopia⁵¹ showed that this is considered by almost 57% of students to have a high impact on girls' dropout rates. In Swaziland, according to a nationally representative study using a sample of 1292

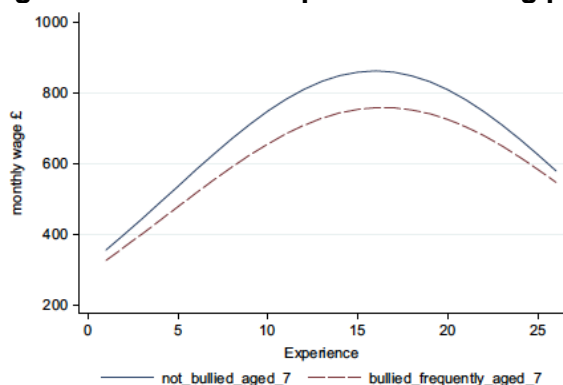
young women, 17.4% of girls aged 13-17 have been pulled out of school because of pregnancy, with 10.6% of the same age group having been forced to have sex or raped and 19.5% of incidents taking place in school, on school grounds or on the way to school.⁵² This means that some of the girls were pulled out of school when they became pregnant as a result of sexual abuse in school.⁵³ In South Africa, gender-based violence in schools was shown to have a considerable impact on girls' absenteeism and dropout, while in many cases the perpetrators of sexual violence (both students and teachers) remained at school.⁵⁴ In Benin, in a small, non-representative study (70 girls), 43% of primary students and 80% of secondary school students said that they knew someone who had dropped out as a result of gender-based violence and sexual abuse.⁵⁵

Corporal punishment has also been linked strongly to dropout rates. Studies in Pakistan and Lesotho provide evidence of corporal punishment or harsh treatment by teachers as reasons for dropping out of school.⁵⁶ A study of Palestinian children in refugee camps in Lebanon found that 68% of boys and 58% of girls had dropped out of school because of harsh treatment by teachers.⁵⁷ A small study in Nepal, where harsh corporal punishment is routine, found that 14% of school dropouts can be attributed to fear of teachers⁵⁸.

Educational **attainment or performance** is affected by school violence through a number of channels, many of which are mentioned above. There is evidence of indirect effects of lower levels of schooling on health and life opportunities. For example, levels of female education have a direct effect on fertility rates (better educated women tend to have fewer children), on the health of their children and on their own reproductive health.⁵⁹ Thus, lower educational attainment has important economic implications. For example, the economic costs of 65 low- and middle-income and transition countries of failing to educate girls to the same level as boys has been estimated at \$92 billion per year.⁶⁰

Positive correlations have been demonstrated between exposure to violence and lower educational performance of adolescents.⁶¹ In North Carolina, one more episode of violence was shown to have a small impact on Maths and verbal scores of 8th Grade students.⁶² In Brazil, out of 5396 students surveyed, 1675 (31%) reported having been mistreated or bullied. Out of the total of bullied children, close to 4% reported that they had failed courses as a result and 57% felt that their learning had been affected in the following ways: 5% stopped learning altogether, 26% lost concentration in classes and 27% lost interest and enthusiasm in their studies.^{63/64} A paper in the UK based on panel data from the British National Child Development Study (NCDS) found that school bullying has a detrimental effect on human capital accumulation, which may influence wages received during adulthood. In particular, the study presents empirical results that confirm that wage levels (at ages 23 and 33) are higher for those individuals who did not experience bullying (controlling for other factors) than for those who experienced bullying. The wage differential is highest between those who were never bullied and those who were bullied frequently in school.^{65/66}

Figure 1: Estimated experience-earning profiles by bullying at age seven⁶⁷



School performance can impact on returns to education by generating lower levels of learning, which can have an indirect economic impact on victims by potentially affecting their capacity to obtain a better-paid job. Additionally, low levels of attainment represent losses to public expenditure investment in schools. Resources invested expect a minimum level of performance as a return on the investment, which is negatively affected by the presence of school violence, thereby lowering the potential returns to investment in education.

Early school leaving, including that linked to school violence, also results in lower contributions to tax revenue.⁶⁸ There is a loss in direct tax revenues caused by lower earnings resulting from lower educational attainment by those victims of violence who work in the formal sector, or by those in the informal sector who would have otherwise been able to obtain a formal sector job. Lost indirect taxes are generated by lower levels of consumption resulting from lower earnings resulting from lower levels of human capital accumulation.⁶⁹ Thus, one economic impact of school violence on the government's budget is through the loss of tax revenue, although it is complicated to calculate this, given difficulties in estimating earnings and consumption patterns of school violence victims.

2.2.2 Effects of school violence on physical health

The economic impact of school violence of consequences on health and related treatment is largely dependent on the form and severity of violence inflicted on the victim. Relatively few cases of school violence have immediate consequences that are severe enough to require hospital treatment⁷⁰ and which therefore would result in an economic cost. Some of the acute cases where treatment is required include rape cases, cases of severe injury resulting from assault (such as stabbing, beating in episodes of bullying⁷¹ or extreme corporal punishment) and cases where sexual abuse results in pregnancy. Although studies have found that these severe incidents do occur,⁷² they have not been registered systematically in survey or in administrative data in a way that would allow them to be quantified to determine aggregate costs at the national or community level. However, it is clear that they generate an important economic cost for victims, their families and often health service providers.

Extreme cases of school violence can lead to death of victims, through homicide or suicide, but these are rare. For example, a National Violent Death Reporting System⁷³ report in the US⁷⁴ shows that school settings were the location for three out of 3409 homicides (0.1%) in the reporting period. Loss of a life not only has a moral value but also can be assessed economically, including through the lost lifetime earning of a person and all additional contributions to a productive life.

Research on physical and sexual abuse of children,⁷⁵ some of which occurs in schools and school surroundings,⁷⁶ found this to have long-term consequences of health risk behaviours such as smoking, unsafe sex and harmful use of alcohol. Health-related economic costs of school violence are therefore spread across the life course and dispersed through many different sectors. Longitudinal data tracing victims of school violence over the medium term would be a useful way to generate robust evidence of health-related impacts and health risk behaviours in the medium and long term (as well as providing useful information on education and social impacts).

Despite the low level of follow-up on physical injuries at medical clinics, evidence from studies on child abuse shows that this can produce bruising, fractures or other soft tissue injuries that result in important economic impacts. For example, a study looking at the economic impact of child abuse in Canada found that the aggregate costs of child abuse to the health sector in the short and long term was CA\$222.570 million^{77/78}. Similarly, in the US the annual cost of child abuse and neglect to victims only was estimated at \$103.8 billion in 2007 value⁷⁹ (although the share of child abuse that takes place in school is not specified).⁸⁰

Sexual violence in schools poses a number of health hazards, including the spread of sexually transmitted infections (STIs) including HIV/AIDS and unwanted or early pregnancy.⁸¹ In a study in Ethiopia interviewing 1278 children, 10.6% of victims of sexual violence (not necessarily in school

settings, although other studies indicate a high prevalence of sexual abuse in schools in Ethiopia) reported instances of unwanted pregnancy and 23.5% had contracted STIs.⁸² Of those who contracted STIs, none sought treatment for fear of others finding out. The underreporting of instances of sexual violence is a considerable problem in estimating the health impacts of sexual violence. In Japan, there is virtually no discussion of sexual abuse of schoolgirls, and very few come forward in instances of abuse for fear that their reputations will be tainted for the rest of their lives.⁸³ Sierra Leone has seen instances where girls agree to sex, or parents encourage the sexual abuse of their daughters, in exchange for money or to avoid incurring school fees.⁸⁴ Prosecution rarely happens as families often accept small out-of-court settlements.⁸⁵

Other types of consequences of school violence on physical health are more severe if violence is repeated or particularly severe, or if victims are not given adequate support following incidents. For example, correlations have been drawn between greater ill-health and regularity of bullying: physical symptoms include 'headaches, stomach-aches, backache and dizziness'; psychological symptoms include bad tempers, nervousness, loneliness and feeling helpless.⁸⁶

Corporal punishment can inflict serious physical injury on students. A report on corporal punishment in the US (HRW, 2008) found that students can sustain severe muscle injury, extensive bruising and whiplash damage. Students can worsen injuries through efforts to protect themselves leading to beaten limbs. Most children who experience corporal punishment report severe immediate pain.⁸⁷

A number of studies have attempted to estimate the health costs of other forms of violence through data collection from hospitals and other health services to estimate the prevalence or number of cases, as well as to register the types of injuries resulting from acts of violence, and thus to estimate unit costs of treatment. It is difficult to estimate the health costs of school violence based on these studies, since they do not break down costs according to where the violent incident occurred (for example at home, on the street, in a public place, at school, on the way to or from school), because records used as a source of data fail to record this. Other studies on violence (e.g. domestic violence) survey victims who have reported being victims of violence (e.g. to the police) and inquire about the consequences of acts of violence for their physical health and well-being. However, datasets that register occurrence of school violence fail to include data on whether victims of physical violence in school need to seek medical attention and of what nature. This information is necessary to establish the health costs of school violence.

A particular case in point is the Global School-Based Student Health Survey, conducted by the WHO. Although GSHS administers questionnaires to 13-15 year olds attending school, reported health events and risk behaviours are not limited to those occurring in school but rather reflect respondents' experiences in all settings over the period of recall. Thus, although the dataset contains a wealth of information on violence against children who attend school (where the survey is conducted), it does not focus specifically on violence in schools. In fact, most evidence on violence against children indicates that few severe instances occur within schools, and that the majority of forced sexual intercourse and violence-related injuries leading to time lost from routine activities occur in the home or in community settings.⁸⁸ Most school violence involves forms of fighting, bullying and sexual harassment, which can have long-term consequences for health risk behaviours (although generally few immediate consequences severe enough to necessitate hospital treatment). This means that, although such violence certainly has economic costs, these are spread across the life course and dispersed through many different sectors.⁸⁹

In summary, as can be seen from the wide variety of data sources underpinning the evidence described above, the difficulty of estimating the health-related economic costs of school violence does not imply that school violence does not generate such costs, rather that they cannot currently be estimated using existing data.

2.2.3 Effects of violence on psychological health and emotional well-being

The psychological impacts of school violence, in the short and long term, are perhaps the most commonly reported of its consequences. For example, a recent survey on bullying in Brazil⁹⁰ showed that 27% of victims of bullying lost interest and enthusiasm, 14% went to school with fear and close to 3% lost trust in teachers, lost friends and stopped learning. Other studies show that children who are bullied are five times more likely to be depressed than their peers and that bullied girls are eight times more likely to be suicidal.⁹¹

Physiological impacts can be caused by both physical and psychological forms of abuse, the latter tending to be the most common form of sexual abuse and bullying. Psychological abuse may have devastating lifelong consequences. This includes verbal abuse directed at individual children and fear generated by watching the physical punishment of other children.⁹² Children are acutely sensitive to verbal abuse: research shows that children often perceive psychological abuse as more hurtful than physical abuse.⁹³

The mental health effects of witnessing or being subjected to acts of physical or psychological violence are extensively covered. Children who witness or are subject to adult domestic violence have been shown to act more aggressively, be more antisocial and inhibited, to have greater psychosomatic complaints and to be more prone to adulthood depression and lower self-esteem.⁹⁴ Of children abused as children, 80% meet the diagnostic criteria of at least one psychiatric disorder.⁹⁵

Sexual abuse and violence commonly result in a range of psychological impacts with lasting consequences. In Ethiopia, of those who reported a history of sexual abuse, the most commonly cited psychological consequences were: 3.2% blaming themselves, 2.7% suffering feelings of worthlessness and 2.7% feeling suicidal.⁹⁶ Sexual abuse during adolescence can have severe consequences for identity formation and developmental processes, which can last well beyond adolescence and into young adulthood or beyond.⁹⁷

An important body of research exists on the consequences of corporal punishment in schools.⁹⁸ Resultant effects on children appear to be correlated with its frequency and severity. Meta analysis of a number of studies on the use of corporal punishment has shown that children who are victims of or who witness beating at school are likely to think that violence is acceptable.⁹⁹ Corporal punishment can make students aggressive, angry and more likely to lash out against their peers or educators, and can teach them that domestic violence is permissible. It has also been thought to explain susceptibility to delinquent, criminal and antisocial behaviour. For example, a number of African studies suggest childhood experience of bullying increases anti-social and risk-taking behaviour in adult life.¹⁰⁰ Similarly, another study concluded that more than two-thirds of school shooting incidents are motivated by revenge against bullies.¹⁰¹ Children who have been victims of abuse also display higher levels of aggression and poorer mental health.¹⁰²

Similarly, bullying has been shown to have negative impacts on children's mental health and cognitive function. Studies from Finland found that victimisation in the 8th Grade led to negative views of peers in the short term; in the long term, there was increased likelihood of depression and a negative view of others in young adulthood.¹⁰³

Mental illness and psychological problems carry economic costs that are difficult to quantify. The literature on the psychological consequences of violence stops short of assessing impacts on economic functioning, future earnings or human capital. However, some estimates have been made of the burden of mental illness on public services. For example, it was estimated that in 2002/03 mental illness cost the UK £77 billion, which was the sum of £23.1 billion in output losses, £12.5 billion in health and social care and £41.8 billion in human costs.¹⁰⁴ Mental illness clearly incurs huge costs. However, to the extent that this study has been able to ascertain, data specifically on the extent of mental illness caused by school violence are not available.

The exact relation between victims and perpetrators of school violence and domestic violence has not been quantified. However, as noted above, the psychological impacts of school violence can trigger a greater propensity to perpetrate domestic violence, particularly among boys. As such, they may also be responsible for an important indirect economic cost. Recent studies in developed countries estimate important economic costs of domestic violence for victims and institutions. For example, in Australia the cost of domestic violence in 2002/03 was AU\$8.078 billion.¹⁰⁵ In the UK it was estimated to be £23 billion (including costs to the state, employers and victims).¹⁰⁶ These estimates highlight the enormous direct and indirect costs of domestic violence in developed countries, where victims of violence have access to a series of support services. The estimates could be calculated as a result of the wealth of statistical and administrative data.

The direct cost of domestic violence in developing countries, which includes actual expenditures on health and other services used in responding to intimate partner violence and foregone income, is also important. A recent study¹⁰⁷ found that, despite low service use, the direct and indirect costs incurred are considerable, both for women and their families and for local and national governments. In Uganda, average out-of-pocket expenditure on health related to an incident of intimate partner violence comes to UGS11,337, (equivalent to \$5 or 1.5% of gross national income (GNI) per capita), with the highest outlay for seeking police intervention, UGS17,904 (\$10 or 3% of GNI per capita). In Morocco, the costs associated with seeking help from the justice system are the highest (DH2349 or \$274, equivalent to 12% of GNI per capita), followed by health (DH1875 or \$211, equivalent to 9.3% of GNI per capita).¹⁰⁸ The service women use most frequently is health. Providers report average costs of tending one such case at \$1.20 in Uganda, \$5.10 in Bangladesh and \$196 in Morocco. Evidence gathered in these countries therefore points to high violence-related out-of-pocket expenditures, particularly compared with income levels in these countries. It is evident from the average costs recorded by providers that intimate partner violence causes a significant economic loss to victims. In addition to the indirect cost derived from the higher propensity of victims of school violence to become perpetrators of domestic violence, some of the costs incurred, for example in seeking health attention or help from the justice system, could be the same for victims of school violence. This is particularly in the case of sexual abuse although, as explained above, the costs are sometimes not incurred because these incidents are underreported, even when attention is required.

So, although data are insufficient to enable an analysis of the exact number of perpetrators of domestic violence impacted by school violence, the evidence indicates a relationship. This means at least a portion of the economic impact of domestic violence can be linked to school violence.

2.2.4 Effects of school violence on social capital

Society-wide social costs are also incurred as a result of school violence. Societal violence has been shown to be related to lower levels of community trust, and social capital has proven to be an important indicator of violence within communities.¹⁰⁹ Evidence exists to suggest that violence is more prevalent among adolescents who lack social capital to help normalise their relationships with others. Friends and family are an important part of regulating behaviour and providing support functions to allow expression in non-violent ways.¹¹⁰

The erosion of this familial support is intergenerational. Consistent evidence suggests that those exposed to violence are more likely to perpetrate violence against their children¹¹¹ and that children who experience violence at home or anywhere else are more likely to become perpetrators of violence in schools and among their peers.¹¹²

The effects of youth violence present long-term costs for society. Children who have been victims of abuse, including in school, are more likely to become a greater drain on public resources, with greater incidence of drug and alcohol abuse and mental illness and lower socioeconomic status.¹¹³ Longitudinal studies following students suggest that those who display 'conduct disorders' during

schooling years are more likely to have poorer mental health, worse family life and poorer social and economic outcomes over a 40-year period.¹¹⁴

Importantly, a form of societal and community indirect economic impact relates to loss of security. Given that children who have been victims of violence are more likely to become perpetrators of violence,¹¹⁵ persistent violent acts in schools can affect surrounding communities, being part and parcel of community levels of violence or insecurity. For example, one analysis¹¹⁶ shows a link between overall level of victimisation, particularly on youth in Chile, and level of school violence. Study results suggest that in-school violence could represent an important amount of total victimisation for young people between 15 and 18 years old. In this sense, important evidence in certain countries documents the cost of youth violence. Although comprehensive data do not exist to trace the number of youth offenders to the occurrence of school violence, some studies provide some evidence of this link,¹¹⁷ which would mean that a share of the costs of youth-related violence is indirectly related to school violence. And the cost of youth violence is significant in some countries. For example, in the US, the cost of youth violence is estimated to exceed \$158 billion.¹¹⁸

In addition, those who have experienced violence or abuse as a child are 2.7 times more likely to be arrested for violent or criminal behaviour as an adult, and 11 times more likely to be arrested as a juvenile.¹¹⁹ Retroactive studies have also shown that two-thirds of those receiving treatment for drug addiction were abused as children¹²⁰ and one-third of those abused as children were likely to abuse their own children in later life.¹²¹ All these are impacts that, in addition to causing terrible consequences for individuals' well-being, incur important economic costs.

Further economic impacts can affect the community and its surroundings. Areas around schools where violence is common may be affected through greater lack of investment, as business stays away from problem areas, house prices may be relatively depressed and micro-economies may suffer.¹²² These effects are largely relevant to violence perpetrated through individual conduct disorders, such as bullying and sexual abuse. Institutionalised violence such as corporal punishment may have lesser impacts on the wider community, although it is possible that the trust in school and teachers by children is eroded, so that schools are no longer 'safe havens' for students. However, the literature assessing the impact of corporal punishment focuses largely on individual consequences rather than impacts on the community, making it difficult to assess possible impacts.¹²³

Table 2: Some economic impacts according to different consequences of school violence

Area of impact	Consequences	Implications on economic impact
Educational attendance, attainment and performance	School dropout, absenteeism (truancy), poor school performance.	Lower accumulation of human capital (either from lower learning performance or lower level of schooling) with negative impacts on potential earnings; wasted education public spending (invested in children who then leave school or fail to learn); poorer health outcomes linked to lower education: this has an economic impact on quality of life and/or burden of health. Lower lifetime earnings resulting from poor educational attainment can also have an impact on the potential income tax revenue collected by the government.
Physical health	Dizziness, stomach aches and headaches; injury resulting from beating or sexual abuse (can be minor or severe); STI, pregnancy.	Cost of health treatment; pre/postnatal care; cost to health care systems.
Psychological/emotional well-being	Depression, anxiety, increased risk of antisocial behaviour; replication of patterns of violence; suicide.	Counselling or psychological attention; medicines; impacts on others of violent or antisocial behaviours (indirect link to costs of domestic, youth and other forms of

Area of impact	Consequences	Implications on economic impact
		violence); decreased productivity resulting from poor emotional well-being; cost of treatment of substance abuse.
Social capital	Erosion of trust in school; deteriorating relationships with others/violence; increased likelihood of antisocial behaviour.	Costs of prosecuting and administering criminal punishment to youth delinquents (directly and indirectly linked to school violence); costs of combating youth, domestic, against children and other forms of violence; loss of value of property in areas around schools.
Overall economy	Increased demand for services, lower productivity.	Different demand for services across the sectors (health, judicial, human rights, etc) posing an increasing burden; poorer health and educational outcomes leading to lower productivity, impacting on economic growth potential.

In summary, the impacts of school violence are relatively well researched in qualitative terms and have obvious cost implications, and as such it is clearly vital to tackle them. Poor data and methodological difficulties should not prevent this. Instead, greater action should be taken to generate data and produce evidence to better be able to leverage support for the prevention and reduction of school violence. Given the significant costs that have been calculated for similar forms of violence, as well as some basic costs related to school violence where data have enabled calculation, it can safely be assumed that the economic impact of school violence is substantial.

3. Prevention: good practice interventions and their costs

Prevention of school violence is a critical policy and programming measure that can contribute to the fulfilment of children's rights by guaranteeing them a safe school environment where they can learn to the best of their ability. Preventive measures are necessary in both the developed and developing world. Prevention has an additional equity dimension, given that children who are poor are more than proportionally affected by school violence in several ways:

1. Children from poorer families or living in more deprived communities are more vulnerable to abuse and violence in general, including in school. Some of the economic triggers are: greater levels of social exclusion; inequitable educational and job opportunities; jobless youths; insufficient educational expenditure; low teacher salaries; underequipped and overcrowded classrooms; shortage of school counsellors; and lack of means of transport to school increasing risks on the way to and back from school.¹²⁴
2. Economic impacts of school violence on the individual include direct impacts such as medical expenses or foregone earnings and indirect impacts through lower potential earnings in the future. These represent a greater loss to children and families living in poverty, who tend to have fewer coping mechanisms.
3. Evidence suggests that poverty is a dimension of discrimination that can be targeted by bullies.¹²⁵

This means that, from a rights and equity perspective, investing in prevention of school violence is critical to guaranteeing the right to education for all children. Further, given the range of consequences and costs that can be linked, directly or indirectly, to school violence, an additional important issue for analysis lies in the gains from investing in preventive measures that would reduce the occurrence of school violence and thus also the economic impact of this phenomenon. This would also entail analysing whether the costs of these interventions are lower than the costs to individuals, communities, schools and the public sector of allowing violence to continue. Interestingly, successful preventive measures implemented in different contexts tend to be relatively low in cost, since they focus on community and school behavioural change using existing resources rather than requiring heavy investment in physical infrastructure, equipment or additional teachers. Prevention costs can be shared between the school, the community, families, local and national governments and NGOs. Particularly in poorer and developing countries, where communities and schools might be under-resourced, the need for state-supported and -funded preventive mechanisms is greatly needed. Further, the role of the state in developing and enforcing legal frameworks to promote prevention and prosecute cases of severe school violence is critical.

Although cost-effective analysis of prevention measures still needs to be developed, the boxes below provide examples of cost-effectiveness analysis of prevention of other forms of violence (youth violence and child abuse at home), which illustrates that prevention is cost effective.

Box 3: Cost effectiveness of youth violence prevention interventions

The Washington State Institute for Public Policy¹²⁶ calculated the cost-effectiveness of the following four youth crime prevention and intervention strategies in Washington state, in the US: 1) early childhood intervention (peri-natal home visitation combined with 4 four years of enriched day care programmes) for high-risk families; 2) parent training for families with children who have shown aggressive behaviour ('acted out') in school; 3) improved public school programmes that target all youth; and 4) early interventions for very young delinquents. Looking at the benefits to the criminal justice system alone (that is, benefits to the taxpayer), many early interventions and selected strategies come close to paying for themselves with the money they save; others actually achieve benefits greater than programme costs.

Age ¹²⁷	Programme	Estimated cost per participant (\$)	Benefits per dollar cost (\$)	
			Benefits to the tax payer (criminal justice system benefits)	Benefits to the taxpayer and victims
Early childhood	Perry preschool programme	13,938	0.7	1.5
	Syracuse family development research programme	45,092	0.2	0.3
	Prenatal and infancy home visitations by nurses	7403	0.8	1.5
Middle school	Seattle Social Development Project	3017	0.9	1.8
Adolescent: no-juvenile offender	Quantum Opportunities Programme	18,292	0.1	0.1
	Big Brothers Big Sisters of America	1009	1.3	2.1

The Seattle Social Development Project, for instance, saves \$0.90 from reduced rates of crime for every tax dollar spent. Programmes targeting at-risk or delinquent youths can be even more cost effective. The largest economic returns are achieved with interventions targeted at juvenile offenders, who are at greatest risk of future offending. However, even programmes aimed at non-offenders can achieve significant cost benefits when future savings to potential crime victims (owing to a reduction in the number of victims) and the taxpayer are combined. In general, these analyses underestimate the benefits of prevention programmes because they fail to consider many of the indirect benefits in preventing serious or violent offenses, such as increased work productivity, increased taxes realised, reduced welfare assistance costs and reduced victim medical costs.

Box 4: Cost effectiveness of a preventive measure against child abuse at home¹²⁸

The Nurse-Family Partnership (NFP) is an evidence-based, nurse home visiting programme in the US that improves the health, well-being and self-sufficiency of low-income, first-time parents and their children (it has been shown that a greater proportion of child abuse cases take place in low-income households). Women voluntarily enrol as early in their pregnancy as possible, with nurse home visits beginning ideally by the 16th week of pregnancy and continuing through the first two years of the child's life. NFP is the most rigorously tested programme of its kind. Through randomised controlled trials, the programme was found to improve prenatal health, result in fewer subsequent pregnancies, increase intervals between births, decrease childhood injuries, increase maternal employment and improve school readiness. A key result for children served was a 48% lower level of abuse and neglect than among children in the control group. NFP more than pays for itself, given its many positive effects. The RAND Corporation estimated that the return for each dollar invested in NFP was \$5.70 for the higher-risk population served and \$2.88 for the entire population served (in 2003 dollars). Because this estimate does not include the cost saving attributable to reductions in subsequent pregnancies or preterm births, the actual cost savings are likely to be larger, given the significant expenses associated with these outcomes.

According to evaluations and assessments of school violence preventive measures, these offer greater potential for reducing school violence through a combined approach, including engagement with schools through better systems of support to students, greater communication and a focus on teaching values.¹²⁹ This entails investing in teacher training and in the facilitation of enhanced communication mechanisms among students. Preventive measures would also need to include greater legal protection for students, greater enforcement of existing legislation against child abuse, which in some countries includes violence in schools, systems to find instances of wrongdoing and further training for teachers to change values and perceptions of their behaviour

and responsibilities as educators.¹³⁰ Some of these measures are the responsibility of national and local governments, which would need to fund and support monitoring and enforcement structures for such behaviour. This can be a challenge for poorer countries, which at the moment struggle to finance functional local-level structures to report and provide support to victims of child and domestic abuse, not only in schools but also in the community at large. Despite the greater short- and medium-term costs in allowing school violence to continue rather than introducing preventive programmes, it is precisely because these costs do not accrue directly to local or national governments but are absorbed indirectly as lack of returns to investments, and because costs (direct and indirect) are rather incurred by individuals, families, schools and communities, that it is a challenge to refocus state and donor attention on the cost effectiveness of such interventions. However, the costs of not acting to reduce school violence, as discussed, are significant and, in the long term, accrue to the economy as a whole.

Prevention does not lie just with the state but also involves families, schools, teachers and communities in addressing violent and abusive behaviour. Families, teachers and other school staff need to be supported to understand more positive ways of managing children's behaviour. This often requires training for teachers and support for parents.¹³¹ Community involvement also serves an important collaborative function in working with at-risk children and schools. Evidence suggests that victimisation and aggression diminish when children feel supported by their family and by teachers, and when local stakeholders such as residents' associations, the police and social services work together to protect children.¹³²

Nevertheless, available research suggests that the most effective local strategies for tackling corporal punishment, sexual violence and bullying are those that concentrate on the school itself, for example changing classroom techniques and establishing clear rules regarding behaviour in school. School-wide interventions that aim to lower the violence rate are the most effective, since they not only reduce violent or aggressive behaviour but also can reduce truancy, improve academic achievement and enhance social skills and well-being.¹³³ While different prevention needs require use of different interventions, those shown to be universally successful: are instituted early; are developmentally appropriate, comprehensive and long term; develop student social competence; improve the school climate through good organisation and increased student, staff and parent attachment and participation; take into account the impact of violence and victimisation by violence; integrate violence-related issues into teacher training; and have a comprehensive evaluation programme.¹³⁴ These interventions need not be costly but do require resources to pay for training, support materials, occasional organisation of workshops and monitoring of the progress of students and those more at risk. As such, inadequate funding of initiatives to reduce violence in schools can challenge their sustainability and reach. This means that alternative forms of support to local education authorities, schools (particularly those at risk) and community-based initiatives to promote violence reduction need to be accompanied by financial commitment of local authorities and, in some cases, donors. This would be a way to share the costs of prevention among several stakeholders.

Globally, there is very little attention paid to the quality of laws to tackle violence in school or their enforcement,¹³⁵ although there has been some progress in legislation against school violence, which is an important starting point for prevention. Evidence indicates also that countries and states that have legislation against school violence tend to have lower prevalence. One such example is corporal punishment in the US. A majority of the states have enacted legislation outlawing the use of corporal punishment in public schools but it is still legal in 21. In Texas alone, data show that 49,197 students were subjected to corporal punishment during the 2006-2007 school year, more than in any other state.¹³⁶ However, corporal punishment has been registered to take place only in states where legislation does not prohibit it, which suggests that, where there are adequate mechanisms to implement legislation, it is effective.

While many countries still allow some forms of school violence in their legislation, particularly in the case of corporal punishment – examples of such countries include France, Indonesia and Côte

D'Ivoire, among many more¹³⁷ – 106 national governments as well as some state and local governments have banned corporal punishment in schools. These include, for example, Finland, Costa Rica and Mali. Anti-bullying legislation has been introduced in some countries. For example, in Kenya it is possible to take administrative action against bullying in schools; Korea, Norway, Sri Lanka, the US and the UK have specific legislation to protect children against bullying;¹³⁸ and some Brazilian states, such as Minas Gerais and São Paulo, have recently promoted anti-bullying legislation. Similarly, some countries have developed clear policy frameworks to define, prohibit and/or penalise acts of gender-based violence in schools. In 2004, The Gambia developed a policy to punish adults who sexually harass students in schools¹³⁹ and South Africa's Department of Education has issued guidelines aimed at reducing the sexual abuse of students by teachers.¹⁴⁰ However, equally necessary are measures to enforce such legislation and the allocation of budgetary resources to support its effective rollout. For example, the budget of Western Cape province in South Africa includes a line on 'implementation of social welfare legislation',¹⁴¹ necessary to ensure earmarked resources are available to carry out activities to roll out legislation to prevent child abuse and promote child protection and, in particular, to eliminate violence in schools. There is little evidence – including looking at budget documents themselves – indicating that national and local government budgets are systematically earmarking resources to tackle school violence.

Some good practice examples of preventive measures are as follows.

There are many good practice examples of cost-effective preventive interventions against different forms of school violence. There have been systematic reviews carried out to analyse the impact of many measures, showing that they are effective means to reduce school violence.^{142/143} Below, a few examples illustrate that the cost of such interventions is relatively low.

Preventive measures against bullying: Evidence has shown that victims of bullying often lack support from schools, families and friends.¹⁴⁴ Measures that have been found to be successful in combating bullying in schools have directly addressed this issue by: introducing better teacher training methods to support children with behavioural difficulties and to monitor their progress; instituting values to be taught in schools; and rewarding student success. Although this is hard to implement in contexts where teachers are already overstretched in their capacities, and although there are resource constraints to adding teachers or school counsellors to provide support, greater communication between schools, communities and families is used as a mechanism for tackling problems inside and outside schools. This can include setting up conflict mediation systems in the event of violence to reduce the risk of reoccurrence.¹⁴⁵ Innovative mechanisms need to be disseminated and taught to local education and school authorities, so their initial rollout would require an investment. Costs would be reduced over time if these interventions became institutionalised in capacity building for teachers. Community participation seems a critical element for sustainability.

For example, Colombia's *Proyecto Hermes*, which began implementation in 2001, is targeted at adolescents between 12 and 17 years who face situations of violence and conflict in schools (mainly bullying). It is based on providing pedagogical tools to teachers and other school officials to improve their ability to transform conflict through dialogue and consensus building by promoting respect between students, teachers, families and other members of the community. Similarly, the programme has created 'conflict management roundtables' in which trained volunteers (usually students) promote dialogue and create a space for peaceful solution of conflicts. According to an assessment in 2008, the programme has trained 20,286 mediators, who have impacted on approximately 220,000 people. Of users, 74% graded the programme's performance as between good and excellent; 93% of students who had been part of it reported having found a peaceful and effective solution to conflict; and 84% of students reported that they would use the programme to reduce conflict. The success of the project is linked to the large participation of volunteers in schools, who are trained and supported through programme consultants and facilitators. In 2007, the programme's cost amounted to approximately \$272,000, out of which 85% was for technical

and professional staff who introduce the model and provide training. The cost per school was \$1400 and the capacity building of mediators (volunteers) was \$13 per person per year, equivalent to only \$1.20 per year for each person benefited by the programme. Thus, the cost of the programme per person is quite low, owing to important economies of scale. The programme has been financed with joint funds from Bogotá's Chamber of Commerce and from the Inter-American Development Bank (IADB). The evaluation suggests that the programme is highly cost effective and easy to replicate given the adaptable yet systematised model that it has developed.¹⁴⁶

Preventive measures against sexual violence: Many preventive measures against sexual violence have found legislative change and legal punishment of perpetrators difficult to enforce.¹⁴⁷ While this needs to be pursued and legal action needs to be taken against offenders, it is hard to do so in contexts with weak judicial systems. As such, improving these systems in general (not only for the sake of school violence) is likely to require time and substantial investments, which are in process in many developing countries. However, some measures have also been found to be successful. The US Agency for International Development (USAID) and the UNICEF have been supporting training programmes with teachers and students to institute systems of control against sexual violence, as well as providing counselling support services to victims of sexual violence. These have had success in preventing peer-to-peer sexual violence against girls.¹⁴⁸ Other measures that have been successful include: increasing female teacher representation in schools, with teachers who have been trained in creating enabling learning environments for girls; encouraging cultural change towards their protection, such as by gaining the support of traditional authorities, which can then contribute towards changing community attitudes; and sensitising girls on their rights and teaching them ways to deal with traditional cultural norms that might not be aligned with their rights.¹⁴⁹ These alternatives are lower cost and have the advantage of being able to be implemented more rapidly.

The challenges and costs related to prevention of sexual violence are great because they require long-term work to change individual and community attitudes that have become tolerant of various forms of violence. Teachers often work in contexts where abuse – including sexual abuse – of children is tolerated, or where they fail to realise their critical role as teachers who should inspire trust rather than fear. In these cases, the approach to prevention needs to be more comprehensive. It is not enough to provide sensitisation and closer monitoring of teachers; significant sanctions for their behaviour should be imposed. Additionally, a context of broader gender inequality and violence increases the risk of girls being abused by classmates.

A successful example of communities having been involved in addressing school-related gender-based violence (SRGBV) includes using community members as classroom assistants and establishing community education committees. One report¹⁵⁰ highlights the positive impact of programmes that have trained female community members as classroom assistants to help protect students from abuse and to create a school environment conducive to learning. The introduction of a female presence in the classroom balances the primarily male teaching force, which has been found in some contexts to make girls vulnerable, as explained earlier. The female assistants become witnesses to any misconduct from teachers and other students. Meanwhile, the International Rescue Committee (IRC) initiated a classroom assistants' programme at refugee schools in Guinea and Sierra Leone. Evaluations of these programmes have indicated positive changes in teachers' behaviours, and girls reported that they felt that the classrooms were more welcoming and supportive of learning.¹⁵¹ Such an intervention is mostly reliant on volunteers, therefore its cost is relatively low, as it involves training female community volunteers and in some cases providing them with a very small stipend (although it is important to systematise training and payments of stipends to ensure such actions are continued). This contrasts with the high number of costs related to sexual and gender-based violence in schools.

Preventive measures against corporal punishment: Although 108 countries have laws that prohibit corporal punishment in school, laws in 89 countries still allow it.¹⁵² The Committee on the Rights of the Child has consistently stated that persisting legal and social acceptance of corporal

punishment is incompatible with the UNCRC. The UNCRC requires states to protect children from 'all forms of physical and mental violence' while in the care of parents and others (Article 19). As such, the Committee has recommended that states in all continents should implement legal reforms to prohibit all corporal punishment and public education campaigns to promote positive, non-violent forms of discipline, including within the family, schools and other institutions and penal systems. In particular, the Committee has condemned legal concepts which attempt to define 'acceptable' violence to children – 'reasonable chastisement', 'lawful correction' and so on. Despite these laws,¹⁵³ corporal punishment continues to take place in several countries. Key to the effective use of legislation against corporal punishment is effective enforcement.

Analyses of reductions in corporal punishment in schools show that prohibition of the practice implemented jointly with dissemination on the negative consequences for children has been effective, including in Norway, Sweden and some states in the US, among others.¹⁵⁴ For this purpose, pursuing the ban on corporal punishment in schools is a key means of prevention. Once it is achieved, systems need to be put in place to allow the effective reporting of incidents of corporal punishment and the appropriate investigation and legal proceedings for enforcement. As evidence from the implementation of the Child Justice Bill in South Africa indicates,¹⁵⁵ the rollout of legislation to protect children requires resources. Support for this can be strengthened by undertaking cost-benefit analysis to provide evidence of the effectiveness of its impact. In the case of legislation on corporal punishment, this requires investment in well-functioning local institutions, including local education authorities, which can be more effective in monitoring schools and sanctioning incidents of corporal punishment. Further to this, awareness needs to be raised among communities and families, many of which condone corporal punishment and therefore do not report it or put pressure on teachers to end it. These types of initiatives to promote behavioural change can be relatively low cost if they rely on schools, community-based organisations (CBOs) and local authorities, although initial investments in training and preparation of materials need to be put in place. In addition, teachers need to be trained in alternative disciplinary methods, such as positive discipline techniques, to allow them to maintain control of classrooms without resorting to violent punitive measures.¹⁵⁶ Several NGOs, such as Plan International and Save the Children, as well as UNICEF, promote such interventions in developing countries. Their larger-scale rollout would require the involvement of education authorities to ensure that these methods are included in institutional training curricula for teachers,

4. Analysis of school violence costs in case study countries

4.1 Aim of the case studies

In order to have a clearer sense of the impact of school violence in specific countries, this research draws on five country case studies, with each country chosen from one of the regions where Plan International works: Asia/India, East Africa/Ethiopia, West Africa/Sierra Leone, Latin America/Brazil and OECD countries/US. The choice of countries responded to a preliminary review of the literature that suggested relevant information and/or research on school violence were available for these countries, particularly as in all of them (except the US) Plan has launched its Learn Without Fear campaign, which focuses on school violence and is based on country-based research of the problem.

In order to have a clearer research focus, each of the five case studies concentrates on a specific form of violence. There is evidence that the three forms of school violence – corporal punishment, sexual abuse and bullying – take place in all countries, so the selection responded to three criteria: 1) there is significantly more data and research on the specific form of school violence selected for each country; 2) existing data and research indicate that this form of violence is the more prevalent and/or the one causing greater impact on children’s well-being in the country; and 3) Plan’s Learn Without Fear campaign focuses on those topic areas per country, reflecting an assessment of the greater relevance of looking at that area to contribute to research and advocacy efforts.

Accordingly, the choice of focus areas was as follows:

- Brazil: Bullying
- Ethiopia: Sexual violence/sexual abuse
- India: Corporal punishment
- Sierra Leone: Sexual violence/sexual abuse
- United States: Bullying

This section, therefore, looks at the extent of school violence in each country, based on existing data and the level of research on school violence. It provides a brief overview of local legislation with regard to school violence and, where relevant, points out some customary norms that perpetuate or regulate school violence. It also identifies some good practice initiatives for tackling school violence in each country, including some information about the costs of these preventive initiatives, where available, to highlight the relatively low cost of these initiatives, particularly in contrast with the significant economic impact of school violence .

In addition to this, for Brazil, India and the United States, where data was available, we estimate one dimension of the economic impact of school violence: the cost of early school leaving that can result from the problem, following evidence presented in section 2 about school drop out being one of the consequences of school violence. Given the challenges to utilising existing methodologies to estimate costs of violence, we have opted for an alternative approach to provide a proxy of these costs in relation to the loss incurred through lower levels of education completed. We draw on a methodology that has been used with variations¹⁵⁷ to measure the foregone benefits to society resulting from early secondary school leaving (including through lower potential earnings and contribution to growth; lower contributions to tax revenue; and the higher likelihood that leavers will need to use the social safety net relative to those who stay in school).. Although the precise rate of school drop outs resulting from the different forms of school violence is unknown and it would vary between countries and the type of violence, considering what we know from different countries, a conservative estimate would put this figure between 1% and 5% of all early school leavers, depending on the context (see Section 2.2.1).

A detailed methodology of how the foregone social benefits from early school leaving were calculated, including the assumptions used, can be found in Appendix 5. It is relevant to note that according to this methodology, the ESL varies in each country depending on the level of GDP (higher GDP is an indicator of higher potential earnings, thus higher losses with drop outs), the share of students who drop out of secondary school (the higher the rate of early school leavers, the costlier it is on the economy); the transition rate to college or university and the expected economic gains from tertiary education. There is a constant social rate of return, which incorporates values such as tax revenues, impact on economic growth, and the use of social safety nets and others.

Thus, by estimating the total forgone benefits to society¹⁵⁸ from early secondary school leaving, and then calculating what 1% to 5% of this is equal to, we have a useful approximation of the range of magnitude of the economic impact of school violence that causes early school dropouts. Although several assumptions are used to arrive at this estimate it is a plausible estimate given what we know about the consequences of school violence and the effects of early school leaving; thus even if the assumptions were to be slightly modified, these estimates remain significant. It is important to underscore that the estimates using this methodology are an underestimate of the total economic impact of school violence because it does not capture financial costs, including for the individual, schools and families. It also does not include other education-related costs, such as lower earnings resulting from lower educational performance (even when school was completed), or medical costs or indirect costs over the lifetime caused by psychological-, emotional- or social capital-related consequences of school violence, as explained in section 2. However, it does give a sense of how much school violence is costing, at a minimum, and contrasts importantly with the lower costs of prevention interventions.

4.2 Brazil

4.2.1 Context

Youth violence in Brazil is a widespread problem, and Brazilian schools are not immune to this form of violence. According to a study on Latin American youth,¹⁵⁹ in Brazil 84% of students in 143 schools from six state capitals consider their school violent, and 70% reported being victims of violence in school. Many schools in Brazil have become dangerous places that harbour robberies, homicides, sexual abuse, threats and property damage, as well as other more brutal forms of violence.¹⁶⁰ These situations occur within the schools as well as in the areas that surround them. The issue of school violence has therefore gained central attention from authorities, citizens and civil society.¹⁶¹

The costs of violence in Brazil are enormous. A study on violence in Brazil¹⁶² estimated the direct costs of crime for Brazilian cities and states as ranging from 3% to 5% of GDP per year. The report highlights, however, that this is likely to be a small fraction of the total costs: potentially more important is the impact of crime on economic growth. As a proxy of this, if the homicide rate in Brazil had been 10% lower between 1991 and 1995, per capita income could have been 0.2% to 0.8% higher over the following five years.¹⁶³ Nationwide, using the 1996 population, this would be equivalent to \$2.2 billion (close to 0.15% of current GDP, \$1.573 trillion).¹⁶⁴ Violence among youth has risen significantly, with 51% of deaths among the 15-24 age group being caused by homicides and 20% by natural causes in 2002.¹⁶⁵ Similarly, a violence mapping in Brazil concludes that, in 2007, 36.6% of homicides were perpetrated by young people, despite their representing only 18.6% of the Brazilian population.¹⁶⁶ The most important risk factors for youth violence in Brazil have been identified as substance abuse, having committed 'general' offences, having antisocial parents, being male, low family socioeconomic status, poor school performance or attitude and aggressive behaviour. These factors combined raise the likelihood of delinquency by 21% to 35%.¹⁶⁷

Looking at these risk factors, and as explained in Section 2, school violence can be linked to increased future violence through the greater likelihood of committing general offences, of performing poorly and of expressing aggressive behaviour.

The most prevalent form of school violence in Brazil has been identified as bullying.¹⁶⁸ As a result, and based on a prior general survey on violence in schools carried out in 2001, a follow-up study on bullying in five regions in the country was commissioned by Plan Brazil to provide evidence to rally support for the prevention and control of this problem, with results published in March 2010.¹⁶⁹ In recent years, a greater share of education resources has been spent on managing situations linked to school violence, which illustrates a greater need for authorities to invest in actions to mitigate the impact of school violence.¹⁷⁰

4.2.2 Legislative framework

Brazil ratified the UNCRC in 1990, the same year that the Statute of the Child and the Adolescent came into force. Since 1988, the Brazilian Constitution has affirmed the duty of families, society and the state to guarantee and grant priority to the respect of the rights of children and adolescents and to protect them against all forms of violence, abuse or exploitation (Article 127).¹⁷¹ Nevertheless, this constitutional right is still not reflected in national legislation.

Still, progress is being made to approve legislation to ban the different forms of violence in schools. Bullying is not banned at the national level but, since 2005, a number of state and municipal governments, recognising the severity of the problem, have started to promote local legislation against it. Recently, the Governor of Santa Catarina state approved State Law 14.651/09 to institutionalise an interdisciplinary programme to eliminate bullying, which calls for the participation of the community and public and private schools. In other states, such as São Paulo e Rio de Janeiro, similar initiatives are being analysed by the legislative branch.¹⁷² At the city level, the Municipality of Porto Alegre unanimously approved an initiative to 'stimulate specific legislation that commits municipal authorities to the development of a policy to prevent bullying and to open a possibility to discuss this issue to generate real possibilities to prevent violence and intolerance in schools.'¹⁷³ An important next step will be to ensure that state and municipal governments that approve such legislation include resources to implement it in their budgets.

Corporal punishment in schools is not currently banned by law. A bill that would have prohibited corporal punishment in all settings was dropped in 2008. A major new campaign was launched in December 2009 to promote its approval, and the government confirmed commitment through the Human Rights Ministry in 2009.¹⁷⁴

With regard to sexual violence in schools, the Criminal Law Code devotes Chapter II, Title VI (Crimes against the Common Good) to the crimes of seduction and corruption of minors, including in schools.¹⁷⁵

4.2.3 Research and data

The 2001 National Survey on Violence, AIDS and Drugs in Schools, supported by the UN Educational, Scientific and Cultural Organization (UNESCO) in 14 provinces, was based on the perceptions of the students, parents, teachers, principals and employees of public and private schools.¹⁷⁶ The study was able to construct a map of the numerous types of violence registered in schools. The study points to some situations that may trigger violence, which include: disciplinary acts; aggressive acts between students and teachers; graffiti; damage to the school; lack of human or material resources as well as low salaries for teachers and employees; and lack of dialogue between the people who make up the school. An additional important factor identified is the lack of interaction between the family and the community. The study concludes that, despite their primary purpose, schools have become challenging locations for teaching, largely because of violence in school settings, which aggravates student absences and leads to a deterioration in the quality of

classes.

According to the recent bullying study by Plan Brazil, bullying emerges in an already violent school environment, considering that 70% of the total sample (5168 students in five regions of the country) reported having witnessed scenes of violence between school mates in the 2009 school year, and 30% declared having been victims to at least one form of bullying in the same period. In addition, 10% of students interviewed said that they had experienced bullying three or more times. The majority of students reported not having been victims of bullying (the percentage responding they had not been victims of bullying varied in each response, showing some inconsistency among respondents, ranging from 42.8% to 69%). For those who have experienced it, episodes are usually limited to verbal aggression, but other forms of mistreatment were also found.

Table 3: Most frequent types of bullying, Brazil¹⁷⁷

Type of mistreatment	% of students affected
I was not mistreated at school in 2009	42.8
They insulted me	9.8
They called me offensive names	5.7
I was threatened	4.8
They hit me or kicked me	3.8

According to the study, the most common consequences of bullying were the following:

Table 4: Consequences of bullying on victims, Brazil¹⁷⁸

Consequences	Number of students	%
I was not mistreated	3721	69
I lost interest/enthusiasm	459	8.5
I lost concentration	430	8.0
I come to school with fear	248	4.6
I lost trust in my teachers	156	2.9
I lost my friends	150	2.8
I stopped learning	79	1.5
I failed my courses	62	1.1
I changed school	58	1.1
I missed classes	33	0.6
Total	5396	100

As discussed in Section 2, these incidents may have drastic consequences for students, resulting in the need to repeat grades or to miss classes, both of which compromise the efficiency of the school system, generating wasted education investment and lower educational attainment for the student. It is important to highlight that, because this is a school-based survey, children interviewed are all in school – so there is no information about those who dropped out of school as a result of bullying. Dropout is therefore not reported in the survey as a consequence of bullying.

4.2.4 Estimation of economic impact

We discuss in this subsection two specific dimensions of economic impacts in Brazil.

1. The first relates to the significant economic impact of youth violence in Brazil. Although there has been no analysis to quantify the link between school violence, primarily bullying, and youth violence in Brazil, both the international literature outlined in Section 2 and studies specific to Brazil¹⁷⁹ highlight the fact that there is a link: perpetrators and victims of violence in school are more likely to become engaged in youth violence. Thus, in addition to posing a significant risk to students, a share (even if small) of the significant economic impact of youth violence can be attributed to school violence. Research to determine the extent of this link would be a key element to better understand the economic impact of school violence.

In the absence of such detailed information, we can make a lower-bound estimate of the economic impact of school violence with respect to its link with overall violence based on the information available on the costs of violence in Brazil, the share of youth violence in total violence (approximately 30%), as presented in Section 4.2.1:

Nominal GDP Brazil (2008) = \$1.573 trillion
 Cost of violence: 4% of GDP (mean of 3% to 5%) = \$62.92 billion
 Cost of youth violence: 30% of total costs = \$18.87 billion

Although we do not know how many victims or perpetrators of school violence in Brazil end up as youth delinquents, analysis on youth violence, for example, by the Centre for Disease Control and Prevention in the United States¹⁸⁰, the World Health Organisation¹⁸¹ and the World Bank¹⁸², highlight that there is in fact an important link. To make a conservative estimate, if we assume a lower-bound of 5% of cases of youth violence that are caused by victims of school violence or that originate from cases of violence in schools, then we can estimate:

Cost of violence to the Brazilian economy that can be linked to school violence: **\$943 million per year**, which is significant.

2. The economic impact of school violence can also be measured by estimating forgone benefits to society from early secondary school leaving caused by school violence.

Cunningham et al. (2008) estimate the foregone social benefits of early school leaving in Brazil, as a result of **all possible causes**, to be equivalent to 14.4% of annual GDP.

Given the prevalence of school violence in Brazil, particularly bullying, where 33.3% of students interviewed report being bullied or mistreated, and 6.6% of students report having faced this form of violence for several weeks¹⁸³ we can make a conservative assumption that between 1% and 5% of total early school leavers do so largely as a result of school violence.

Table 5: Economic impacts of school violence in Brazil resulting from Early School Leaving (ESL)¹⁸⁴

Rate of foregone benefits resulting from ESL as a % of GDP	Nominal GDP (2008) in current US\$	Loss in GDP as a result of ESL (all possible causes) in US\$	Cost of school violence related to ESL estimated to be between 1% and 5% of total foregone benefits from of ESL	
			1% of ESL	5% of ESL
14.4%	1.573 trillion	226.51 billion	2,268,216,000	11,341,080,000

Based on this assumption, between **\$2.26 billion** and **\$11.34 billion** in foregone social benefits are lost to school violence each year.

These two proxy estimates of costs of school violence (through youth violence and through ESL) in Brazil suggest that it is possible that this problem costs at least between \$3.2 billion and \$12.28 billion annually, with costs accruing to the state, to schools, to individuals and to society as a whole. This is equivalent to approximately between 0.2% and 0.7% of GDP, which is significant.

In addition to this economic impact ‘on society’ of school violence, it is worth highlighting that the individual impact of Early Secondary School Leaving on an individual is huge, in terms of life time opportunity costs and foregone income, as explained in section 2. Although data to estimate these individual costs is not generally forthcoming and thus we have been unable to estimate this for the five case study countries, to illustrate these individual costs, we use Cunningham et al’s (2008:49) estimate for Brazil. The aggregate estimate of individual lifetime opportunity costs from not completing secondary school are estimated to be 345.8% of annual GDP, that means \$5.446 trillion. If 1% of these individual costs were related to school violence – again taking a very

conservative estimate – the costs to individuals, per year would be equivalent to \$54.47 billion, close to 3.5% of GDP.

4.2.5 Prevention

There has been a push in Brazil to promote preventive actions to reduce the impact of school violence, from programme work such as teacher training to policy-level work, including the development of local legislation against school violence.¹⁸⁵ Other measures recommended by experts to be effective and of low cost include community- and school-led monitoring of the areas that surround the school and the internal school environment, as well as interaction among the school, families and the community. Emphasis is also placed on the need to establish mechanisms for negotiating rules and norms within the school as well as creating processes that make teachers more sensitive to the different ways that violence is expressed. Linking different governmental areas (education, justice, culture, etc) is also highlighted.¹⁸⁶ These initiatives are not expensive but do require funding and support to be developed and sustained over time.

Box 5: Good practice examples of school bullying prevention in Brazil and their costs¹⁸⁷

The Making Room Programme

A useful good practice example of a prevention intervention in Brazil is the Making Room Programme, conceived in 2000 by officials in UNESCO Brazil as an initiative to develop a global policy for the development of what they defined as 'a culture of peace'.¹⁸⁸ The Making Room Programme provides young people with constructive ways to use their free time and also engage in leisure activities. The programme is intended to contribute towards reducing the high levels of violence seen to occur on weekends. It enables the opening of schools on weekends, thereby utilising learning establishments that have adequate physical space available. Most of the time, workshops are administrated by hired monitors and by volunteers, preferably young people and members of the community. An impact evaluation of the Making Room Programme, which collected the impressions of school head teachers, confirms the positive balance the programme has for the school establishment in reducing the level of violence.¹⁸⁹ Some of the main indices of improvement include: fights in school; student misbehaviour; community involvement with school; relationships among students; vandalism/damage; and personal offenses/humiliations. Although the evaluation did not estimate the economic value of these losses, from the assessment in Section 2 it is clear that the reduction of violence had a positive economic impact.

At the end of this study, based on an analysis of total annual programme expenses in the states of Pernambuco and Rio de Janeiro, it was estimated that the average cost of the programme per participant was \$0.30 per month in Pernambuco and \$0.70 in Rio de Janeiro. According to international standards, these are very low values in terms of preventive programmes. The cost covers the running of the workshops (although some are run by volunteers) and a meal (seen as a way of promoting socialisation); other costs are marginal. This is in contrast with, for example, the cost of repressive or punitive activities (jailing adolescent offenders or imprisoning young criminals), which in Brazil is estimated to cost \$1500 per month.

Making a rough calculation of how much the programme would cost for all primary and lower secondary students in Brazil, assuming a fixed cost per student, at the average between \$0.30 and \$0.70 per student (\$0.50), the total cost would be \$16.144 million, considering a total student population for those levels of 32.288 million.¹⁹⁰ This cost estimate is not precise partly because it is unlikely that all students would be targeted (not all students need it) and that costs would remain the same at large-scale implementation, in which the state and local government would need to intervene, at a larger cost than in community-based efforts. Nevertheless, given the estimates of cost of school violence in Brazil in Section 4.2.3, we can conclude that dealing with its consequences is more costly than preventing it through a low-cost and high-impact programme such as this, which means that prevention is a good investment. However, to obtain stronger evidence, it would be ideal to undertake a cost-benefit analysis of the intervention, in order to understand exactly how effective the programme is in relation to its costs, and whether the investment is worthwhile in terms of the costs it helps reduce. This type of cost-benefit analysis has not yet been done.

The Education for Peace programme

Plan Brazil is implementing a model of school-based bullying prevention entitled Education for Peace as part of its Learn Without Fear campaign. This programme has been shown to be highly effective. For example, in one government school, the initial rate of student involvement in bullying (either as victims or as

perpetrators) was 66%. After two years of intervention (2002-2004), the rate came down to 4%: the programme was successful in reducing bullying in that school. The estimated costs of implementing such a programme in a school with approximately 1000 students, including costs for consulting services, diagnostics, capacity building of teachers, parents and students, graphic materials and implementation, are approximately R200,000 (\$112,500) per year, equivalent to R200 (\$112.5) per student per year.

Of higher cost, this programme, which includes more investment in materials and training, etc, would seem useful for targeted violent schools, as its cost per school and per student is still significantly lower than costs for a school with high incidence of violence with regard to dealing with the problem. A more systematic cost-benefit analysis of interventions is necessary to generate robust evidence on why such interventions are a good investment, given the economic impacts of school violence.

4.3 Ethiopia

4.3.1 Context

There are multiple forms of violence against children in Ethiopia, many of which affect children in schools. Many of these are perpetrated by students, but those perpetrated by teachers, principals or other school authorities pose a major challenge to educating children, not only because of the direct consequences of such abuse, which contributes to class repetitions and dropouts for many students, but because of the erosion in confidence in schools. Snatching of books, ornaments and cash, rape, stabbings, excessive bullying, terrorising and even homicide are among the forms that school violence takes in Ethiopia. Findings of the study 'Violence in Ethiopian Schools: A Study of Some Schools in Addis Ababa',¹⁹¹ which draws on information from three junior secondary schools and five senior secondary schools in the inner areas of Addis Ababa, suggest that most violence takes place in senior secondary schools (91%), and that this type of violence is generally targeted at girls (up to 72%).

Despite a constitutional provision that prohibits the corporal punishment of children in schools, this is still practised. According to responses from children obtained from questionnaires and focus group discussions (in a sample of 1150 students), corporal punishment of children in schools involved forcing them to kneel down (81.3%), hitting the head (77.8%), pinching (74.4%), slapping (72%) and hitting them with a stick (60.8%). These are the most widespread forms of punishment at school.¹⁹² There is also evidence of sexual abuse in schools, affecting mainly girls but also boys. This suggests that approximately 60% of the 761 girls interviewed had experienced some form of sexual abuse (from verbal to physical assault) in school.¹⁹³ Although bullying has not been studied in Ethiopia, evidence from other general studies on school violence indicates that bullying does occur.¹⁹⁴

4.3.2 Legislative framework

Ethiopia ratified the UNCRC in 1991. Following this, it issued Proclamation 10/1992 for the adaptation of the UNCRC into the legal system. As per Article 9(4) of Ethiopia's Constitution, all UNCRC provisions are considered an integral part of the law of the land.¹⁹⁵

The Constitution includes pertinent provisions that deal with violence against children. Article 36 states that every child has the right to be free from corporal punishment and cruel and inhumane treatment in schools and other institutions responsible for their care. The same article stipulates that a child has the right not to be subjected to exploitative practices, or to be required to do work that may be hazardous or harmful to his or her education, health or well-being. In Article 35, which deals with the rights of women, the Constitution provides for the protection of women, including girls, against harmful traditional practices that cause physical and psychological harm.

However, Ethiopia does not have a separate child policy or Code of Law that explicitly deals with the rights of children. Legal provisions related to children in Ethiopia are scattered in federal and regional legislation.

The Criminal Code of the Federal Democratic Republic of Ethiopia 2004 shows important progress in legislation to protect children in several ways. It has an entire chapter criminalising harmful traditional practices that cause deaths or injuries or can lead to poor health. In particular, the Code bans practices that can 'endanger the lives of pregnant women and children' or that cause 'bodily injury to pregnant women and children'. Other relevant provisions in the Criminal Code include: Maltreatment of Minors; Rape; Sexual Outrages on Minors between the Ages of 13 and 18 Years; Sexual Outrages Committed on Infants; Participation of a Juridical Person in Sexual Outrages Committed on Minors. These are all important provisions that prohibit sexual abuse in schools.

In the most recent school administration regulation issued by the Ministry of Education (in 1998), corporal punishment was not included in the list of disciplinary measures allowed, and hence is indirectly prohibited. However, the regulation does not specify the kind of measures that should be taken against a teacher who violates this prohibition. Nevertheless, most regional education bureaus have issued manuals or circulars that prohibit any form of corporal and emotional punishment against children. These documents make it a breach of disciplinary rules for a teacher to engage in any form of physical punishment and psychological abuse.¹⁹⁶ In addition to these legal and administrative norms, in 2001, the Ministry of Education issued the Blue Book, which serves as a guide to educational administration and which has some relevant provisions. Among other things, the book deals with the rights and duties of students and states that students must 'refrain from threatening, harassing, raping, beating and violating the human rights of female students'.¹⁹⁷ This is effectively a norm against bullying, although it is not legally binding.

According to the above, the government has shown clear commitment and determination to establish the appropriate policy and legal foundation to promote the general welfare of children and to protect them against violence. However, evidence shows weak policy implementation pertaining to the implementation of these legal frameworks. For example, corporal and psychological punishments continue to occur in schools¹⁹⁸ and sexual abuse in schools continues to be a significant problem.¹⁹⁹

4.3.3 Research and data

While there are several studies that focus on child violence and abuse and include some analysis of corporal punishment,²⁰⁰ fewer focus specifically on school violence. These latter have focused mostly on gender-based violence. A study of sexual violence among female high school students in northern Ethiopia²⁰¹ surveyed 216 female high school students aged between 12 and 21, with questions focusing on perceptions of sexual violence. Findings suggest that people perceive sexual violence as a major health problem, with respondents suggesting that consequences of school violence can include unwanted pregnancies, abortion, STIs and physical and mental trauma, which can then lead to high dropout rates. Rape is perceived as a major problem by over 70% of female students yet, owing to social stigma, it is generally underreported and sidelined. Although most cases of rape are committed by the victim's boyfriend, the study shows that there is some occurrence of this problem in schools. Focus group discussions reported that sexual violence against female high school students is aggravated by poor support from law-enforcing authorities, insufficient punishment, the difficulty in taking assailants to court (since they are often recognised social figures) and underreporting.

A more comprehensive study was conducted in 2008, with the support of the Ministry of Education and the Ministry of Women's Affairs.²⁰² Its aims were to 'identify and analyze the types, prevalence, major causes and effects of violence against girls in and around schools; assess the availability and effectiveness of policies, rules and regulations; and recommend ways to reduce and eliminate violence against school girls', based on a national study of 41 sample woredas from every regional state in Ethiopia. The study presents data from an Ethiopian national study related to students' perceptions of the effects of violence (generally broken down by type of violence) on girls' school

absenteeism, reduced class participation, inability to complete homework, grade repetition, dropout rates and future life prospects.

Table 6: Teachers', parents' and students' perceptions of the prevalence of the different types of violence and abuse in school²⁰³

Type of violence and abuse	Students (%)	Teachers (%)	Parents (%)
Beating	37	30	51
Snatching property	16	37	23
Verbal insult	48	63	54
Deprivation of liberty	21	38	27
Threat of harm	23	45	34
Humiliation	28	50	42
Name calling	29	48	45
Demanding money	11	24	24
Sexual coercion	11	23	24
Sexual harassment	23	46	33
Abduction	7	17	10

According to the study, truancy is the most significant outcome of school violence. As explained in Section 2.2.1, this can have significant economic impacts, particularly through lower school attainment leading to more limited work opportunities. Verbal abuse or sexual harassment by a teacher increases the likelihood that a girl will skip class, whereas sexual assault on the way to school or in school discourages girls from attending school. There were significant gender disparities in students' perceptions about the links between violence against girls in and around school and absenteeism, with 60% of female respondents (versus only 42% of male respondents) citing violence against school girls as the main cause of absenteeism among girls. Other important impacts include loss in concentration, lower participation and overall worse performance in school.

It is important to note nuances around what is understood by violence and abuse, which has implications for the types of economic impacts that can be linked to it. According to the study, the most common type of violence and abuse experienced by girls in school is verbal abuse and insults by members of the school community, aimed at undermining their self-esteem. Around 32% of students think that girls are beat up by their peers. The survey findings also indicate that the school and the way to and from school are the two most common settings for sexual harassment against school girls. Rape is the worst form of sexual violence committed against them. Its severity stems from the fact that it may leave scars on the body (like bruises, broken bones), psychological trauma and social stigma (e.g. lack of social acceptance), which are a reminder of the horrors of rape, in addition to having important economic repercussions in terms of medical treatment and, on occasions, additional consequences such as pregnancy and transmission of STIs. Female students were asked if they ever encountered rape in school, on the way to and from school and at home; 2.5% admitted that they had actually experienced rape in different settings. Most rape cases occurred in and around schools and school girls within the 10-19 age group were most affected.

Thus, in existing research in Ethiopia it is clear that school violence results in important economic impacts on individuals, who face the consequences of lower educational attainment. As explained in Section 2, this may lead to lower earnings. The burden on social services is not as strong, primarily as a result of underreporting in severe cases, the dearth of services available to victims of severe cases and the larger occurrence of verbal forms of violence.

4.3.4 Estimation of economic impact

The economic impacts of school violence in Ethiopia, particularly given the significant prevalence of sexual abuse in schools, as documented above, are likely to include direct out-of-pocket expenses for health care, including in relation to pre and postnatal care if the form sexual abuse is rape resulting in pregnancy. However, existing data do not enable estimation of these costs,

because we do not know how many of the cases of sexual abuse in Ethiopia are severe and require medical attention, and what type of medical attention is sought.

With the purpose of estimating the economic impacts of school violence in Ethiopia through the 'rate of foregone benefits resulting from ESL as a % of GDP' as in the case of Brazil, an extensive data search was undertaken. However, from the range of variables required to make this calculation, the only data found was:

- The number of students enrolled in secondary education: 2,189,021.00
- The dropout rate: 10.2%
- The number of secondary school dropouts: 222,365.00

However, this information is insufficient to estimate the foregone social benefits resulting from ESL, which would require additional data, as detailed in Appendix 5.

In a context where there are multiple causes for school dropout, and where school violence tends to be underreported because of fear of teachers or abusive students, other types of analysis would be more useful to estimate its economic impact. For example, use of longitudinal data from Young Lives in the next round could help ascertain the loss of well-being among children reported to drop out of school because of school violence. Another way would be to collect more detailed administrative data on the impact of school violence on young girls' health, including by asking questions of adolescent girls in clinics who seek attention for sexual abuse or who express having an unwanted pregnancy, such as where this occurred and who was the perpetrator. Similarly, registering administrative data on out-of-pocket expenditure on such attentions would be useful.

4.3.5 Prevention

One of the main ways in which violence against children in general, and school violence specifically, are being prevented is through public awareness raising and dissemination regarding children's rights and their rights to be protected against violence in particular. The Ministry of Social and Labour Affairs and its regional counterparts the Regional Education Bureaus, the Ministry of Information and the Ministry of Justice are the major government bodies engaged in raising public awareness on child rights issues, including violence against children. A significant number of NGOs are also working to promote children's rights among the public, with some specifically focusing on violence against children.²⁰⁴ Such dissemination is not cost intensive but does require resources for campaigning, printing information for dissemination and organising workshops. As such, resources need to be budgeted for this purpose by local authorities, including through the support of donor or NGO funds.

In addition to dissemination, some specific programmes are being implemented to prevent school violence, particularly SRGBV, which includes sexual violence in schools. These are being implemented mainly by the government, with the support of donors and NGOs. Information on such programmes is limited, and systematic evaluations or cost-benefit analyses are even less accessible, meaning that this report cannot discuss the costs of such interventions in Ethiopia. Nevertheless, information about one such good practice example is provided below, to give a sense of the types of actions that successfully reduce SRGBV in Ethiopian schools, for which costs could then be estimated by local practitioners and policymakers.

Box 6: Safe Schools Programme²⁰⁵

An innovative initiative in Ethiopia to address the problem of SRGBV, is the Safe Schools Programme (SSP), financed by USAID. This aims to create gender-safe environments for all girls and boys, which promote gender-equitable relationships and reduce SRGBV, resulting in improved educational outcomes and reduced negative health outcomes. Five key principles guide the SSP's programming:

1. Take a social mobilisation approach, at multiple levels: national, institutional, community and individual;
2. Address the three areas of the SSP SRGBV activities: prevention, reporting and response;

3. Take a gendered approach, working with men and boys not only as perpetrators but also as potential victims as well as partners;
4. Have at least minimal support services in place before encouraging victims to come forward; and
5. Build on existing programmes.

The programme, which is mainly implemented by the government at national and local levels, working in partnership with some NGOs, has actions at different levels (national, community, institutional and individual) and supports specific actions at each level. For example, at the community and school level, it recommends developing a baseline survey on SRGBV to serve as the basis for the development of a Community SRGBV Action Plan. The SSP then provides support for the implementation and monitoring of the plan. Illustrative activities could include training for parents and community members on SRGBV – what it is, how to recognise it, how to report incidents of it and where to go for help.

At the individual level, it recommends strengthening existing programmes to support boys and girls in the creation of healthy relationships based on respect, responsibilities and rights. This includes strengthening clubs for students that work on issues related to GBV and integrating activities targeting SRGBV. Other initiatives are clubs for boys to address their needs and co-ed clubs where girls and boys can dialogue about issues and promote solutions to their own problems.

The programme also promotes the provision of institutional support services at school level and in teachers' training colleges/institutes for victims of violence, including a referral system. It also supports the provision of training in counselling and reporting to ensure that all teachers and counsellors are knowledgeable about the appropriate action to take in cases of abuse. The SSP suggests developing a functional code of conduct and creating a referral system to external support services through NGOs for victims of violence.

Although the case of the SSP illustrates an effective way to institutionalise school violence prevention, by involving school authorities, a key element in this is ensuring funding in national and local education budgets. In Ethiopia, given the extent of decentralisation of education, regional and district (woreda) education budgets are particularly important. Education receives the largest share of the woreda budget, ranging from 28% to 55%, but non-salary items may still be less than 1% of the recurrent budget.²⁰⁶ This suggests that, while it is not clear how much different local governments spend on school violence prevention, a specific budget would need to be carved out, as well as rallying support from local communities and CBOs to sustain initiatives with a positive impact such as the SSP, as donors phase out their support and external funding dries up.

4.4 India

4.4.1 Context

In 2007, India's Ministry of Women and Child Development published a study on child abuse in India, based on the experiences of 12,447 children aged 5-18 years across 13 states. It looked at different forms of child abuse: physical abuse, sexual abuse and emotional abuse and issues affecting girls and child neglect in five different evidence groups – children in a family environment, children in school, children at work, children on the street and children in institutions.²⁰⁷ The study found the following:

- 69% of children reported physical abuse, including corporal punishment.
- 62% of the corporal punishment was in government and municipal schools.
- 53.2% of children reported having faced one or more forms of sexual abuse.
- 21.9% of child respondents reported facing severe forms of sexual abuse and 50.8% other forms of sexual abuse.
- Most children did not report the problem to anyone.

A recent Plan India report (2008) highlights that power inequity leading to discrimination on the basis of caste and gender is the major cause of violence. Discrimination against children on the basis of their caste often leads to them being exposed to situations of both verbal and physical

abuse. Societal acceptance of violence as a form of discipline is another contributory factor to violence against children, including in schools. Parents, teachers and other community members, having been beaten themselves, believe that, by using physical punishment on children, they will be better able to discipline them. As a consequence, children accept this as a justified form of punishment. This is exacerbated by a lack of awareness about children's rights. Further, given that the focus is on achieving full school enrolment, attention is on expansion of the school system. Sanctioning teachers who perpetrate corporal punishment, sometimes in single teacher schools, is seen as potentially undermining the expansion of schools to reach all.²⁰⁸ What is missing from this analysis is taking into account the number of children who abandon school as a result of having been victims of corporal punishment. This, of course, poses a threat to the achievement of universal education. More systematic evidence of the number of children who drop out of school as a result of corporal punishment is therefore required.

4.4.2 Legislative framework

The Constitution of India recognises the rights of children to protection. Article 15 guarantees special attention to children through necessary and special laws and policies that safeguard their rights. As such, the Constitution reiterates India's commitment to the protection, safety, security and well-being of all its people, including children. For example, one of its articles states that 'children (should be) given opportunities and facilities to develop in a healthy manner and in conditions of freedom and dignity and that childhood and youth are protected against exploitation and against moral and material abandonment'. Similarly, India is signatory to a number of other international instruments and declarations pertaining to the rights of children to protection, security and dignity.²⁰⁹

At the national level, several laws and national policies have been framed to implement the commitment to child rights. The Indian Penal Code includes provisions against rape and unnatural sex, which could be considered to include forms of sexual abuse, such as those that can take place in schools. The Juvenile Justice (Care and Protection of Children) Act 2000 includes specific sections that deal with child abuse. For example, Section 23: Punishment for Cruelty to Juvenile or Child includes provisions against actions causing or procuring a juvenile or child to be assaulted, abandoned, exposed or neglected in any manner likely to cause unnecessary mental or physical suffering. Under these laws, children – particularly girls – are protected against sexual abuse in schools. Protection against bullying is indirectly (rather than specifically) included under these laws. In the case of corporal punishment, the government has committed to its prohibition in schools and other settings outside the home. In particular, the 2003 National Charter for Children recognises children's right to protection from corporal punishment.²¹⁰

The Commission for the Protection of the Child Rights Act 2005 provides for the Constitution of national and state commissions for the protection of child rights in every state and union territory. The functions and powers of these include:

- Examine and review the legal safeguards provided by or under any law for the protection of child rights and recommend measures for their effective implementation;
- Inquire into violations of child rights and recommend initiation of proceedings where necessary;
- Spread awareness about child rights among various sections of society;

Apart from these laws mainly concerning children, a host of related social legislation and criminal laws have some beneficial provisions with regard to the care, protection and rehabilitation of children. Some states have formulated state-specific legislation to deal with child abuse.

However, there are still major gaps in the legal provisions relating to child abuse in many situations, which includes violence against children in schools. The Ministry of Women and Child Development is therefore formulating a comprehensive legislation on offences against children.

4.4.3 Research and data

Corporal punishment in India is recognised as a problem at the policy level, where it has in fact been banned, although the problem persists in practice. Recent research studies on corporal punishment in India have been useful to obtain a better sense of the scale of the problem and how engrained it is in the Indian school system. In particular, the Ministry of Women and Child Development commissioned a solid piece of research on child abuse in 2007, with one section focused specifically on corporal punishment, which is the major manifestation of violence in schools against children in India.²¹¹

The research sample focusing on school children included 3163 students. Findings showed that an overwhelming 65% of children reported having been beaten at school (54.3% were boys and 45.7% were girls). Notably, the states of Assam and Mizoram show rates of more than 90% of students affected by corporal punishment.

Table 7: State-wise percentage of children reporting corporal punishment²¹²

State	Yes (%)	No (%)
Andhra Pradesh	50.03	46.97
Assam	99.56	0.44
Bihar	47.45	52.55
Delhi	69.11	30.89
Goa	34.25	65.75
Gujarat	48.97	51.03
Kerala	57.58	42.42
Madhya Pradesh	48.73	51.27
Maharashtra	75.90	24.10
Mizoram	90.86	9.14
Rajasthan	17.87	82.13
Uttar Pradesh	81.59	18.41
West Bengal	55.56	44.44
Total	65.01	34.99

Gender differences were also more notable in some states than in others (e.g. Andhra Pradesh, 71.4% boys: 28.6% girls; Rajasthan, 67.6%: 32.4%; Delhi, 67.4%: 32.6%, etc). The study also found that children in older age groups are more likely to experience corporal punishment than children in lower age groups. Of the children in the 15-18 year age group, 70.3% reported experiencing physical abuse in one or more situations, compared with 66.1% of children aged 13-14 and 60.9% of children aged 5-12.²¹³

Table 8: Gender-wise percentage of corporal punishment²¹⁴

State	Boys (%)	Girls (%)
Andhra Pradesh	71.43	28.57
Assam	45.16	54.82
Bihar	43.01	56.99
Delhi	67.42	32.58
Goa	61.33	38.67
Gujarat	54.74	45.26
Kerala	43.86	56.14
Madhya Pradesh	60.42	39.58
Maharashtra	63.51	36.49
Mizoram	49.52	50.48
Rajasthan	67.57	32.43
Uttar Pradesh	57.32	42.68
West Bengal	56.36	43.64
Total	54.28	45.72

Of particular concern is the fact that schools run by state governments accounted for a majority of reported incidents of corporal punishment (53.8%), compared with public schools (22.3%), NGO-run schools (13.0%) and municipal/*zila parishad* schools (7.9%). Significant variation was observed from state to state.

While this study is useful to give a sense of the magnitude of the problem of corporal punishment in India, it does not explore the effects of this form of abuse on children. This means that it does not provide data that enable the calculation of the economic impact of corporal punishment although, given the scale at which it is practised, this is likely to be important.

Among other research studies, a large-scale research study conducted in May 2006²¹⁵ looked at children's experiences of corporal punishment in schools and in the home in one district each of Andhra Pradesh, Bihar, Rajasthan and Uttar Pradesh. The research involved 1591 children, mostly from 41 schools, as well as members of various children's organisations. Parents, teachers (215), community members, government officials and other adults were also consulted. The main methods used were interviews, focus group discussions, role play and classroom observation. The study found corporal punishment to be an accepted way of life in all the schools and communities visited. The most common forms of punishments were hitting with hands and sticks, pulling hair and ears and telling children to stand for long periods in various positions. Threats of physical violence were also common. Severe forms of corporal punishment were also encountered, including being severely kicked, starvation, tying with rope to chairs/poles followed by beatings and being assigned physically strenuous labour (e.g. in the fields).²¹⁶

Important findings include the following:

Prevalence and types and forms of corporal punishment: Corporal punishment is widely used and accepted by parents and teachers as a legitimate form of punishing children. In fact, the team found sticks visible in hands or in classrooms of each school it visited. The types of corporal punishment encountered included the more common forms – threat of or actually hitting with hands or sticks, pulling hair and ears and making children stand in various positions for long periods – as well as more severe forms, including kicking, starving (at home), tying them up with ropes to chairs or poles and beating them and forcing them to do strenuous work. The study also found instances of sequential punishments by different officials – first teacher, then head teacher, then parents, etc.

Corporal punishment in schools: The research team documented at least five beatings per day in all the schools visited, and teachers justified their actions by complaining that they were overburdened with too many students and had too little time. They also cited being held accountable by the government for 'non-teaching' tasks. The team also observed differences among teachers depending on where they were in their career – young teachers were more hesitant to use corporal punishment, very senior teachers regretted having used it too frequently and the principal perpetrators were mid-career and middle-aged teachers.

Children's views: Corporal punishment is accepted as normal and even necessary, although the level of acceptability varies with severity of the punishment. Common views of corporal punishment among students included:

- Corporal punishment is desirable as long as it has a corrective value.
- Parents and teachers have a right to subject children to corporal punishment otherwise they will go astray.
- The injury (resulting out of a punishment) is not as painful as the act of punishment.
- Corporal punishment is just a reward for bad behaviour.
- Legislation banning corporal punishment of children is neither desirable nor acceptable.

These findings are interesting because they suggest that the impact of corporal punishment varies, including in terms of its psychological impact, according to its acceptance. This could have implications for the toll it takes on the mental health of victims as adults. However, what is clear from the findings is that victims of corporal punishment accept and are very likely to replicate it as adults, not only in a school context but very likely also as domestic and interpersonal violence, with important cost implications, as we saw in Section 2.

4.4.4 Estimation of economic impact

In order to assess the economic impacts of corporal punishment in India, it would be useful to account for the medical services incurred by children (and their families) injured as a result of corporal punishment. However, these data are unavailable and so we cannot calculate the health-related cost. This is also true for estimating the burden on health services, given that we do not know how much additional demand for health services is caused by school violence.

We therefore focus on estimating the economic impact of school violence through the forgone benefits to society from early secondary school leaving caused by school violence. In this case, we estimate the cost of ESL resulting from all possible causes, based on the methodology described in Appendix 5²¹⁷ for India to be equivalent to 12.8% of annual GDP²¹⁸.

As explained in section 4.4.3, 64% of children in Indian schools are victims of corporal punishment, and qualitative research indicates that many children abandon school as a result of corporal punishment resulting from a fear of teachers, the injuries they experience and their failure to learn. A conservative assumption would suggest that between 1% and 5% of students who leave school, do so as a result of corporal punishment (and potentially other forms of school violence)

Table 9: Economic impacts of school violence in India resulting from Early School Leaving (ESL)²¹⁹

Rate of foregone benefits resulting from ESL as a % of GDP	Nominal GDP (2008) in Current US\$	Loss in GDP as a result of ESL (all possible causes) in US\$	Cost of school violence related to ESL estimated to be between 1% and 5% of total foregone benefits from of ESL	
			1% of ESL	5% of ESL
12.8%	1.159 trillion	148.373 billion	1,483,737,600	7,418,688,000

Based on this assumption, between **\$1.483 billion** and **\$7.418 billion** in foregone social benefits are lost to school violence each year. This is equivalent to approximately between 0.13% and 0.64% of GDP, which is significant.

4.4.5 Prevention

An important step in terms of the promotion of institutionalised forms of school violence prevention in India came in recent weeks, with the Human Resource Development Ministry of the government of India ordering that stringent guidelines be formulated against corporal punishment in schools. These guidelines are set to properly define corporal punishment but also suggest immediate action to be taken against those imposing it on students. Senior Ministry officials said that, although the Central Board of Secondary Education has generalised guidelines against all kinds of corporal punishment, the Board feels that specific instructions need to be given to schools to ensure accountability in case of lapses by authorities. Positive discipline alternatives to corporal punishment will also be promoted.²²⁰ The cost of rolling out such guidelines to the thousands of schools in India will be substantial, but likely less than those in continuing to endure the negative consequences and economic impacts of corporal punishment, as detailed in Section 4.4.4. The resources for this purpose are likely to come from state governments, with technical support likely to be provided by NGOs and CBOs working in this area.

The promotion of actions against corporal punishment have been led by the Government's National Commission for the Protection of the Rights of the Child and is supported by NGOs, such as Plan India and Save the Children UK, as well as by UNICEF, working through local partner NGOs and CBOs.

Box 7: Plan India's implementation of the Learn Without Fear campaign²²¹

The Learn Without Fear campaign includes raising awareness of children's right to learn in a safe environment and of the negative impact of violence on children. It aims to advocate with government agencies for the effective enforcement of legal protection for children, including making corporal punishment illegal in schools, and for the development of support and reporting mechanisms for children against violence in schools. It also promotes access to methods of positive engagement in classrooms for teachers and institutions.²²² These broad-based actions are carried out at a relatively low cost: the launch of the campaign in seven states, which has included the development of communication materials, carrying out children's consultations and promoting school contact programmes and state consultations, among others, over a period of two years, has cost a total of \$289,284, with a further \$36,000 for the development of a training module for teachers on positive discipline and training of Plan staff on this.

With regard to school-based interventions, Save the Children UK and Save the Children Canada have been carrying out actions to promote child-friendly school environments through the development of training materials and teacher training. An example of this is a programme promoted by Save the Children in India, in which teachers are trained in 'model schools' using 'joyful' learning methodologies and positive discipline techniques. Teachers trained using this model reported that they realised that it was possible to teach in a different and more effective way using these new methods. This was done in parallel with involving children to develop indicators to measure teachers' performance and installing feedback boxes that children's clubs in school would then look at and discuss with school authorities. Assessment concluded that this has been a successful approach to reducing the prevalence of physical and humiliating punishment,²²³ although impacts have not been rigorously evaluated. Specific costs for this initiative are not included in the assessment, but information from other school development models by Save the Children provide some sense of the costs. A study analysing the cost of operation of a Save the Children community school in Mali estimates non-salary teacher costs (which include training) at \$974 per school and instructional material costs at \$897 per school.²²⁴ Because this covers the entire curriculum for the school, it can be assumed that the cost for positive discipline training is 50% of the total, so approximately \$900 per school per year. Thus, while such an approach is unlikely to be expensive, it requires a great deal of work with school and local education authorities to ensure support and to promote its role to a greater number of schools than those that can be reached by NGOs only.

4.5 Sierra Leone

4.5.1 Context

Sierra Leone is a highly patriarchal society in which gender inequalities are institutionalised and exacerbated by discriminatory customs, not to mention the legacy of the conflict, which was characterised by widespread sexual violence and changes in gender roles brought on by violence and displacement. Assistance to women has generally been limited, and the failure to establish systems to prosecute perpetrators of gender-based violence has compromised the involvement of women in decision making and created a culture of widespread gender-based violence.²²⁵ This affects most level of society, in particular the population with the least education and females of all ages, from girls to the elderly. As a result, gender-based violence is also a major problem in schools.

One report describes the problem of sexual abuse of schoolgirls in Sierra Leone, particularly by their teachers, which takes place in exchange for marks or school fees.²²⁶ Other analysts observe

that girls are often threatened with failing or low grades if they do not cooperate, and those who do are 'compensated' with high or passing grades.²²⁷

In a context of prevalent gender-based violence, there is evidence to suggest that some mothers are complicit in initiating, condoning or tacitly accepting their daughters' engagement in sexual relations, including with teachers in exchange for school fees or other financial support. Parents also undermine efforts to combat these practices by accepting out-of-court payments as compensation for abuses.

In response to this, Sierra Leone's Education Sector Plan identifies the need to improve gender-related problems as one of the most relevant challenges, including in relation to gender-based violence in schools.²²⁸ In particular, it includes among its aims:

1. **Providing girl-friendly environments in educational institutions;**
2. Addressing the gross disparities in male : female enrolment rates at the post-primary level;
3. Need for concrete programmes to **address gender-based violence within schools;**
4. Obtaining more female role models.

4.5.2 Legislative framework

Sierra Leone ratified the UNCRC in 1990 and the African Charter on the Rights and Welfare of the Child (ACRWC) in 1992. Although huge violations to children's rights occurred during the civil war, which lasted from 1991 to 2002, the country has now recovered and is in the process of ensuring sustainable peace. Child rights are recognised again, as shown by 2006 and 2007 passing of the Children's Policy and the Child Rights Act, respectively. The latter is the outcome of a review of Sierra Leone's laws, both statutory and customary, as they pertain to children. It domesticates to a large extent the UNCRC and the ACRWC, with some local adaptations. The National Child Rights Bill supersedes all other existing national laws and adopts the international definition of the child as any person under 18 years of age. As such, it has promoted greater alignment of national laws and policies with international standards.²²⁹

However, although there have been improvements, child rights are far from respected in Sierra Leone. This is shown by the widespread school violence that takes place, among many other forms of violation. Part of the problem is the application of these legal frameworks, which in many ways are distant from people's realities. Customary laws and practices are still the reference for communities to rule their lives or solve their problems, including those relating to violence against children. For instance, in northern Sierra Leone, village chiefs recently promulgated a new local law, stating that, when school girls are impregnated by male students, both must drop out of school, preventing them from completing their education.²³⁰ Therefore, despite the existence of laws, which signifies important progress, implementation remains a challenge.

More specifically with respect to school violence, the Child Rights Act of 2007 does not include a ban on corporal punishment. Whereas Sierra Leone's Truth and Reconciliation Commission, set up after the war, recommended prohibition of corporal punishment in the home and schools (2004), the Child Rights Act reaffirms right to correct.²³¹ In addition, the Child Rights Act does not include a provision to specifically ban sexual abuse in schools, nor does it have any provision against bullying. This means that there is a gap in the act with respect to the provision of the rights of children to a safe environment at school, despite some policy efforts to bridge that gap.

4.5.3 Research and data

Research on school violence in Sierra Leone has centred on sexual violence, given its prevalence, and has mainly been qualitative and small scale. Plan Sierra Leone, in alliance with other international NGOs, has recently embarked on a SRGBV study. This is set to be completed in summer 2010 but results are not yet available.²³²

One short qualitative study, carried out by Concern Worldwide Sierra Leone,²³³ assesses cause, effect and possible responses in gender-based violence against children in and around primary and junior secondary schools in Tonkolili district. The study found many types of violence to be prevalent, including: corporal punishment, child labour, unwanted sexual proposals from school boys, transactional sexual relationships and sexual proposals by teachers of school girls. Corporal punishment was the type of violence with the most social acceptability, with children, parents, school management committees and teachers all agreeing with the reasonable use of corporal punishment in schools. The prevalence of sexual relationships between teachers and school girls was particularly high in junior secondary schools. Girls who rejected proposals from teachers suffered beatings and/or verbal abuse, were driven out of class and were given low marks. Another interesting study, commissioned by Plan, involved participatory research by children who investigated school violence.²³⁴ There is compelling evidence from the data collected by 20 children from 1600 school children over a period of four months that levels of abuse (corporal punishment, bullying and sexual abuse) are very high and require immediate and urgent action from all authorities concerned. For instance, 75% of children reported having been hit by a teacher in the month preceding the survey; 67% had been bullied or beaten by their peers; and 59% of girls had been sexually abused by teachers.

Another study which contains important information on school-based violence is UNICEF Sierra Leone's study on out-of-school children.²³⁵ This study examined 'school-related factors' that might cause children to be out of school. 'Protection issues' on the way to and from school (e.g. snakebites, **abduction** and **rape**) were mentioned as making many community members reluctant to send their children to school, especially the youngest aged 6-10. A factor identified as linked to school dropout was sexual violence: 'untimely' pregnancy of young girls ranked as the third most common reason for them dropping out of school. While not all cases of early pregnancy among school girls result from sexual abuse, given evidence that highlights the prevalence of this latter it is safe to assume that at least some of them do. The study showed that this situation affects not only the mother-to-be but also the younger sisters. Of girls aged 11-14 forming part of focus group discussions (in which a total of 145 girls participated), 43% said that their parents/guardians refused to pay their 'school fees' and send them to school when their older sisters came home pregnant. This suggests that, indirectly, sexual violence causes older girls to drop out of school and their younger sisters to be taken out. This has repercussions in many of the areas analysed in Section 2, such as educational attainment, job opportunities, ability to care for and nurture children, need to pay costs related to pregnancy and babies, among others. This ultimately leads to a significantly negative economic impact on these girls, even more so as they already live in a context of poverty and adversity.

With regard to corporal punishment, UNICEF's report notes that it is perceived as legitimate and acceptable in schools and families in Sierra Leone. Parents cane, flog or hit children at home and 'expect' the same from schools, sometimes even requesting it. As a result, 5% of all respondents identified corporal punishment as grounds for a student dropping out of school.

The UNICEF report points out that one of the factors behind the poor quality of education is the shortage of qualified teachers, especially female teachers. Recruiting more qualified female teachers in rural areas is seen as a way to reduce the 'alleged increase of protection issues, such as gender-based violence in schools.

4.5.4 Estimation of economic impact

With the purpose of estimating the economic impacts of school violence in Sierra Leone, and given the dearth of data and/or information to calculate costs related to health services payments, burden of services, and others, we attempted to estimate, as with the other countries, the 'rate of foregone benefits resulting from ESL as a % of GDP'. An extensive data search was undertaken, but we

were unable to find the require data. The details of unavailable data for the case of Sierra Leone are detailed in Appendix 5.

This unavailability and/or inaccessibility of key data sources in Sierra Leone is an obstacle for this and other types of research which needs to be surmounted by statistical authorities. Specific data collection on school violence, as suggested in section 5 of this report, will also be a relevant step in being able to estimate the economic impact of school violence in Sierra Leone.

4.5.5 Prevention

There are multiple prevention programmes in Sierra Leone to reduce sexual violence against girls in school, although they have not been systematically evaluated and there is no published information about their costs. Nevertheless, their grassroots focus, working with schools, parents and children, suggests that they are relatively inexpensive, particularly in relation to the scale of the impact of school violence in Sierra Leone.

One such initiative is a project implemented by the Federation of Women Educationalists. FAWE, with a grant from ActionAid International, is working in 15 schools to create 'an enabling environment for girls' learning', in which school clubs are organised to train girls and teachers and to encourage attitudinal change to promote the protection of girls. The report notes that the initiative is promising from a political standpoint because 'there is little resistance in promoting education, particularly given the government's commitment to the MDGs and universal primary education, and it can provide a useful entry point for targeting more controversial issues such as sexual harassment in schools'.²³⁶

While Plan Sierra Leone is currently focusing its efforts on raising awareness on sexual exploitation and abuse in schools, other NGOs, such as Save the Children, are actively promoting initiatives on positive forms of discipline and children's learning of child rights, including through the formation of children's clubs at school, to increase awareness and empowerment against school violence.

On the policy front, the government is currently pushing an anti-corruption campaign focused on the wide-reaching negative impact of teachers sleeping with their students. The campaign also addresses the lack of parental responsibility exacerbating the situation.²³⁷

4.6 United States

4.6.1 Context

Different forms of school violence occur in the US, including bullying, corporal punishment and sexual abuse in schools. Corporal punishment is still used where it is allowed. For example, according to estimates from the federal Department of Education (Office of Civil Rights), there were about 223,000 'paddlings' of students in the 2006/07 school year – down from 457,754 only 10 years previously. Total paddlings were equivalent to only 0.5% of the total US school population.²³⁸

According to the US National Center for Education Statistics,²³⁹ bullying is of particular importance, often leading to cases of physical violence. In recent years, attention to bullying among children has increased dramatically among school personnel, the general public and policymakers.²⁴⁰ The attention is well deserved. Recent research indicates that bullying is prevalent, directly involving approximately 30% of American school children within a school semester.²⁴¹ As of 2003, at least 15 states had passed laws addressing bullying among school children, and many others have considered legislation. Most laws have been in effect since 2001. Their passage was motivated, at

least in part, by tragic shootings at several US high schools in the late 1990s, such as the Columbine High School massacre²⁴² and later reports that many perpetrators of school shootings had felt bullied or threatened by peers.²⁴³

In the US, many students take a weapon to school, increasing the likelihood of a tragic and severe episode of school violence, resulting in physical injury and even death. According to a nationwide survey conducted every two years by the Centers for Disease Control and Prevention (CDC) – the Youth Risk Behavioural Surveillance System – and involving representative samples of US high school students, 5.9% of students carried a weapon (e.g. gun, knife, etc) on school property during the 30 days prior to the survey. The rate was three times higher among males than among females. In the 12 months prior to the survey, 7.8% of high school students reported having been threatened or injured with a weapon on school property at least once, with the prevalence rate among males twice that among females. In the 12 months prior to the survey, 12.4% of students had been in a physical fight on school property at least once. The rate among males was twice the rate among females. In the 30 days prior to the survey, 5.5% of students reported that, because they did not feel safe, they did not go to school on at least one day.²⁴⁴ As analysed in Section 2, all these factors have important economic implications for individuals and for the economy.

In fact, the relevance of bullying is illustrated by an anti-bullying campaign launched in 2004 by the national Department of Health and Human Services, in partnership with more than 70 health, safety, education and faith-based organisations, named Stop Bullying Now.²⁴⁵ In addition, a Youth Expert Panel comprised of 18 nine through 13 year olds provided creative direction during the development of the campaign, which is still ongoing.

4.6.2 Legislative framework

The US is one of only two countries that have not ratified the UNCRC (along with Somalia). The two reasons often given for the US Senate not ratifying the convention are: 1) some states allow children to be given the death penalty, which the UNCRC would not allow;²⁴⁶ and 2) the claim by conservatives that ‘this Treaty would virtually undermine parents’ rights as we know it in the United States’.²⁴⁷ However, the country has significant national legislation regulating child protection, child welfare and child development.²⁴⁸

More specifically, there is legislation and/or regulations dealing with the three different forms of school violence: sexual violence, corporal punishment and bullying. In the first case, legislation is federal and not specifically focused on schools, but is part of the more comprehensive bills, such as the US Code on Sexual Exploitation and Other Abuse of Children and the US Code on Sexual Abuse. These codes state that ‘Any person who employs, uses, persuades, induces, entices, or coerces any minor to engage in, or who has a minor assist any other person to engage in ... any sexually explicit conduct for the purpose of producing any visual depiction of such conduct, shall be punished.’ This includes sexual offences by teachers, school staff or other students.

The US Supreme Court decided in 1977 that spanking or paddling by schools is lawful where it has not been explicitly outlawed by local authorities. Currently, corporal punishment in schools is legal in 21 states (out of 50).

With respect to bullying, 15 states define or include bullying in some form in their state laws. Some of these state laws define the term but vary with regard to the types of behaviour that constitute bullying. Other states include legislative findings about bullying in their statutes. Legislative findings reflect the seriousness with which policymakers consider the issue. For instance, in New Jersey, the statute expresses that ‘Bullying, like other disruptive or violent behaviours ... disrupts both a student’s ability to learn and a school’s ability to educate its students in a safe environment.’ Most frequently, state laws require or encourage that school officials (typically school boards) develop a policy to prohibit bullying. In some cases, they even encourage schools to implement a bullying prevention programme (e.g. Colorado, New Jersey and Oklahoma). Further, at least six states

require or encourage individuals to report school bullying incidents to authorities. In response to this fragmented approach, and recognising the challenge that schools may face in developing anti-bullying policies, several states have issued model policies or published technical advisories that guide educators in the interpretation and implementation of laws (e.g. Colorado, New Hampshire, New Jersey and Washington).²⁴⁹

In relation to possession of weapons in schools, although the US Supreme Court has declared the Gun-Free Zones Act of 1990 unconstitutional, the Gun-Free Schools Act of 1994 requires states to pass legislation requiring local education agencies to expel from school for at least a year students possessing weapons in school.

Further to this, in March 2010, in response to a recent government investigation that found widespread allegations that children were being abused through misuses of restraint and seclusion in classrooms, the US House of Representatives approved bipartisan legislation to protect children from inappropriate uses of these practices in schools.²⁵⁰

4.6.3 Research and data

All forms of school violence occur in the US, although some are less prevalent and therefore less researched. In 2009, the American Civil Liberties Union and Human Rights Watch published a comprehensive report analysing corporal punishment in American schools during the 2006/07 school year.²⁵¹ In addition to estimating that approximately 223,000 students are still victims of paddling, the study found that African-American students and students with mental or physical disabilities receive corporal punishment at disproportionately high rates, creating a hostile school environment in which these students may struggle to succeed. This links to evidence of poor educational attainment resulting from corporal punishment, which carries an important economic impact, as well as contributing to exacerbate social exclusion and inequalities in education.

In the case of sexual violence in schools, few studies specifically analyse its prevalence. Sexual harassment is the type of sexual violence that generally receives most attention by schools.²⁵² The American Association of University Women (AAUW) conducted a study of 2064 8th through 11th graders, which highlighted that harassment pervades school life.²⁵³ Four out of five students experience harassment; girls report only slightly more harassment than boys. While more students say their schools have a sexual harassment policy, the behaviours continue. Students still rarely tell adults, even though both boys and girls report that harassment is upsetting.

Bullying has been extensively researched, including in academic literature, by policymakers and by NGOs and other civil society organisations. Useful for this is the availability of several periodic surveys and other data sources that give information on its prevalence – particularly focusing on the most severe cases that result in injury or death in school. For example, 1) the Department of Education (through its National Centre for Educational Statistics),²⁵⁴ with support from the CDC,²⁵⁵ publishes the annual report Indicators of School Crime and Safety; 2) the CDC has collaborated with the Departments of Education and Justice to monitor school-associated violent deaths at the national level, periodically publishing the School Associated Violent Death Study; 3) the School Health Policies and Programs Study (SHPPS) is the largest, most comprehensive assessment of school health policies and programmes, conducted at state, district, school and four classroom levels across the country and sponsored by the CDC; and 4) the Youth Risk Behavioural Surveillance System, through which the CDC monitors risk behaviours, such as violence, that contribute to the leading causes of death among youth in the US. Some findings include:²⁵⁶

School environment:

- Approximately 38% of public schools reported at least one incident of violence to police during 2005/06.
- In 2007, 23% of students reported gangs at their schools.

- In 2003/04, 10% of teachers in city schools reported that they were threatened with injury by students, compared with 6% of teachers in suburban schools and 5% in rural schools.

In 2007, a nationwide survey of students in grades 9-12 reported the following **risk behaviours**:

- 5.9% of students carried a weapon (e.g., a gun, knife, or club) on school property during the 30 days before the survey.
- 7.8% of students were threatened or injured with a weapon on school property during the 12 months before the survey.
- 12.4% of students were in a physical fight on school property during the 12 months before the survey.
- 2.3% of students were offered, sold or given an illegal drug by someone on school property during the 12 months before the survey.

Non-fatal victimisation:

- In 2006, there were 29 violent crimes at school per 1000 students. This included rape, both sexual and aggravated assault, and robbery.
- In 2007, about 32% of students reported being bullied during the school year.
- About 4% of students reported being cyber-bullied in 2007.
- Children who bully are more likely to get into fights, vandalise property, skip school and drop out of school.

Violent deaths:

- Violent deaths at schools accounted for less than 1% of the homicides and suicides among children ages 5-18.
- During the past seven years, 116 students were killed in 109 separate incidents – an average of 16.5 student homicides each year.
- Rates of school-associated student homicides decreased between 1992 and 2006. However, they have remained relatively stable in recent years. Rates were significantly higher for males, students in secondary schools and students in central cities.
- Most school-associated violent deaths occur during transition times – before and after the school day and during lunch.
- Violent deaths are more likely to occur at the start of each semester.
- Nearly 50% of homicide perpetrators gave some type of warning signal, including making a threat or leaving a note, prior to the event.

4.6.4 Estimation of economic impact

In the case of the US, where violence in schools is closely related to youth violence (in fact, the Centre for Disease Control and Prevention defines school violence as a subset of youth violence²⁵⁷) and youth violence poses an important problem²⁵⁸, it is important to look at the economic impact of school violence in relation to youth violence as well as in relation to early ESL.

1. In the US there has not been a specific quantification of the share of youth violence linked to school violence, but as some of the research findings included in section 4.6.3 indicate, this relationship exists, not only in terms of victims and/or perpetrators of school violence later going on to commit acts of violence during their youth, but because acts of violence in schools – including bullying, fighting, homicides, carrying weapons and drug trafficking – are already happening in schools²⁵⁹. Therefore, in addition to posing a significant risk to students, a share of the significant economic impact of youth violence can be attributed to school violence.

The cost of youth violence in the US, including direct and indirect costs, has been estimated at \$158 billion each year²⁶⁰.

As in the case of Brazil, although we do not know the magnitude of the link between school violence and youth violence, as explained above, the link has been shown to exist. If we use the same conservative estimate as in the Brazilian case study, and assume that 5% of cases of youth violence are linked to school violence or that originate from cases of violence in schools, then we can estimate:

Cost of violence to the US economy that can be linked to school violence: **\$7.9 billion per year**, which is significant.

2. The second estimate relates to the economic impact of school violence through the forgone benefits to society from early secondary school leaving caused by school violence. We estimate the cost of ESL resulting from all possible causes, based on the methodology described in Appendix 5²⁶¹ for the US to be equivalent to 4.6% of annual GDP.

As indicated in section 4.6.3, qualitative research in the US has indicated that several cases of school drop out has been linked to school violence and bullying. We again take the conservative assumption used for the cases of Brazil and India whereby between 1% and 5% of total early school leavers abandon secondary school as a result of school violence.

Table 10: Economic impacts of school violence in the US resulting from Early School Leaving (ESL)²⁶²

Rate of foregone benefits resulting from ESL as a % of GDP	Nominal GDP (2008) in current US\$	Loss in GDP as a result of ESL (all possible causes) in US\$	Cost of school violence related to ESL estimated to be between 1% and 5% of total foregone benefits from of ESL	
			1% of ESL	5% of ESL
4.6%	14.093 trillion	648.291 billion	6,482,918,000	32,414,590,000

Based on this assumption, between **\$6.482 billion** and **\$32.414 billion** in foregone social benefits resulting from early school leaving are lost to school violence each year.

These two proxy estimates of costs of school violence (through youth violence and through ESL) in the US suggest that it is possible that this problem costs at least between \$14.38 billion and \$40.31 billion annually, with costs accruing to the state, to schools, to individuals and to society as a whole. This is equivalent to approximately between 0.1% and 0.28% of GDP, which is significant.

4.6.5 Prevention

In response to the growing problem of bullying in the US, initiatives have been created, from national-level campaigns to community-based actions and school-level interventions. In the case of community- and school-level work, most actions are jointly funded through local government budgets, schools' own budgets and, often, private contributions. In some cases, there are federal grants to co-fund these initiatives. In order to look in detail at the costs of one preventive initiative, we focus on the Olweus Bullying Prevention Program, one of the most successful examples of school-based initiatives to overcome bullying, particularly in developed countries.

The Olweus Bullying Prevention Program is a multi-level, multi-component, school-wide programme designed and evaluated for use in elementary, middle or junior high schools (students six to 15 years old). Its goals are to reduce and prevent bullying problems among school children and to improve peer relations at school. The programme has been found to reduce bullying among children, improve the social climate of classrooms and reduce related antisocial behaviours, such as vandalism and truancy. The programme attempts to restructure the existing school environment

to reduce opportunities and rewards for bullying. School staff are largely responsible for introducing and implementing the programme. Their efforts are directed towards improving peer relations and making the school a safe and positive place for students to learn and develop.²⁶³

The Olweus Program has been implemented in more than a dozen countries around the world, and in thousands of schools in the US.²⁶⁴ It has been evaluated in different settings and found to be a successful way of reducing or even eliminating bullying.²⁶⁵

Box 8: Components of the Olweus Bullying Prevention Program²⁶⁶

School-level components:

- Establish a Bullying Prevention Coordinating Committee
- Conduct committee and staff training
- Administer bullying questionnaire school-wide
- Hold staff discussion group meetings
- Introduce the school rules against bullying
- Review and refine school's supervisory system
- Hold a school kick-off event to launch the programme
- Involve parents

Classroom level-components

- Post and enforce school-wide rules against bullying
- Hold regular class meetings
- Hold meetings with students' parents

Community-level components

- Involve community members on the Bullying Prevention Coordinating Committee
- Develop partnerships with community members to support the school programme
- Help to spread anti-bullying messages and principles of best practice in the community

The greatest costs of the programme are incurred during initial start-up, although resources are needed for ongoing training and other activities aimed at maintaining staff commitment. Some intended practical benefits, which help cut day-to-days cost and thus offset the cost of the programme, include: 1) cutting down on lost teaching time and staff burnout; and 2) protecting schools from potential legal actions related to bullying. More broadly, the programme states that it can reduce the costs to society caused by the effects of bullying on both the student who is bullied and the students who bully others.

Depending on the size of the school, purchasing the programme materials (the School-wide Guide and Teacher Guide) can range from \$1500 to \$3200. The Olweus Bullying Questionnaire has an additional cost that ranges from \$250 for a single school.²⁶⁷ This means that the initial investment for a school is close to \$5000, plus maintenance during additional school years. As illustrated in Box 8, many of the investments in the programme are not financial but rather are investments in volunteer time and commitment from school staff and the community – but it is this that makes the programme successful. If this programme (or a similar one) were to be implemented in all schools in the US, which has approximately 125,000²⁶⁸ (public and private) schools, the cost in one year would be approximately \$625 million. Over the medium term, additional costs would include maintenance (significantly lower than the original investment) and inclusion of additional schools. The total cost of this initiative would definitely be offset by the huge economic impact of the continued prevalence of bullying in schools, although a more rigorous cost-benefit analysis would be necessary to provide more details. Thus, 'rough' estimate show that investing in prevention of school violence is cheaper than dealing with its consequences.

4.7 Estimated economic impacts for additional countries

To complement the analysis in the case studies and provide additional estimates of cost of school violence for a broader range of countries in which Plan International works, based on the same assumptions used for the case studies. We have drawn on existing estimates of rates of Early School Leaving (ESL) calculated for other studies, which utilise methodologies similar to the one included in Appendix 5. Using those 'Rates of foregone benefits resulting from ESL as a % of GDP' we have estimated the data presented in table 11 below.

Table 11: Economic impacts of school violence in the US resulting from Early School Leaving (ESL)²⁶⁹

	Rate of foregone benefits resulting from ESL as a % of GDP	Nominal GDP (2008) in current US\$	Loss in GDP as a result of ESL (all possible causes) in US\$	Cost of school violence related to ESL estimated to be between 1% and 5% of total foregone benefits from of ESL	
				1%	5%
Bolivia	18.20%	16,674,278,583	3034718702	30,347,187	151,735,935
Colombia	22.40%	243,765,000,000	54,603,360,000	546,033,600	2,730,168,000
Dominican Republic	28.20%	45,540,637,782	12,842,459,855	128,424,598	642,122,992
Ecuador	30.40%	54,685,881,000	16,624,507,824	166,245,078	831,225,391
El Salvador	36.00%	22,114,600,000	7,961,256,000	79,612,560	398,062,800
Guatemala	58.80%	38,983,126,459	22,922,078,358	229,220,784	1,146,103,918
Nicaragua	49.30%	6,592,350,718	3,250,028,904	32,500,289	162,501,445
Peru	17.10%	129,109,000,000	22,077,639,000	220,776,390	1,103,881,950
Egypt	6.95%	162,283,000,000	1,273,800,010	112,738,000	563,690,000
Jordan	1.45%	21,237,672,807	307309125	3,073,091	15,365,456
Europe* (Eurozone)	1.40%	8,971,118,900,000	125,595,664,600	1,255,956,646	6,279,783,230

* GDP: Current, US\$, except Europe where it is in Euro, at market prices

As explained in section 4.1, each country has a different rate of foregone benefits according to the value of the variables that make up this rate in each country. For example, in countries such as Guatemala and Nicaragua where drop out rates are higher, the rate of foregone social benefits is higher as well. We have considered the same range of costs related to school violence, between 1% and 5% of total foregone benefits from ESL given that the exact figure is unknown for all these countries, but the range is plausible given what is know about school drop outs and school violence.

Similar estimates of ESL were unavailable for other countries, however using the methodology included in Appendix 5, estimates can be made for ESL in other countries where data indicated is available and subsequently for the social cost of secondary drop outs resulting from school violence, using the range of 1% and 5% as a benchmark. If additional survey data is collected on school violence in different countries that can be used to ascertain the link between school drop outs and school violence, the estimates can be more precise: rather than a range of values there can be a more precise estimate of how many early school leavers result from school violence in each country.

5. Insights

The economic impacts of school violence are hugely under-researched in relation to the rest of the literature on school violence and the efforts that have been made to cost other forms of violence. This is particularly the case given the growing interest and need to ascertain the short- and long-term costs of different forms of violence to inform better policymaking. Many of the key informants interviewed for the purpose of this study highlighted this gap in knowledge and supported efforts to take steps toward bridging that gap. Thus, this study taps into a relatively unexplored area of research, with the ultimate aim of complementing human rights approaches to the imperative of eliminating school violence.

This issue is also a priority in relation to equity and poverty elimination. Poor children are more than proportionally affected by school violence, since they are more vulnerable to abuse and violence in general (see Section 3). As we have seen, economic impacts of school violence represent a greater loss to children and families living in poverty, which tend to have fewer coping mechanisms. Evidence also suggests that poverty is a dimension of discrimination that can be targeted by bullies. Meanwhile, school violence affects poor people more because they have to use a larger proportion of their income to treat its consequences. Prevention is an economically sensible investment. In the long term it brings financial saving but also societal improvement.

While some initial steps have been taken with this piece of research, particularly in terms of mapping the information, data and relevant methodologies available to start estimating the economic impacts, the first key insight is the dearth of data preventing us from making estimates in a robust and systematic way. Short-term costs could be better estimated by collecting relevant data through purposively designed questions to be included in existing cross-sectional surveys (for example demographic and health surveys (DHSs), the MICS, GSHS or specific surveys on school violence) or by developing new research instruments that focus on the cost of school violence.

Nevertheless, despite a lack of data, we have seen that school violence does in fact have an economic impact on individuals, schools, communities and governments. These medium- and long-term costs include (but are not limited to): impacts on government expenditure through investments in education forgone (i.e. low educational performance and attainment of students) and lower tax revenues resulting from lower earnings (directly through income tax for those who would have had higher earnings in the formal sector as well as indirectly through lower production and consumption). There are also impacts on public service providers of physical and mental health support, financed by the state, local governments or donors; on earnings as a consequence of a negative accumulation of human capital resulting from school violence; and from health risk behaviours that are triggered partly by the psychological impacts of school violence (see Section 2). Such indirect costs can accrue to victims, perpetrators, communities, the private sector and the state through public sector spending and related losses in economic potential. Although difficult to estimate, these costs are incurred and are significant.

To be better able to ascertain these costs, it is necessary to integrate relevant questions related to school violence into longitudinal surveys, as in Brown and Taylor's analysis, which will generate, in the course of some years, solid evidence about costs during the victim's adult life.

A key insight that this research has generated is the type and nature of quantitative data required to better estimate the economic impacts of school violence. There is extensive literature providing evidence on school violence, but most of it is qualitative. This provides a great deal of depth to the understanding of the causes and consequences of and contexts leading to school violence, and also makes the case that school violence incurs costs. However, it is of limited use for the quantification of impacts, particularly economic impacts.

A further area of economic impact that needs to be explored through primary data collection is the burden of costs on services as a result of school violence. These costs are largely skewed towards richer countries, which have in place mechanisms to control violent incidents (such as surveillance and policing), to support victims through counselling and protective services and to prosecute perpetrators, and can be significant. However, in poorer countries, where these services do not exist, these costs are negligible. This is a problem because it indicates that authorities are not being sufficiently accountable to protect the right to safe education for all children, nor are they providing services to compensate victims. As services develop, costs could increasingly be incurred, with useful information for planning from countries already incurring such costs, thus making the economic case for prevention rather than cure. However, especially considering the current lack of expenditure on services, the lack of services in and of itself represents a vacuum in the responsibility of the state and the community to protect children, and therefore has implications related to accountability that arguably carry significantly more weight than costing factors in the arguments in favour of prevention.

Despite constraints, the analysis in Sections 2 and 4 leads to some positive conclusions concerning the methods most useful in estimating the costs of school violence. These include:

1. Quantitative data collected through purposely designed questionnaires or that include relevant questions (such as those included in Appendix 4);
2. Inclusion of questions on school violence in longitudinal studies with a focus on education or child well-being in developing and developed countries, ensuring that future rounds of data collection include questions on earnings and educational and job opportunities as the individual grows, health status, health risk behaviour and psychological and emotional well-being, to enable better analysis of relations between such outcomes and school violence;
3. Promoting more comprehensive registration of administrative data so that details that shed light on school violence can be collected in this way. For instance, health centres should systematically register the place of occurrence of an act of violence and school-based administrative data should systematically register information on different forms of school violence, the victim and the perpetrator; and
4. Continued collection of qualitative data to better understand nuances related to the consequences of school violence. Having different sources and types of data can allow for a more robust analysis and for more solid conclusions to be drawn about the economic impact of school violence.
5. Estimating the foregone social benefits of Early School Leaving (ESL) where relevant household survey data is available, which can then be used as a reference point to calculate the losses that relate to ESL resulting from school violence.

Ultimately, one of the objectives of estimating the costs of school violence is to understand the magnitude of the problem for policy purposes. This includes being able to show that taking preventative action is less costly than dealing with the consequences of violence. In this sense, cost-benefit analysis of preventive programmes and actions should be pursued, rather than focusing only on the costs of either prevention or dealing with the consequences of school violence. Methodologies for effective cost-benefit analysis rigorously evaluate interventions in real-world settings through randomised controlled trials or other rigorous comparison group designs.²⁷⁰ Benefits are calculated in terms of gains not just for programme recipients but also for taxpayers and wider society, considering direct and indirect costs in the absence of the intervention. This type of methodology has been used to assess interventions for other child- and adolescent-related challenges, including crime reduction, education, substance abuse, mental health and teen pregnancy. It has not yet been used systematically to assess school violence interventions.

A critical point to be considered in addition to estimating the aggregate costs of violence is the huge costs that a severe episode of school violence can represent for a single child and her/his household, particularly those living in poverty. These can be very important in the short and long term, for example if the child has been heavily injured as a result of strong corporal punishment or if a girl has acquired an STI as a result of a school-based rape, requiring significant out-of-pocket

payments for health treatment or, in the medium term, the loss of revenue to individuals. In extreme cases, where children have committed suicide resulting from violence in schools, the costs to consider are those of a lost life.

This is particularly the case given the need to ensure that the fulfilment of the right of every student to education in an atmosphere of protection should be protected by all states as signatories to the UNCRC. Similarly, with the aim of achieving international goals such as the MDGs and EFA, education needs to include all children, and school violence is a stumbling block in achieving this.

The impacts of school violence are important, are relatively well researched in qualitative terms and have clear cost implications. The fact that these cannot easily be measured does not mean that substantial costs have not been incurred and should not prevent action from being taken. The value of cost estimates lies in clearly illustrating the amount of investment forgone, expenses incurred or productivity denied. In terms of enabling policy, the cost of prevention measures is important not just in demonstrating that prevention can be an economically sensible investment but also in directing policymakers towards appropriate and cost-effective interventions. Cost-effective analysis requires large investments in data generation, but ultimately is the basis for evidence-based policy decisions in this area.

5.1 Proposed approach to assess some key costs resulting from school violence

Throughout this paper, different approaches to estimate costs of school violence have been discussed and the limitations have been highlighted. We have also made some suggestions as to how to improve data collection going forward. Of particular relevance is the need for surveys to collect more directly relevant information and inclusion of questions on school violence in longitudinal studies. This is necessary to generate the data on which any analysis of economic impact or cost can be based.

Once such data are obtained – for a school, locality, region or country – the following methodological approach is useful to evaluate the economic and social costs of school violence. This is an adaptation of a seven-stage approach to evaluate the costs of antisocial behaviour proposed by Whitehead et al.²⁷¹

- Step 1: Define categories of school violence and the numbers of school violence occurrences in each category
- Step 2: Clarify the outcomes/consequences of each category of school violence
- Step 3: Specify the groups affected by each category of school violence and the numbers in each category
- Step 4: Assess the reduction in welfare associated with each school violence occurrence by category of school violence and category of victim (in the short and medium term)
- Step 5: Determine any significant nonlinearity in impact of different levels of occurrence²⁷²
- Step 6: Estimate costs of bringing value (welfare) back to original level, distinguishing 1) direct resource costs of amelioration to original level, 2) direct resource costs of non-amelioration (e.g. additional expenditure on services) and 3) reductions in individual welfare that are not included in 1) and 2) measured by compensation that victims would expect or other proxies of reduction in value
- Stage 7: Sum all

Undertaking a cost analysis based on the seven-stage approach above requires relevant data to be available, as well as the technical skills to carry out such an assessment, at a smaller or larger scale. The analysis can be limited, for example to the 'education-' or 'health-'related cost, or to the impact on female victims or on schools, depending on how the variables are defined, in line with the purpose of the research and the availability of information. In any case, following a rigorous

and systematic method is necessary to generate robust evidence, optimal for advocacy and promoting policy change.

6. Policy recommendations

Stemming from the research undertaken for this report, the findings and the insights detailed above, we propose two sets of policy recommendations. One is related to the need to raise awareness and provide support on prevention and the second is related to future research on school violence that is needed to estimate and understand its costs

6.1 Awareness, prevention and support

There has been important progress in developing legislation to ban or control the different forms of school violence, in line with the UNCRC, to ensure that children have the right to a safe school environment where they can learn to the best of their ability. However, more needs to be done, not only in terms of ensuring this type of legislation is adopted by all UNCRC signatory countries but more so to ensure that legislation is implemented, through preventive actions and programming as well as through the prosecution of those who violate this right. Implementation of legislation requires the allocation of budgetary resources to support preventive and responsive actions by local governments, schools and communities. This is in line with Article 4 of the UNCRC, which requires states and international partners to allocate resources within the extent of their available resources to ensure progressive realisation toward the implementation of those rights.

According to the analysis of preventive measures above, it is crucial that government and non-government stakeholders, including education authorities, schools and civil society, promote a non-violent culture through:

1. The development of context-specific codes of conduct for schools;
2. Ensuring the participation of children in prevention through their knowledge and empowerment, broadening school curricula to include learning on gender equality, conflict resolution, child rights, child participation and active citizenship;
3. Enabling children, as the main victims and perpetrators of violence, to play a critical role in shaping the solution of violence in schools;
4. Promoting the support of children's families and the communities in which they live in taking measures to reduce school violence through the dissemination of positive forms of discipline and by fostering an atmosphere of peace;
5. In most contexts, involving relevant opinion shapers, such as local media, traditional and religious leaders and CBOs, in order to challenge norms that are conducive to the violation of children's rights.

Many actions to reduce school violence entail building on investments that are required or already in place to promote quality education. An additional investment with a focus on school violence can increase the impact of this. For example, it is crucial to invest in developing teacher training and education; ensuring curricula include child rights; and promoting the role of teachers in peace building, conflict resolution and dialogue and positive forms of discipline. To create positive incentives, teachers should be adequately and regularly paid for their work. This could help mitigate frustrations, which might be taken out on students through abusive language or actions. Similarly, it is key to improve recruitment systems for teachers at the national and local level to ensure that these become a better filter. Monitoring mechanisms to prevent violence and intervene readily when it occurs should include students, a range of personnel in schools, parents and local education authorities. These require a small amount of resources to operate, which needs to be made available, as well as the support of volunteers.

In addition to focusing on schools and the education system, investment in child protection systems beyond schools is important to promote preventive and responsive actions against school

violence, which children can access when they lose trust in schools. These might include telephone help lines, community groups, children's clubs, referral and reporting mechanisms in local health and justice systems (including, for example, child focal points in local police offices) and counselling support services for victims, which are generally absent, particularly in developing country contexts.

Given the evidence that school violence is linked to a context of eroded social capital and family and community violence, policymakers, schools and other actors (such as NGOs) need to also focus attention on promoting spaces for dialogue, conflict resolution and leisure (such as sports, music, theatre, etc), so that children and young people in school can develop relationships and social capital outside the school context.

6.2 Research

The most salient policy recommendation derived from the research process is the need to promote the development of more and better quantitative data to be able to ascertain the impact of violence to better inform policy design. This can entail two different approaches. The first is directly collecting school violence-specific quantitative data with specific questions that enable the identification of costs related to consequences, through both cross-sectional surveys and longitudinal surveys. The second is improved quantitative data collection, by including relevant (not generally applied) questions regarding the consequences of school violence in commonly used instruments (e.g. DHS, MICS, GSHS) to obtain better diagnostics, which also allows for the observation of changes over time. In this sense, data collection on the health behaviour in school-aged children (HBSC) should incorporate costs-related questions and harmonise already similar questions to ensure this type of information can be collected.

Of particular relevance in terms of data collection is promoting the inclusion of useful questions on violence in longitudinal studies which track, among other things, schooling patterns of children over time, and which obtain information on earnings, health status, health risks and emotional well-being, among other areas. These types of studies would help trace victims of violence over the medium term and enable a deeper analysis of related impacts, including economic impacts, over time. Although it will take time to generate the data, findings will represent robust evidence on how school violence impacts on individuals in the short, medium and long term, and thus can be the basis for estimating economic impacts.

This research suggests that, given current data limitations, the most feasible and useful methods to estimate some dimensions of economic impact are those that focus on returns to education and human capital accumulation, which are only proxy estimates of the more specific costs. However, problems with underreporting and incomplete datasets may lead to an underestimation of the economic impacts of school violence on education in the short term. As such, it is necessary to use this information as part of a comprehensive strategy that highlights medium- and long-term impacts, as well as identifying indirect costs that might be triggered by school violence. Improving data collection on health and psychological/emotional impacts of school violence is critical, given the current dearth of such data and the importance of these dimensions to the analysis of the impacts of school violence, including its economic impacts.

This study provides a useful starting point to map the constraints and possible avenues to explore this area of knowledge related to school violence. The next step requires the collection of empirical data, including questions that generate information on more than one area of economic impact of school violence (in addition to education), which would then enable a fuller illustration of costs. For example, impacts on losses in quality of life and emotional well-being can be calculated using the QALY methodology explained in Section 2, but specific data need to be collected from victims of school violence to enable this calculation.

One of the most effective sets of cost data for advocacy purposes is likely to be that which shows state funds in educational costs forgone and the costs of treatment and mitigation of consequences of school violence to the state. This is because, when the costs are actually absorbed by the individual, the aggregate impact is less clear. In terms of justifying interventions, the state might be more inclined to tackle problems that are making its spending more inefficient and ineffective, rather than focusing on reducing private costs.

Another potentially powerful dataset would identify the lower productivity resulting from lower education, as well as lower human capital accumulation as a result of school violence. Part of this information would best be obtained through longitudinal data, although some estimates can be made of short-term losses in returns to education, in particular those presented in the case studies.

Primary research needs to cover, among other areas: 1) a breakdown of costs according to where the violent incident occurred and where it was treated; 2) consequences of acts of violence to physical and mental health and well-being; 3) more nationally representative data collected through systematic questionnaires that could lead to quantitative data sets and 4) recommendations on how to develop a bullying index in the southern hemisphere. To contribute to better data collection, this report has included a suggested methodological approach (Section 5) and presents a series of questions in Appendix 4 to be included in standalone surveys, or other surveys that include school violence, to obtain complementary information.

In addition to efforts to collect information on the economic impacts of school violence, a more thorough approach is recommended. Cost-benefit or cost-effectiveness analysis of effective preventive programmes, as well as of interventions aimed at dealing with the consequences of school violence could generate more robust information to better inform policy design and the allocation of resources by government, donors, NGOs and communities interested in working in this sector. These would include analyses of social as well as economic costs. Currently, most assessments and evaluations of school violence prevention measures look at their impact, but not in relation to their costs. This analysis is critical to generating stronger and clearer advocacy messages about how best to invest in school violence prevention and stronger evidence on why this is cheaper than managing the consequences of school violence.

It is important for school violence researchers to learn from research on domestic violence, whereby data are collected through a wealth of statistical and administrative sources that can generate better figures to allow for more adequate calculations of economic impacts. In this vein, it is key to have a holistic reporting system that collects compatible and disaggregated data for research and, more importantly, generates evidence that informs more adequate, friendly and effective protection systems. This can contribute to reducing underreporting as well as to informing the design of interventions to limit duplication. (For example, sometimes the judiciary, police and health are carrying out similar actions, incurring inefficient costs.)

However, as this report demonstrates, some costs can be calculated using the available data. Utilising this information alongside that from qualitative data analysis is to be recommended to provide robust arguments for addressing the consequences of and preventing school violence.

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Appendix 1: List of telephone interviewees

Name	Role and/or institution
Moacyr Bittencourt	Plan Brazil
Alexander Butchart*	Coordinator, Prevention of Violence, Department of Violence and Injury Prevention and Disability ,WHO
Cleo Fante	Consultant on Bullying, Brazil
Sally Gear	Education Advisor, DFID
Grace Harman*	Plan Sierra Leone
Stephanie Hodge	Programme Manager, UNICEF
James Mercy	National Center for Injury Control and Prevention, CDC
Gary Milante and Alys Williams	Research Economists, Conflict and Fragility Section, World Bank
Asif Mohammed	Plan India
Karen Moore	Policy Analyst, UNESCO
Gabriella Olofsson	Senior Advisor on Violence against Children, Save the Children Sweden
Carolyn Rose-Avila	Plan US
Marta Santos Pais	Representative of the UN-Secretary General on Violence against Children, UNICEF/UN
Julie Swanson	Education Programme Specialist, USAID
Samuel Tadesse	Plan Ethiopia
Margaret Wachenfeld	Senior Policy Advisor, UNICEF
George Yorke*	Plan Ghana

Note: * Interview carried out through and email exchange.

Appendix 2: Interview feedback process, May/June 2010, ODI-Plan

Topic area	Sally Gear, DFID	Karen Moore, UNESCO	Stephanie Hodge, UNICEF	Julie Swanson, USAID	James Mercy, CDC
<i>Sources of data</i>	Camfed has detailed information on gender-based violence internationally in African schools.	As per below.	<ul style="list-style-type: none"> Global Monitoring Report Annual Country Reports Global Out-of-School Study 	<ul style="list-style-type: none"> USAID (2008) look at appendix. There is a Bangladesh study somewhere on self-reported incidence of violence by type. USAID safe schools project was an intervention with detailed monitoring information. Lots of data on incidence of violence but too disaggregated to be meaningful and apparently cannot be aggregated (important lesson!) Does show difference in positive attitudinal changes among teachers and students, however. USAID Brazil report. Sierra Leone – International Rescue Committee has just done a study on gender-based violence in schools 	Youth Risk Behaviour Survey, for US and international.
<i>Alternative methodologies/proxies/non-monetary variable estimation</i>	<ul style="list-style-type: none"> Suggested looking into literature on refugees and impact of war trauma on service efficiency. Suggested contacting Professor Elaine Unterhelder at Institute of Education at University College London who runs the Beyond Access Programme. Look at Amnesty et al.'s safe schools report to see what their methodology was. 	<ul style="list-style-type: none"> There is a lot of anecdotal and qualitative evidence for countries such as India and Brazil. Could think about how to make use of these. Need to account for age and type of violent incident. 	<ul style="list-style-type: none"> Very focused on the use of qualitative methodologies to assess costs. Feel there needs to be a phased approach to be able to test methodologies and build from there. Feel that models have to emerge from contexts. Want to see consensus built around indicators. Feels that drivers should be around quality education, high cost of violence and cost of prevention. 	No suggestions other than should include all types of violence and make particular efforts to pick up hidden forms of violence such as bullying and psychological violence.	<ul style="list-style-type: none"> Consider the use of willingness to pay methodologies where you ask people how much they would be willing to pay for prevention. This may pose considerable problems with social norms but those could be controlled for. Our methodology doesn't seem to be the main problem; the main problem is the lack of data.
<i>School violence as causal variable</i>	No suggestions	No suggestions	No suggestions	No suggestions	<ul style="list-style-type: none"> Causality is difficult to isolate, perhaps best way is through meta analysis of other studies and attributing this to prevalence/incidence rates.

Topic area	Sally Gear, DFID	Karen Moore, UNESCO	Stephanie Hodge, UNICEF	Julie Swanson, USAID	James Mercy, CDC
					<ul style="list-style-type: none"> • Look at Australia study for a good example of this approach. • Get around data limitations by being upfront and make some difficult decisions on the assumptions you have to make to get around this. <ul style="list-style-type: none"> ○ Issues of unreported data – rely on survey data rather than anything else. Again, use meta analysis to help control for underreporting. • Problems of assessing intangible costs of violence, could be done through looking at problems in the community at large, through meta analysis of studies which look at micro impacts and causality; you could then work backwards to come up with something. • Willingness to pay also allows you to measure intangible costs. • Three main methodologies: how we are doing it; willingness to pay; burden of health approach – Australia example.
<i>Case studies of burdens on public services</i>	No suggestions	No suggestions	No suggestions	<ul style="list-style-type: none"> • Thinks this is not applicable in areas of the South where services aren't prominent. Additionally, these won't have accurate data and underreporting would be even more of a constraint. • In looking at the US should try looking at one of the more progressive states, e.g. California. Look at Ministry of Education for data. 	<ul style="list-style-type: none"> • The majority of incidents likely to be of low burden, particularly in the US, with the exception of large-scale acts of violence such as Columbine. • Real issues are much subtler and difficult to pin down. Long-term physical and psychological impacts of seeing or experiencing violence, however; attributing them is inaccurate and hard.
<i>Advocacy considerations and single figure implications</i>	<ul style="list-style-type: none"> • Can understand why coming up with a single figure would be difficult but feel that this would provide a better basis for 	<ul style="list-style-type: none"> • Suggests that we don't worry about producing single figures, that we concentrate on producing sound, defensible research 	<ul style="list-style-type: none"> • Frame as a pre-study. • Need to think about how evidence can be used as a tool for legislative change and fostering political will. 	<ul style="list-style-type: none"> • Understands the power of formulating a single figure but feels that this research is so new that in fact anything will be of interest 	<ul style="list-style-type: none"> • This will be useful for research no matter what we come up with and will help to foster further research efforts. Perhaps the most

The Economic Impact of School Violence

Topic area	Sally Gear, DFID	Karen Moore, UNESCO	Stephanie Hodge, UNICEF	Julie Swanson, USAID	James Mercy, CDC
	<p>campaigning and convincing donors.</p> <ul style="list-style-type: none"> • Would be good to get ball park figures to be hard hitting. • Perhaps look at a national basis to get a couple of soundbites, i.e. in US or where there are good data. • Perhaps from this can infer impacts for other regions? • Suggest using UN Girls' Education Initiative (UNGEI) as testing ground in releasing the report to see how it goes down. 	<p>and let Plan make its own interpretation of the research for advocacy purposes.</p>	<ul style="list-style-type: none"> • Case studies should be picked carefully according to the potential for transformational change and perceived impact of a study like this. 	<p>and get attention. Depends on who the audience is of course.</p> <ul style="list-style-type: none"> • Good study to make inroads and start the discussion. • Big disadvantage is not doing primary research. 	<p>valuable bit will be to provide a roadmap of what is needed and how to do it, particularly when thinking about what data are needed.</p> <ul style="list-style-type: none"> • It would be a useful advocacy tool to get political support if we can provide that kind of evidence.
<p><i>Comments on prevention, how to cost and suggestions for good case studies</i></p>	<ul style="list-style-type: none"> • There are some relatively simple things that can and are done such as in altering school design and infrastructure so that girls have safe areas/making sure that girls don't have to walk too far to school. • There is a report from UNGEI on preventive recommendations. • Too Often in Silence report. • Prevention is also about changing social norms and what is acceptable. • Preventive measures aren't necessarily expensive. 	<ul style="list-style-type: none"> • Karen is working with the Canadian International Development Agency (CIDA) on school-based violence and armed conflict. • There is a CIDA initiative to end school-based violence. • She advises contacting donors directly about projects and programmes. • It should be relatively easy to find information about the costs of development interventions against school violence. Donors may also have information on impact. • It does seem though that preventive measures need not be expensive and require medium- to long-term interventions and changes. 	<p>There has been an evaluation of the Child Friendly School project, manual and concept note. Evaluation may provide some useful data on cost effectiveness etc. To share with us.</p>	<p>Can look at some of the USAID materials on safe havens, and safe schools.</p>	
<p><i>General comments</i></p>	<ul style="list-style-type: none"> • A timely initiative that will do well to speak to donors in continuing consideration of the need to justify costs. • A lot of the existing work is through human rights-based approaches. Be careful not to alienate this audience and acknowledge this approach in your paper. 	<ul style="list-style-type: none"> • Talked a lot about the use of case studies. Feels that the role of the US is misguided as it is not a shining example in the OECD world. • Need to be upfront about the reasons for using the US as a case and the limitations this may bring. • A better balance would be to look at 3 OECD countries 	<ul style="list-style-type: none"> • UNICEF's approach to education is based around inclusive learning, exclusion and reducing disparities. Through this, violence is a component, but is seen as an aspect of exclusion. UNICEF takes a holistic approach to education and sees change as a transformation of social norms. Key programmes 	<p>Thinks this is a great idea and a much-needed project. Something that is groundbreaking and of immense value for many who work on this issue in the field and in advocacy.</p>	<ul style="list-style-type: none"> • Biggest problem is certainly the gaps in data. • Case studies – it may worth using countries with minimal levels of data. • IMPORTANT – decide which level of schooling we are going to focus on.

Topic area	Sally Gear, DFID	Karen Moore, UNESCO	Stephanie Hodge, UNICEF	Julie Swanson, USAID	James Mercy, CDC
		<p>and 3 developing countries.</p> <ul style="list-style-type: none"> Feels that the issues we have flagged for each case study are not accurate. It may be that the literature is not representative of the issues on the ground. Feels that many of the intangible costs are relevant to rights-based work. Where there is overlap, we shouldn't try to cost impacts as this will detract from universal values. Only target costing to those that do not cover indispensable human rights. 	<p>are in creating child-friendly schools with a focus on the quality of education.</p> <ul style="list-style-type: none"> Very focused on the process of our research. Keen push for methodological workshop; a focus on the definition of violence is paramount to working out what a typology would look like. UNICEF would like to impress on us that we should include a case study of fragile states, humanitarian/emergency settings, etc. 		
<p><i>Additional leads – references/ people/ organisations</i></p>	<ul style="list-style-type: none"> Should contact Lucy Lake at Camfed: llake@camfed.org. Girls in Education 2005, relevant to gender-based violence, Malawi, Camfed. Emerging issues with the UNIGEI partnership and the Dhaka, Senegal Conference just passed. A whole stream of the conference was on violence. UK must have study on the costs and economics of violence or bullying. 	<ul style="list-style-type: none"> HRW and American Civil Liberties Union 2008. A Violent Education - Corporal Punishment of Children in US Public Schools. New York: HRW. www.hrw.org/sites/default/files/reports/us0808webwcover.pdf. (Associated press releases on their website; I think the appropriate people to contact there would be Bede Shepperd sheppab@hrw.org and Zama Coursen-Neff. Dr. Sharon Owen (sharon.j.owen@btinternet.com), Res. Coordinator, Global Initiative to End All Corporal Punishment of Children (www.endcorporalpunishment.org/.) OECD: Search www.oecd.org/advancedSearch/ for KW: bullying TOPIC: education YEAR: 2004. Also see (defunct) International Network on School Bullying and Violence http://oecd-sbv.net/. 	<ul style="list-style-type: none"> Dina Craissatti dcraissati@unicef.org – undertaking the Global Out-of-School Study. Workshop on the methodology for this in Istanbul on week of 7 June 2010. SH and UNICEF want to be more substantially involved in this project. We need to work out whether there are opportunities for us to get access to data here, and whether further involvement will be useful. 	<ul style="list-style-type: none"> CARE Bangladesh is currently doing a study on measuring the cost of gender-based violence. May be worth talking to them. Fione Leech, Professor at University of Essex on gender-based violence in schools. Claudia Garcia Moriano, ICRW, has done costing exercises on violence against women. Alexandra Geddes at PACO. Look at UN Secretary-General's report on Violence against Children. 	

The Economic Impact of School Violence

Topic area	Asif Mohammed, Plan India	Gary Milante and Alys Williams, World Bank	Moacyr Bittencourt, Plan Brazil	Gabriella Olofsson, Save the Children Sweden	Marta Santos Pais, UNICEF/ UN Rep. on Child Violence
<i>Sources of data</i>	<ul style="list-style-type: none"> Suggests that national-level census data will be non-existent and government data will be largely unreliable, with reported incidents not representative of the whole. Gross underreporting. Look at study undertaken by Nuepa on behalf of government of India which found that two out of three children are affected by violence at school. National Commission for Protection of Child Rights may be a source of data. Suggests that we won't be able to get budgets from government sources or archives, we will have to work out a different way of assessing government spending. 	<ul style="list-style-type: none"> Suggest municipal-level data. Look at anti-bullying campaigns in US. Colombia has a wealth of data available in their national statistical office, DANE and also ICFV, which has child abuse data. WB, 2008, Youth at Risk Report. 	<ul style="list-style-type: none"> Look at the Learn Without Fear website for Brazil (www.aprendersemmedo.org.br) (in Portuguese) which has the results of a national survey on bullying. National campaign on the right to education – has information on costs of school quality and losses that might contain useful proxy information. Get in touch with Dr. Cleo Fante who is the national expert on bullying. 	<ul style="list-style-type: none"> Swedish Institute for Public Health might have relevant information regarding the public health dimension of violence (they are likely to have research on consequences, prevention, etc). www.fhi.se/en/. Looking at municipal budgets to see if there is information on budget expenditure on violence interventions (attention and prevention). 	<ul style="list-style-type: none"> Norway: violence against children is a primary concern for the government and there are earmarked resources against violence in the budget. South Africa: legislation on child rights act/child legislation – they did a costing exercise to ensure implementation of this legislation; some information can be drawn from that (also documented by Innocenti Research Centre). UNICEF and CDC carried out a study in Swaziland collating views from young people regarding violence, particularly school violence, and impact on most vulnerable populations. Australia study on economic cost of violence against women and children, which can have useful data/methodologies.
<i>Alternative methodologies/proxies/non-monetary variable estimation</i>	<ul style="list-style-type: none"> Methodological issues pose the greatest challenge to this study. Feels that school violence has a good research base, measuring impact is fairly under-researched and economic impact specifically is almost entirely un-researched. Plan has done a study on the Hidden Costs of Violence which will be sent through. 	<ul style="list-style-type: none"> Problem is you really need primary data. Can you work backwards and infer anything from dropout rates. Could use accounting methodology, willingness to pay would involve constructing a survey. Difficultly in constructing a good baseline, assessing prevalence is key and costs will stem from that. The WB violence report was not done from primary data either but was a synthesis of other studies so can be done. 	No recommendations.	<ul style="list-style-type: none"> She sees that there are a lot of data limitations to carrying out this study rigorously. No suggestions on proxies, etc. She thinks that doing more qualitative research (primary) including though participatory approaches with children to uncover impacts of violence on their lives, would be very powerful. 	
<i>School violence as causal variable</i>		<ul style="list-style-type: none"> Need to have a control to measure so that you can tell which is which. 	No comments	<ul style="list-style-type: none"> Does not know studies that measure specific impact of SV as a variable that affects schooling. 	<ul style="list-style-type: none"> Agrees that there is limited evidence – mentioned that recently the Norwegian Minister of Education said

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					publicly that an increase in dropouts might be related to violence in schools.
<i>Case studies of burdens on public services</i>	<ul style="list-style-type: none"> This is not a priority in India. The govt is more concerned with raising enrolment rates. In fact, reducing school violence is not a priority among either schools, parents, teachers, or the government. 		<ul style="list-style-type: none"> Bullying is increasingly a national priority and as such there have been some initiatives to incorporate it in state/municipal legislations (particularly in São Paulo); but no estimate of burden on public services as such. 		<ul style="list-style-type: none"> Suggested speaking to Alex Butchart from WHO who should have info on impact on health systems.
<i>Advocacy considerations and single-figure implications</i>			<ul style="list-style-type: none"> Considers this initiative to be very useful at the moment to push support for anti-bullying campaign (agreed with bullying as main form). 	<ul style="list-style-type: none"> Anything we come up with will be a contribution to research and literature on the topic, acknowledges the difficulties and insignificance of coming up with a single figure. 	<ul style="list-style-type: none"> It would be useful to come out with a recommendation about 'minimum standards' for prevention as a low-cost option, linked then to evidence of the cost of not preventing.
<i>Comments on prevention, how to cost and suggestions for good case studies</i>	<ul style="list-style-type: none"> Learn Without Fear is building momentum. Asif doubts that there is any information useful to us on impact or cost given that the focus until now has been on mobilisation, with little stocktaking or monitoring. A similar campaign was done by others on raising awareness around untouchability. A study has assessed this, which may be worth looking at. There is govt legislation against this – national child policy and right to education as well as state-level policy, many of which have banned corporal punishment for example. The sticking point is in implementation and there is little monitoring. Disciplining teachers who use corporal punishment poses its own problems. Many schools are run by a single teacher – to remove them from the school would mean the end of education for all children attending. 	<ul style="list-style-type: none"> Could look at individual programmes. Will probably have to look at municipal level to get data. Will have to think about how to assess context-specific variables. Essentially, the effectiveness and need for prevention programmes will be dependent on each case/context. To get this into the analysis, you will have to look at other variables like school size, location of school, local income levels etc. Could look at cost of prevention programme vs. cost of problem. Or could provide different costing levels for each and allow others to make their own judgements on where to draw the balance between them. 	<ul style="list-style-type: none"> Suggested talking with Dr. Cleo Fante who, as Plan's consultant on bullying, is the person who should be able to provide us with information on costs, consequences, impact, incidence, etc. Also suggested contacting Acao Educativa, an NGO coalition working on issues of school quality, including violence (www.acaoeducativa.org.br). Will send us information of Plan Brazil. 	<ul style="list-style-type: none"> Save the Children has developed a manual on 'child-friendly school environments' with training materials on positive forms of violence which we could use to provide information on prevention. 	

The Economic Impact of School Violence

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<i>General comments</i>	<ul style="list-style-type: none"> Attitudes towards violence in schools in India is almost pro-violence. It is apparent that corporal punishment and bullying are the two main forms of violence in schools, Teachers come under pressure from parents to beat children. Parents often feel that they benefitted from corporal punishment and want teachers to treat their children in similar ways. 	Whatever you come up with will be useful as there is currently nothing there. Gathering exercise will be useful.	<ul style="list-style-type: none"> The study seems like a very interesting initiative and the thematic country approach is useful. Looks forward to seeing some of the outputs. 	<ul style="list-style-type: none"> The study is very useful and it could fill an important gap in research and knowledge, though recognising that it is very challenging, particularly given data limitations. Need for longitudinal research on impacts to determine its medium- to long-term costs. It is necessary to look at things from a different perspective: while we might want to conclude that some forms of violence (e.g. sexual abuse) push girls back, it might be the case that girls who were abused managed to move forward in education, so despite the negative psychological impact, in terms of economic and professional development it might have been positive – important to look at different angles. 	<ul style="list-style-type: none"> In Sierra Leone, the Peace and Reconciliation Commission issued a report incorporating views of children, who recognised the need to reduce violence in schools to be able to consolidate the peace process. This is a good example to include. In general, the study is 'ground breaking', a very useful contribution to research. When she led the Innocenti Research Centre, they tried to work on a similar study but stopped because of insufficient data.
<i>Additional leads – references/ people/ organisations</i>	Have a look at: UNICEF India; National Commission for the Protection of Child Rights; Delhi School of Economics; Jawaharlal Nehru University.	<ul style="list-style-type: none"> Look at refugee programmes for UNIFIL in Sierra Leone, may be good source of data. Will email education group in the Bank. 	<ul style="list-style-type: none"> Dr. Cleo Fante cleofante@terra.com.br; Mr Daniel Cara (Acao Educativa) daniel@campanhaeducacao.org.br. 	Terry Dunnian, regional advisory on education based in Bangkok terryd@seap.savethechildren.se might have information and examples on prevention	<ul style="list-style-type: none"> UNICEF Swaziland Innocenti Research Centre South Africa costing of child code

Topic area	Margaret Wachenfeld, UNICEF	Cleo Fante	Alexander Butchart*	Grace Harman*
<i>Sources of data</i>	<ul style="list-style-type: none"> MICS at childinfo.org. UNESCO's international observatory on violence in schools. International Journal of Public Health has articles on school violence with data sources. IPSCAN/UNICEF child protection. UNICEF presentation on school-based indicators. WHO GSHS guys. 	UNESCO studies on school violence in Brazil, including those written by Miriam Abramovay.	<p>While GSHS administers questionnaires to 13-15 years olds attending school, the reported health events and risk behaviours are not limited to those occurring in school but rather reflect respondents' experiences in all settings over the period of recall.</p> <p>As for violence, we know from other studies that few severe instances occur within schools, and that the majority of forced sexual intercourse and violence-related injuries leading to time lost from routine activities occur in the home or in community settings. So, please be sure not to imply that GSHS violence findings reflect violence occurring in the school.</p>	<p>There are currently no national statistics specifically for school violence. Plan SL and an alliance of international NGOs have just embarked on SRGBC study to be completed in July 2010.</p> <p>ActionAid International SL has conducted a study of violence against girls in and out of school in 2009 but has not published the results as yet.</p>
<i>Alternative</i>			To date, the WHO-CDC approach to the costing of violence	In the absence of data, case studies of

Topic area	Margaret Wachenfeld, UNICEF	Cleo Fante	Alexander Butchart*	Grace Harman*
<i>methodologies/ proxies/non-monetary variable estimation</i>			focuses on violence leading to death and to injuries that receive hospital treatment, and provides recommendations on how to measure the direct costs of such violence and its indirect costs by way of lost productivity. It does not take a 'settings based' approach since doing so would probably make the process of getting enough cases per setting unfeasibly long, and instead focuses on all cases of violence that present at hospital emergency departments, irrespective of where the violent incident occurred. The method is thus not designed to measure the lifelong costs of violence in schools or families.	individuals who have suffered violence and have the cost equivalent in consequences or damages suffered, actual cost for rehabilitation and future costs from dealing with the outcome of the abuse/violence. Where data exist e.g. attitude to domestic violence, the study can then be related to the figures. In SL, UNICEF (MICS3) estimates 85% for domestic violence and use of psychological or physical punishment for child discipline is 92%.
<i>School violence as causal variable</i>		Studies on bullying in Brazil are school based so difficult to pick up information about dropouts		
<i>Case studies of burdens on public services</i>				
<i>Advocacy considerations and single-figure implications</i>		Useful information to complement current actions as part of the Learn Without Fear. There is growing government interest, as shown by recent local legislation against bullying.		Useful advocacy through documentation of case studies in publications or documentaries (e.g. a short documentary on a youth recovering from abuse, will have as much impact as a 30-page report and is more compelling). Case studies also showcase the situation of individuals and speak volumes.
<i>Comments on prevention, how to cost and suggestions for good case studies</i>	EC has safer internet programme to prevent cyber-bullying – led by Prof. Sonia Livingston at LSE s.livingstone@lse.ac.uk .	Provided data from an initiative she has promoted in schools, including for Plan Brazil: Educar para a Paz.		Amount of money and lives saved if available, the number affected where not.
<i>General comments</i>		Considers this to be a useful study with a new and different approach.	Most school violence involves forms of fighting, bullying and sexual harassment that, while important in terms of leading to poor school performance and reduced school attendance, and in terms of long term consequences on health risk behaviours such as smoking, unsafe sex and harmful use of alcohol, generally have few immediate consequences that are severe enough to require hospital treatment. This means that, while such violence certainly has economic costs, these costs are spread across the life course and dispersed through many different sectors.	Challenging study. Dearth of data in Sierra Leone to make any significant assessment of costs/economic impact
<i>Additional leads – references/people/organisations</i>	<ul style="list-style-type: none"> • ILO child labour costing exercise. • UNICEF Child Protection in NY and research: Marta Santos Pais. • UN independent expert – Paula Pereniou. • Peter Newell from Global 	Miriam Abramovay mabramovay@gmail.com .	To get an estimate of violence-related injuries occurring in schools, you would need to find studies from injury surveillance systems and surveys that include place of occurrence/location in their findings. One example is the National Violent Death Reporting System in the US, which currently covers 16 states. A sample NVDRS report is available at	Wairimu Munyinyi at wairimu.munyinyi@concern.net ; Zynab Kamara at zynab.kamara@actionaid.org ; Abdul Manaff Kemokai at manaffkemokai@yahoo.co.uk ;

The Economic Impact of School Violence

Topic area	Margaret Wachenfeld, UNICEF	Cleo Fante	Alexander Butchart*	Grace Harman*
	<p>Campaign to End All Corporal Punishment of Children.</p> <ul style="list-style-type: none"> • Oak Foundation – child protection. • For GBV look at Clinton Initiative on sexual violence against girls – have tried to cost GBV. • IASC UN working group on humanitarian issues have also done a lot of work on GBV. 		<p>www.cdc.gov/mmwr/preview/mmwrhtml/ss5801a1.htm#tab12 from which you can see that school settings were the location for 3/3409, or 0.1%, of homicides in the reporting period. Another example is the attached CDC UNICEF report on a survey of sexual violence against girls in Swaziland, which shows that 13% of sexual violence incidents reported occurred on school premises and 12% on the way to school, with the remaining 75% in family and community settings.</p>	<p>Michael Charley at mcharley@unicef.org.</p>

Interviews with Carolyn Rose Avila (Plan US), Samuel Tedesse (Plan Ethiopia) and George Yorke (Plan Ghana), this last one by email, were very short and did not generate a great deal of information that could be included in the matrix above. Samuel Tedesse and George Yorke followed up by sending Plan country reports for the Learn Without Fear campaign, which were also available on the campaign's website.

Appendix 3: GSHS data analysis

The table below presents an analysis of the potentially relevant questions in the WHO's GSHS for an analysis of school violence, and the countries they were collected for. Although the survey is useful to provide information on prevalence, it does not give us information about the impacts of the episode of school violence on children's decision to stay or not in school or to seek health treatment, or other forms of support, which would be the basis for an analysis of economic impact.

Question	Possible responses	Africa	Americas	Asia
During the past 12 months, how many times were you physically attacked?		Botswana Ghana Mauritius Swaziland Tanzania	Argentina Cayman Islands St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay	Indonesia Myanmar
During the past 12 months, how many times were you in a physical fight?		Botswana Ghana Kenya Mauritius Namibia Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	Indonesia Myanmar Philippines
During the past 12 months, how many times were you seriously injured?		Botswana Ghana Kenya Mauritius Namibia Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	Indonesia Myanmar Philippines
During the past 12 months, what were you doing when the most serious injury happened to you?	<ul style="list-style-type: none"> • I was not seriously injured during the past 12 months • Playing or training for a sport • Walking or running but not as part of playing or training for a sport • Riding a bicycle or scooter • Riding or driving in a car or other motor vehicle • Doing any paid or unpaid work incl. housework, yard work or cooking • Nothing • Something else 	Botswana Ghana Kenya Mauritius Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	India Indonesia Myanmar Philippines

Question	Possible responses	Africa	Americas	Asia
During the past 12 months, what was the major cause of the most serious injury that happened to you?	<ul style="list-style-type: none"> • I was not seriously injured during the past 12 months • I was in a motor vehicle accident or hit by a motor vehicle • I fell • Something fell on me or hit me • I was fighting with someone • I was attacked assaulted or abused by someone • I was in a fire or too near a flame or something hot • Something else caused my injury 	Botswana Ghana Kenya Mauritius Namibia Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	Indonesia Myanmar Philippines
During the past 12 months, how did the most serious injury happen to you?	<ul style="list-style-type: none"> • I was not seriously injured during the past 12 months • I hurt myself by accident • Someone else hurt me by accident • I hurt myself on purpose • Someone else hurt me on purpose 	Botswana Ghana Kenya Mauritius Namibia Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	Indonesia Myanmar Philippines
During the past 12 months, what was the most serious injury that happened to you?	<ul style="list-style-type: none"> • I was not seriously injured during the past 12 months • I had a broken bone or a dislocated joint • I had a cut puncture or stab wound • I had a concussion or other head or neck injury, was knocked out or could not breathe • I had a gunshot wound • I had a bad burn • I lost all or part of a foot, leg, hand or arm • Something else happened to me 	Botswana Ghana Kenya Mauritius Namibia Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	Indonesia Myanmar Philippines

Question	Possible responses	Africa	Americas	Asia
During the past 30 days, on how many days were you bullied?		Botswana Ghana Kenya Mauritius Namibia Seychelles Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	Indonesia Myanmar Philippines
During the past 30 days, how were you bullied most often?	<ul style="list-style-type: none"> • I was not bullied during the past 30 days • I was hit, kicked pushed, shoved around or locked indoors • I was made fun of because of my race or colour • I was made fun of because of my religion • I was made fun of with sexual jokes comments or gestures • I was left out of activities on purpose or completely ignored • I was made fun of because of how my body or face looks • I was bullied in some other way 	Botswana Ghana. Kenya Mauritius Namibia Seychelles Swaziland Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St. Lucia St. Vincent and the Grenadines Uruguay Venezuela	Indonesia Myanmar Philippines
During the past 12 months, how often have you felt lonely?		Botswana Kenya Namibia Seychelles Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St Lucia St Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	India Indonesia Myanmar Philippines
During the past 12 months, how often have you been so worried about something that you could not sleep at night?		Botswana Kenya Namibia Seychelles Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St Lucia St Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	India Indonesia Myanmar Philippines

Question	Possible responses	Africa	Americas	Asia
During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing your usual activities?		Botswana Kenya Namibia Seychelles Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St Lucia St Vincent and the Grenadines Trinidad and Tobago Uruguay Venezuela	India Indonesia Myanmar Philippines
During the past 12 months, did you ever seriously consider attempting suicide?		Botswana Kenya Namibia Seychelles Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St Lucia St Vincent and the Grenadines Trinidad and Tobago Venezuela	Indonesia Myanmar Philippines
During the past 12 months, did you make a plan about how you would attempt suicide?		Botswana Kenya Namibia Seychelles Uganda Tanzania Zambia Zimbabwe	Argentina Cayman Islands Guyana St Lucia St Vincent and the Grenadines Trinidad and Tobago Venezuela	Indonesia Myanmar Philippines

Appendix 4: Questionnaires for costing school violence

The following set of questions is intended to complement those already included in school violence surveys, rather than being a complete survey. The questions would be used to collect data that would generate more complete information about direct costs of school violence in cross sectional datasets.²⁷³ It is advisable to work with a professional researcher to design the questionnaire, so that these and the rest of the questions are context relevant. The complete survey would need to be field tested (piloted) in the specific context where it will be applied, and then refined.

It is necessary to carry out surveys both for school-based and for out-of-school children to get a full view of potential impacts, especially to collect more information on school dropouts who are in some way linked to school violence and who in many cases do not return to school.

In addition to questions on the more common cross-sectional quantitative surveys, it is important to include questions on prevalence of school violence in surveys for longitudinal studies,²⁷⁴ ensuring that questions about type of school violence, frequency, severity and consequences are included. Over time, this information will allow for useful analysis in relation to the medium and long term impacts of school violence.

1. Prevalence and severity of school violence by types*

*This section includes some general questions as well as some related to the 'economic impact' dimensions of the phenomenon. Questions need to be asked in a very sensitive manner, explaining the types of violence (from verbal to physical abuse). They are included here as guidance to ensure these issues are covered in the broader questionnaires on school violence that are typically included in questionnaires on school violence. If not, these type of questions would need to be included in those questionnaires. However, they would have to be structured and phrased to be in line with the broader questionnaire under consideration.²⁷⁵

Have you been victim of any form of violence in schools, for example bullying, corporal punishment or abuse by teachers?*

- a) Yes
- b) No

If yes, what form of violence have you experienced? (you can give more than one option)

- a) Bullying
- b) Corporal punishment
- c) Sexual abuse
- d) Other

Who did this?

- a) Male schoolmate
- b) Female schoolmate
- c) Male teacher
- d) Female teacher
- e) Other school staff (male/female)
- f) Non-school staff (male/female)

How often did these incidents occur?

- a) On a daily basis
- b) On a weekly basis
- c) Once a month
- d) Once every few months (two or three times in the school year)
- e) Only once in the school year

2. Consequences of school violence

Education

As a result of violence, have you:

- a) Missed days of school?
- b) Failed courses?
- c) Felt like you were unable to learn?
- d) Dropped out of school?

If you miss classes, how often do you miss classes?

- a) At least once a month
- b) Once every two to three months
- c) Rarely (once or twice in the school year)

If at least once a month, how many days of school have you missed in one month:

- a) One day
- b) Two to five days
- c) Five to 10 days
- d) More than 10 days
- e) I don't miss classes every month, only once in a while

If you have missed courses, how many have you failed?

- a) One course
- b) More than one course

During how many years of school have you failed courses?

- a) One year
- b) More than one year

If you have dropped out of school, which of the following applies?

- a) Being the victim of violence was the only reason you dropped out
- b) You were expelled because you were violent to other students/teachers
- c) There were other reasons for your decision to drop out (cost of school, need to work, distance) and violence was one of those several causes
- d) Violence was not a cause

Would you go back to school if you were sure not to experience episodes of violence again?

- a) Yes
- b) No

Physical health

If you were a victim of **bullying**, was this abuse mainly verbal or physical (e.g. fighting, beaten up)?

- a) Verbal
- b) Physical

If physical, were you injured?

- a) Yes
- b) No

If you were injured, was the injury moderate (e.g. no major consequences) or were you severely injured (so that you couldn't go to school, had to seek medical attention)?

- a) Moderate
- b) Severe

If severe, what were the consequences?

- a) I missed days of school (how many days?)
- b) I had to stop working²⁷⁶ (for how many days?)
- c) I had to go to the clinic/hospital to get medical attention

If you were the victim of **corporal punishment**, were you injured?

- a) Yes
- b) No

If you were injured, was the injury moderate (e.g. no major consequences) or were you severely injured (so that you couldn't go to school, had to seek medical attention)?

- a) Moderate
- b) Severe

If severe, what were the consequences?

- a) I missed days of school (how many days?)
- b) I had to stop working (for how many days?)
- c) I had to go to the clinic/hospital to get medical attention

If you experienced **sexual abuse**, was it mainly verbal or physical?

- a) Verbal
- b) Physical

If physical, were you physically injured? (e.g. forced intercourse/rape)

- a) Yes
- b) No

If physical, did you seek medical attention?

- a) Yes
- b) No

If you were the victim of rape, did you become pregnant as a result?

- a) Yes
- b) No

If raped, are you aware of having contracted any STI (HIV/AIDS, Chlamydia, etc) as a result?

- a) Yes
- b) No

If yes, have you sought treatment and/or needed to purchase medicines to cure it?

- a) Yes
- b) No

If yes, do you know which STI you were diagnosed with?

Psychological and emotional well-being

Did you feel emotional distress as a result of the episode of violence?

- a) Yes
- b) No

If yes, did you seek counselling, psychological support?

- a) Yes
- b) No

If no, why not?

- a) I did not need it
- b) Service was unavailable
- c) It was too expensive

If yes, who provided the service?

- a) The school
- b) Community/local organisation
- c) Private practitioner
- d) Government service
- e) Other

Social

As a result of school violence, has any of the following taken place?

- a) Lost friends
- b) Lost trust in school
- c) Lost trust in teachers
- d) The community feels more unsafe

3. Direct economic impact of violence

Out-of-pocket expenditure/lost revenue

Do you know how much your father/mother (the main income earner in the household) earns in one week? (*Depending on the context, the response can be a figure, or a multiple choice response can be included, with a range of probable earnings).

If you had to go to the clinic/hospital to get medical attention, how much did you spend?

Who paid for these expenses?

- a) Me
- b) My family
- c) We had to borrow money/sell assts to pay
- d) The services were free

Did you stop receiving payment for the days you missed work?

- a) Yes
- b) No

If yes, how much did you lose?

How much do you normally earn in a week?

*(*These next questions should be asked only if the girl replied she had been raped in the question on sexual abuse)*

If you became pregnant as a result of rape, approximately how much money did you have to spend on pre/postnatal care and cost to give birth?

Who paid for these expenses?

- a) Me
- b) My family
- c) We had to borrow money/sell assets to pay
- d) The services were free

If you sought counselling, how much did it cost?

Who paid for these expenses?

- a) Me
- b) My family
- c) We had to borrow money/sell assts to pay
- d) The services were free

If you were working prior to the pregnancy/birth, have you had to stop working as a result?

- a) Yes
- b) No

If yes, how much did you lose?

*(*If the baby is already born)*

Do you have to pay for child care costs?

- a) Yes
- b) No

If yes, how much do you have to pay?

What other costs have you needed to pay for related to the care of your child? (State the 3 most important costs):

- 1)
- 2)
- 3)

How much do you estimate that you spend on your baby each month, including for the items you mentioned in the question below? *(Response can be a figure or a range or possible costs can be provided in a multiple choice format)*

Appendix 5: Estimating the Social Costs of Early School Leaving – Methodological Note

This methodology attempts to quantify a lower bound of the social impact of leaving school before graduating from secondary education by estimating the economic costs, also referred to as opportunity costs, which are “those costs that are paid by society in the form of the forgone value of a productive resource or a forgone profitable investment opportunity” (Cunningham et al 2008: 248).

Leaving school early entails a cost because the person’s lifetime earnings will be lower because he or she has a lower level of schooling than if he or she had finished school. In the case of a young person who decides to drop out of high school, for example, this cost is equal to the net present value of the earnings differential between an average high school graduate and an average secondary / high school dropout. Also, secondary / high school dropouts may have a higher risk of unemployment, lower labour force participation rates, and fewer hours of work than people with a full high school education. If so, the earnings of secondary / high school dropouts would be lower than those of high school graduates because of lower wages, lower labour supply (because of lower participation, higher unemployment, or fewer hours worked), or a combination of these. Furthermore, it is probable that high school graduates will continue their education through college and, thus, will have higher lifetime earnings associated with this higher level of education (Cunningham et al. 2008:249).

When individuals drop out of school early, they impose an opportunity cost to society from the forgone higher productivity that they would have had if they had completed their education. By not dropping out of school, individuals would have produced a higher value when in the labour force. That lost value is the opportunity cost to society. Assuming that wages are equal to the value of the marginal productivity of labour, we can proxy this opportunity cost by the net present value of the difference in lifetime earnings for graduates and dropouts. The opportunity cost to society includes the value of taxes individuals would have paid had they finished secondary education, since the value of the marginal productivity is equivalent to total earnings, not just after-tax earnings.

The methodology entails three steps:

1. **Calculating the social cost per individual early school leaver:** the individual or unit cost in its simplest form is the net present value of the wages earned by secondary/ high school dropouts and high school graduates. In order to account for the fact that graduating from high school not only has a return on its own, but also opens the possibility of attending college, the unit cost calculation incorporates the probability that a high school graduate attends college or university, which is estimated using the fraction of high school graduates who attend college or university in the country. The unit cost of early school leaving is a sum of the net present value of the difference between the wages of secondary / high school dropouts and secondary / high school graduates and secondary / high school dropouts weighted by the probability of a secondary / high school graduate attending college:

$$\sum_{t=1}^T \frac{w_{hs} - w_{drop}}{(1+r)^t} \times [1 - p(\text{college}|HS)] + \sum_{t=1}^T \frac{w_{college} - w_{drop}}{(1+r)^t} \times [p(\text{college}|HS)]$$

Where r is the discount rate and T is the length of the working life, both of which will be determined as assumptions

2. **Calculating the total cost of early school leaving for the country:** first calculate the number of early school leavers which is simply the population of students in secondary school multiplied by the dropout rate. Then multiply the unit cost by the number of early school leavers,
3. **Calculating the cost of early school leaving as a proportion of GDP:** a measure of nominal GDP can be obtained from the national accounts statistics of the country, the World Bank, IMF, Economist Intelligence Unit or CIA World Fact Book. It is important that the GDP figure is for the same year as the wage data and is in the same units (i.e current or constant currency units). Divide the total cost by the nominal GDP to obtain the cost of ESL as a proportion of GDP.

Syntesis of step by step process explained above, with ID codes for variables in the formula

ID	Variable	Source/Formula
Step 1. Calculating cost per ESL		
wdrop	Median annual earnings for a high school dropout	Labor Force/Employment Survey
whs	Median annual earnings for a high school graduate	Labor Force/Employment Survey
wcollege	Median annual earnings for a college graduate	Labor Force/Employment Survey
p(college HS)	Probability of high school graduate attending college	Administrative records
r	Social rate of return	Assumption
T	Length of working life	Assumption
ucost	Unit cost per ESL	$p(\text{college} \text{hs}) * (\text{net present value of } w\text{college} - w\text{drop}) + [(1 - p(\text{college} \text{hs})) * (\text{net present value of } w\text{hs} - w\text{drop})]$
Step 2. Calculating number of ESL		
psecondary	Number of students enrolled in secondary education	Administrative records/census/survey
drate	Dropout rate	Administrative records/census/survey
pdropout	Number of secondary education dropouts	$p\text{secondary} * \text{drate}$
tcost	Total cost	$p\text{dropout} * \text{ucost}$
Step 3. Calculating cost of ESL as % of GDP		
gdp	Nominal GDP	National Accounts
costgdp	Cost as a percent of GDP	$\text{tcost} / \text{gdp}$

After obtaining the value for the rate of foregone social benefits resulting from ESL as a % of GDP, in order to estimate the monetary loss of ESL resulting from school violence, the rate (as % GDP) is multiplied by the country's nominal GDP, which gives the total loss from ESL, and then multiplying it by the % of cases of ESL that can be associated with school violence. In the examples in section 4, we have used a range from 1% to 5%.

Estimates for case study countries:

1) **Brazil:** the cost of ESL calculated as 14.4% of GDP was taken directly from Cunningham, et al 2008 and hence not estimated for this paper.

2) **Ethiopia:** the cost of ESL could not be calculated given the unavailability of data. Out of the variables required, only those indicated below could be obtained, those indicated as N.A. were unavailable:

Wdrop	Whs	wcollege	r	t	p(college hs)	
N.A.	N.A.	N.A.	0.05	45	10%	
Psecondary	Drate	pdropout	ucost	tcost	gdp	Costgdp
2,189,021.00	10.2%	222,365.00	*	*	\$US 25,584,534,629	*

* Could not estimate these figures due to the unavailable data

Source: Ethiopia Welfare Monitoring Survey 2004

3) **India:** The variables and the sources used for the calculation of the cost of ESL as a % GDP are detailed below

Wdrop	whs	wcollege	r	t	p(college hs)	
33636.24	52850.16	95043.96	0.05	45	10%	
psecondary	drate	pdropout	ucost	tcost	gdp	Costgdp
44,170,844.69	36.7%	16,210,700.00	\$380,328.73	6,165,394,891,258.62	\$US 48,072,200,000,000	12.8%

Year: wages: 2007-2008, education: 1994-1995

Sources: National Sample Survey

Report No. 439

Report No. 531

Economist Intelligence Unit

Assumptions: Wage differences remain constant throughout individual's lifetime

Average daily wages multiplied by 288 assuming full time employment

4) **Sierra Leone:** the cost of ESL could not be calculated given the unavailability of data. Out of the variables required, only those indicated below could be obtained, those indicated as N.A. were unavailable:

Wdrop	Whs	wcollege	r	t	p(college hs)	
N.A.	N.A.	N.A.	0.05	45	N.A.	
psecondary	Drate	pdropout	ucost	tcost	gdp	Costgdp
227,661	N.A.	N.A.	*	*	US\$1,954,325,590	*

* Could not estimate these figures due to the unavailable data

Source: Indicator for 2007, World Development Indicators 2009

5) **United States:** The variables and the sources used for the calculation of the cost of ESL as a % GDP are detailed below

Wdrop	Whs	wcollege	r	t	p(college hs)	
25,045	33,695	61,815	0.05	45	0.65	
psecondary	Drate	pdropout	ucost	tcost	gdp	Costgdp
15,081,091	9.3%	1,402,541.46	\$468,593.69	657,222,079,333.75	14,256,275,000,000	4.6%

Year: 2006

Sources: Digest of Education Statistics 2009, National Center for Education Statistics
 Bureau of Economic Analysis, National Ecaonomic Accounts

Assumptions: Wage differences remain constant throughout individual's lifetime
 Median annual earnings of year-round, full-time workers 25 years old and over,
 Simple averages of male and female earnings

Endnotes

¹ Plan International (2008a).

² www.endcorporalpunishment.org/pages/hrlaw/crc_session.html.

³ For definitions of incidence- and prevalence-based costs please see Corso et al. (2007) and Miller et al. (2000).

⁴ National Council to Reduce Violence against Women and Their Children (2009).

⁵ Macmillan (2001); Malinosky-Rummell and Hansen (1993).

⁶ Colman et al. (2009).

⁷ Butchart et al. (2008); Skaperdas et al. (2009).

⁸ e.g. Carroll (nd); Jones et al. (2008); Plan International (2008a).

⁹ e.g. Perry et al. (2006).

¹⁰ in de Ferranti et al. (2003).

¹¹ Perry et al. (2006).

¹² UNESCO/OECD (2002).

¹³ For example CRRECENT (2009); Neiman et al. (2009); Plan Brazil (2010).

¹⁴ MSI (2008); Save the Children Denmark et al. (2008); UNICEF ROSA (2001).

¹⁵ Skaperdas (2009).

¹⁶ e.g. Carroll (nd); CRRECENT (2009); Plan Brazil (2010).

¹⁷ CRRECENT (2009).

¹⁸ e.g. Plan Brazil (2010).

¹⁹ A proposed set of questions to be included in questionnaires on school violence to be better able to ascertain its economic costs is included in Appendix 2.

²⁰ See Young Lives – Household Questionnaire (1994 cohort) – Round 2 (2006): www.younglives.org.uk/research-methodology-data/questionnaires.

²¹ For a review of these methodologies, please see Butchart et al. (2008).

²² Philips (2009).

²³ [www.principals.org/Content.aspx?topic=The Financial Costs of Bullying Violence and Vandalism](http://www.principals.org/Content.aspx?topic=The_Financial_Costs_of_Bullying_Violence_and_Vandalism).

²⁴ 'Counterfactual' refers to the situation for the individual, institution, community or economy had incidents of violence been avoided.

²⁵ Based on discussion with James Mercy, CDC, authors' interview, May 2010.

²⁶ Saath Charitable Trust and Plan International (2006).

²⁷ See the UN Children's Fund (UNICEF) Multiple Indicator Cluster Survey (MICS) 3, Sierra Leone, 2005 at www.childinfo.org/mics3_surveys.html.

²⁸ ACPF (2006a).

²⁹ Hammitt (2003).

³⁰ National Council to Reduce Violence against Women and Their Children (2009).

³¹ Skaperdas et al. (2009).

³² e.g. Schuller et al. (2004).

³³ Authors' compilation.

³⁴ For example, in the recent case of the teenager Phoebe Prince, who committed suicide purportedly as a result of being constantly physically and verbally bullied by schoolmates, on school grounds, over three months, in the state of Massachusetts in the US, nine teenagers were prosecuted and are undergoing a criminal investigation:

<http://edition.cnn.com/2010/CRIME/03/29/massachusetts.bullying.suicide/index.html>. In the case of Dylan Theno, of Kansas City, Kansas, also in the US, the jury awarded him compensation of \$25,000, to be paid by the school district for failing to stop the bullying that led him to drop out of school in 2004: www.kcra.com/education/4843720/detail.html.

³⁵ Bagley and Pritchard (1998).

³⁶ e.g. Reza et al. (2007); USAID (2008).

³⁷ Some articles in the Indian press have reported cases of students dying as a result of injuries inflicted through corporal punishment in schools. See www.indianexpress.com/news/thrashed-by-teacher-student-dies/208305/ and www.tribuneindia.com/2002/20020710/ldh1.htm.

³⁸ e.g. Clacherty et al. (2004); HRW (1999).

³⁹ e.g. Save the Children (2003).

⁴⁰ e.g. Murphy et al. (2010).

⁴¹ Plan International (2008a).

⁴² Smith (2005).

⁴³ Brown and Taylor (2008); Murphy et al. (2010).

⁴⁴ www.cdc.gov/HealthyYouth/yrbs/index.htm.

⁴⁵ Save the Children Denmark et al. (2008).

⁴⁶ Plan Brazil (2010).

⁴⁷ Temple (2001).

⁴⁸ Chaaban (2008).

⁴⁹ Cunningham et al. (2008).

⁵⁰ Audit Commission (2010).

- ⁵¹ Save the Children Denmark et al. (2008).
- ⁵² Reza et al. (2007).
- ⁵³ The study did not directly ask how many of those girls abused in school became pregnant, so it is not possible to provide a figure for this; however, given the rate of sexual abuse in schools and the number of unwanted/unplanned pregnancies, we can assume that at least some of the cases of dropouts resulting from pregnancy are linked to sexual abuse in schools.
- ⁵⁴ HRW (2001).
- ⁵⁵ USAID (2008).
- ⁵⁶ MSI (2008).
- ⁵⁷ Ibid.
- ⁵⁸ UNICEF ROSA (2001).
- ⁵⁹ Handa (1999); Hobcraft (1993); Strauss (1990).
- ⁶⁰ Plan International (2008b).
- ⁶¹ Munni and Malhi (2006).
- ⁶² Carroll (nd).
- ⁶³ Plan Brazil (2010).
- ⁶⁴ It is important to note that these figures correspond with students' answers regarding perceived impact, but no academic test was used to corroborate impact on learning.
- ⁶⁵ This study presents a very useful methodology reliant on having panel data (from a longitudinal survey) that asks questions on school violence/bullying during childhood and then records information about earnings as an adult.
- ⁶⁶ Brown and Taylor (2008).
- ⁶⁷ Ibid.
- ⁶⁸ Cunningham et al. (2008).
- ⁶⁹ London Economics (2005).
- ⁷⁰ Email correspondence with Alexander Butchart, WHO, June 2010
- ⁷¹ For example, the US National School Safety and Security Services reports on the number of school deaths and school shootings: www.schoolsecurity.org/trends/school_violence08-09.html, identified through print and electronic news sources. In 2008-2009, it reported eight shootings with victims injured, four suicides and one stabbing, all related to incidents of school violence.
- ⁷² e.g. Jones et al. (2008); Plan International (2008a); UNICEF (2006).
- ⁷³ www.cdc.gov/violenceprevention/nvdrs/index.html.
- ⁷⁴ www.cdc.gov/mmwr/preview/mmwrhtml/ss5801a1.htm#tab12.
- ⁷⁵ e.g. Molla et al. (2002); Morrison and Orlando (2004); Reza et al. (2007).
- ⁷⁶ Evidence suggests that most cases of child abuse occur in the household or in the community, with a minority occurring in schools (email exchange with Alexander Butchart, WHO, June 2010; Reza et al. 2007).
- ⁷⁷ All the adult respondents in this study had suffered abuse as children in their homes (not schools) and were seeking medical attention as adults. So, although it does not refer to the health costs of school violence, which have not been recorded by any dataset, it does suggest that school violence could have some economic implications for the health sector, particularly in developed countries, where such support is provided.
- ⁷⁸ Bowlus et al. (2003).
- ⁷⁹ Wang and Holton (2007).
- ⁸⁰ This study uses data on the Harm Standard from the US in the Third National Incidence Study of Child Abuse and Neglect. However, it does not disaggregate data according to where the incident of abuse of neglect occurred.
- ⁸¹ UN Secretary-General (2006).
- ⁸² Worku et al. (2006).
- ⁸³ UNICEF (2006).
- ⁸⁴ UNICEF Sierra Leone (2008).
- ⁸⁵ Symington (2010).
- ⁸⁶ UNICEF (2006).
- ⁸⁷ Saath Charitable Trust and Plan International (2006); HRW (2008).
- ⁸⁸ Email correspondence with Alexander Butchart, WHO, June 2010.
- ⁸⁹ Ibid.
- ⁹⁰ Plan Brazil (2010)
- ⁹¹ e.g. Fox et al. (2003).
- ⁹² Ennew and Plateau (2004).
- ⁹³ Beazley et al. (2006).
- ⁹⁴ Edleson (1999); Malinosky-Rummell and Hansen (1993).
- ⁹⁵ Silverman et al. (1996).
- ⁹⁶ Several studies talk about the problem of underreporting, including victims' parents not allowing them to speak out about violence, particularly when committed by teachers. For example, in Ghana the majority of victims of school violence interviewed indicated they did not like the sexual abuse they experienced; however, only 30% reported the incident – the majority (70%) did not report the incident to anyone (CRRECENT, 2009).
- ⁹⁷ Wiklund et al. (2010).
- ⁹⁸ e.g. HRW (2008); Plan International (2008a); UNICEF ROSA (2001).
- ⁹⁹ HRW (2008).
- ¹⁰⁰ e.g. Lianga et al. (2007), in Plan International (2008a); Mugawe and Powell (2006), in Jones et al. (2008).

- ¹⁰¹ US Secret Service Threat Assessment Center (2000), in Plan International (2008a).
- ¹⁰² Thompson Gershoff (2002).
- ¹⁰³ Salmivalli (2004).
- ¹⁰⁴ SCMH (2003).
- ¹⁰⁵ The cost estimates in this report are calculated using a reported prevalence approach based on Australian Bureau of Statistics Personal Safety Survey data. A prevalence approach measures the costs associated with domestic violence in a specific year, based on the number of women experiencing violence in that year – that is, it includes the costs of all domestic violence occurring in that year. The approach captures reported violence only – in other words, unreported violence is not included.
- ¹⁰⁶ Walby (2004).
- ¹⁰⁷ UNFPA and ICRW (2009).
- ¹⁰⁸ GNI per capita was \$340 in Uganda and \$2,250 in Morocco in 2008 (UNFPA and ICRW, 2009).
- ¹⁰⁹ Galea et al. (2002).
- ¹¹⁰ Wright and Fitzpatrick (2006).
- ¹¹¹ Prevent Child Abuse New York (2003).
- ¹¹² Naker (2005).
- ¹¹³ Macmillan (2001).
- ¹¹⁴ Colman et al. (2009).
- ¹¹⁵ WHO (2002).
- ¹¹⁶ Oyanedel and Bazan (2008)
- ¹¹⁷ Ibid.
- ¹¹⁸ CDC (2008).
- ¹¹⁹ English et al. (2004).
- ¹²⁰ Swan (1998).
- ¹²¹ Prevent Child Abuse New York (2003).
- ¹²² Soares (2009).
- ¹²³ Kacker et al. (2007); Saath Charitable Trust and Plan International (2006).
- ¹²⁴ e.g. UNESCO (1997).
- ¹²⁵ e.g. Plan International (2008a).
- ¹²⁶ Aos et al. (1999).
- ¹²⁷ www.surgeongeneral.gov/library/youthviolence/chapter5/sec7.html#topper.
- ¹²⁸ Fix Foster Care Now (2007).
- ¹²⁹ Eisenbraun (2007).
- ¹³⁰ Naker (2005).
- ¹³¹ Blaya and Debarbieux (2008); Jones et al. (2008).
- ¹³² Plan International (2008a).
- ¹³³ Plan International (2008a).
- ¹³⁴ Flannery (1998).
- ¹³⁵ Plan International (2008a).
- ¹³⁶ HRW (2008).
- ¹³⁷ www.endcorporalpunishment.org/pages/pdfs/charts/Chart-Global.pdf.
- ¹³⁸ Plan International (2008a).
- ¹³⁹ www.unicef.org/infobycountry/index_27533.html.
- ¹⁴⁰ UN Secretary-General (2005).
- ¹⁴¹ Budlender and Proudlock (2008).
- ¹⁴² e.g. Blaya and Debarbieux (2008); Plan International (2008a).
- ¹⁴³ These systematic reviews provide information about the impact of the initiatives but not about their costs.
- ¹⁴⁴ Rigby (2000).
- ¹⁴⁵ Eisenbraun (2007); Peterson et al. (nd).
- ¹⁴⁶ ECLAC and W.F Kellogg Foundation (2008).
- ¹⁴⁷ Koroma (2010).
- ¹⁴⁸ UNICEF (2006); USAID (2008).
- ¹⁴⁹ Barnes et al. (2007); PHR (2002).
- ¹⁵⁰ USAID (2008).
- ¹⁵¹ Kirk and Winthrop (2005).
- ¹⁵² www.endcorporalpunishment.org/pages/frame.html.
- ¹⁵³ www.endcorporalpunishment.org/pages/frame.html.
- ¹⁵⁴ Blaya and Debarbieux (2008).
- ¹⁵⁵ UNICEF (2007).
- ¹⁵⁶ Saath Charitable Trust and Plan International (2006).
- ¹⁵⁷ By Cunningham and Correia (2003), Chaaban (2008) and Cunningham and García-Verdú (forthcoming).
- ¹⁵⁸ The estimate of foregone benefits to society includes losses in output resulting from lower levels of education, lower gross earnings (including taxes) and lost productivity over lifetimes. Appendix 5 gives more details of this methodology.
- ¹⁵⁹ Cunningham et al. (2008).
- ¹⁶⁰ Abramovay and Rua (2005).
- ¹⁶¹ UNESCO (2003).

- 162 World Bank (2006).
 163 Ibid.
 164 World Bank Brazil at a Glance data: http://devdata.worldbank.org/AAG/bra_aag.pdf.
 165 Ibid.
 166 Waiselfisz (2010).
 167 World Bank (2006).
 168 Dr. Cleo Fante, authors' interview, May 2010.
 169 Plan Brazil (2010).
 170 Abramovay and Rua (2005).
 171 www.naobataeduque.org.br/site/reforma_legal/brasil.php.
 172 <http://revistavisaojuridica.uol.com.br/advogados-leis-jurisprudencia/36/artigo141563-4.asp>.
 173 Statement by Mauro Zacher, author of the initiative, as reported in www.gestaouniversitaria.com.br/noticias/22092-camara-aprova-lei-anti-bullying.html.
 174 Save the Children Sweden (2009).
 175 Jones et al. (2008).
 176 UNESCO (2003).
 177 Plan Brazil (2010).
 178 Ibid.
 179 UNESCO (2003); World Bank (2006).
 180 Centers for Disease Control and Prevention (2008)
 181 World Health Organization (2002)
 182 World Bank (2006)
 183 Plan Brazil (2010)
 184 Source: GDP data, World Bank World Development Indicators, 2008 <http://data.worldbank.org/country/brazil>
 185 Moacyr Bittencourt, Plan Brazil, authors' interview, May 2010.
 186 Abramovay and Rua (2005).
 187 UNESCO (2003) and Dr. Cleo Fante, email correspondence, May 2010.
 188 UNESCO (2003).
 189 Waiselfisz and Maciel (2003).
 190 14.476 million students in lower secondary and 17.812 million in primary, according to UNESCO statistics, <http://stats.uis.unesco.org/unesco/TableViewer/tableView.aspx>.
 191 Terefe and Mengitsu (1997).
 192 ACPF (2006b).
 193 Save the Children Denmark, et al. (2008).
 194 Asfaw and Hagos (2008).
 195 ACPF (2006b).
 196 ACPF (2006b).
 197 Save the Children Denmark et al. (2008).
 198 ACFP (2006b).
 199 Save the Children Denmark et al. (2008).
 200 e.g. ACPF (2006a); (2006b).
 201 Worku and Addisie (2002).
 202 Save the Children Denmark et al. (2008).
 203 Ibid.
 204 ACPF (2006b).
 205 DevTech Systems (2004).
 206 FDRE (2006).
 207 Kacker et al. (2007).
 208 Asif Mohamed, Plan India, authors' interview, May 2010.
 209 Kacker et al. (2007).
 210 www.endcorporalpunishment.org/pages/pdfs/charts/Chart-SouthAsia.pdf.
 211 Kacker et al. (2007).
 212 Ibid.
 213 This contrasts with findings regarding overall physical abuse (i.e. not just in schools), which show that children aged 5-12 reported the highest percentages of physical abuse.
 214 Kacker et al. (2007).
 215 Saath Charitable Trust and Plan International (2006).
 216 Ibid.
 217 This is based on Cunningham et al (2008) methodology to estimate the costs of Early School Leaving (ESL)
 218 As a result of the data availability for India, which was not as detailed as in the case of the US, the estimate is a very rough approximation (rather than a precise one) of the cost of ESL, based on existing data, using the methodology proposed
 219 Source: GDP data, World Bank World Development Indicators, 2008 <http://data.worldbank.org/country/india>
 220 www.indianexpress.com/news/cbse-to-warn-schools-on-corporal-punishment/637923/.
 221 Email correspondence with Lilly Vishwanathan, Plan India, May 2010.
 222 www.planindia.org/LearnWithoutFear/LWF_Flyer_page.pdf.

- 223 Bhandari (2005).
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225 Barnes et al. (2007).
226 Symington (2010).
227 Koroma (2010).
228 Government of Sierra Leone (2007).
229 www.unicef.org/media/media_39951.html.
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231 www.endcorporalpunishment.org/pages/pdfs/GlobalProgress.pdf.
232 Email correspondence with Grace Harman, Plan Sierra Leone, May 2010.
233 Cobbett (2008).
234 Bangura (2009).
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237 www.anticorruptionsl.org.
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240 http://www.stopbullyingnow.hrsa.gov/hhs_psa/pdfs/sbn_tip_6.pdf.
241 Nansel et al. (2001)
242 There has been a greater development of research and advocacy on school violence since the Columbine High School massacre of 1999, where 12 students were killed and the 2 aggressors (Klebold and Harris), senior high school students, committed suicide. Early stories following the shootings charged that school administrators and teachers at Columbine had long condoned a climate of bullying by the so-called jocks or athletes, allowing an atmosphere of outright intimidation and resentment to fester which, they claimed, could have helped trigger the perpetrators' extreme violence. Reportedly, homophobic remarks were directed at Klebold and Harris. See The Community: Columbine Students Talk of Disaster and Life." New York Times. April 30, 1999 <http://partners.nytimes.com/library/national/043099colo-voices.html>
243 http://www.stopbullyingnow.hrsa.gov/hhs_psa/pdfs/sbn_tip_6.pdf.
244 <http://www.cdc.gov/mmwr/pdf/ss/ss5905.pdf>.
245 <http://www.stopbullyingnow.hrsa.gov/kids/effects-of-bullying.aspx>.
246 Mason (2005).
247 Klicka (2008).
248 To learn more about at the US legal framework on child protection, please see
www.childwelfare.gov/pubs/otherpubs/majorfedlegis.cfm.
249 http://www.stopbullyingnow.hrsa.gov/hhs_psa/pdfs/sbn_tip_6.pdf.
250 <http://edlabor.house.gov/newsroom/2010/03/houses-approves-bill-to-protect.html>.
251 HRW (2008).
252 <http://www.nsvrc.org/publications/booklets/prevention-and-intervention-sexual-violence-schools-talking-about-it>.
253 <http://www.aauw.org/learn/research/all.cfm>.
254 <http://ies.ed.gov/>.
255 <http://www.cdc.gov/ViolencePrevention/youthviolence/schoolviolence/>.
256 http://www.cdc.gov/violenceprevention/pdf/SchoolViolence_FactSheet-a.pdf.
257 Centers for Disease Control and Prevention (2008)
258 See for example, the Surgeon General's report on youth violence in 2001,
<http://www.surgeongeneral.gov/library/youthviolence/toc.html>
259 A wealth of information on youth violence, including in schools, in the US is available from the Center for Disease Control and Prevention, <http://www.cdc.gov/violenceprevention/youthviolence/index.html>
260 Welsh (2002)
261 This is based on Cunningham et al (2008) methodology to estimate the costs of Early School Leaving (ESL)
262 Source: GDP data, World Bank World Development Indicators, 2008 <http://data.worldbank.org/country/united-states>
263 <http://wch.uhs.wisc.edu/13-Eval/Tools/Resources/Model%20Programs/Olweus%20Bully.pdf>.
264 <http://www.clemson.edu/olweus/>.
265 e.g. <http://wch.uhs.wisc.edu/13-Eval/Tools/Resources/Model%20Programs/Olweus%20Bully.pdf> and Blaya and Debarbieux, (2008).
266 http://www.olweus.org/public/bullying_prevention_program.page.
267 http://www.olweus.org/public/faqs.page#Answer_numberCpQ3.
268 http://www.data360.org/dataset.aspx?Data_Set_Id=9661.
269 Source for GDP data: World Development Indicators, 2008, <http://data.worldbank.org/country>; except Eurozone,, 2009 <http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes>
270 Based on a presentation by Steve Aos from the Washington State Institute for Public Policy, which has an important research area concentrated on undertaking cost-benefit analysis of public policies, including many related to child and adolescent well-being. See www.wsipp.wa.gov/topic.asp?cat=18&subcat=0&dteSlct=0. Figure for Cost of early school leaving as % of GDP was taken from Cunningham, et al, 2008 in the case of Bolivia, Colombia, Dominican Republic, Ecuador, El Salvador, Guatemala, Nicaragua, and Peru; from Chaaban, 2008 in the case of Jordan and Egypt and NESSE (N.D:32) in the case of the Eurozone
271 Whitehead et al. (2003).

²⁷² This refers to a situation where the relationship between variables is not simply static or directly proportional to the input, but instead is dynamic and variable.

²⁷³ Cross-sectional data analysis involves observation of all of a sample population at a defined time: information is collected from each individual only at one specific point in time.

²⁷⁴ A longitudinal study is a correlational research study that involves repeated observations of the same items over long periods of time.

²⁷⁵ As with any study on issues related to child protection, it is important to have a research ethics section as guidance for researchers. This would cover a wide range of ethical issues including, for example, what should be done if the researchers uncover a problematic situation, for example how to deal with confidentiality while also needing to promote the protection and well-being of the child.

²⁷⁶ Since many young people also work and study.