Policy Paper 29

Let's decide how to measure school violence

Violence in schools and other education settings causes serious harm to children and adolescents that can last into adulthood. As the UN World Report on Violence against Children observed, it is a global phenomenon (Pinheiro, 2006). Policies, laws and strategies to prevent school-related violence depend on accurate knowledge of its global prevalence, trends and effects, but such evidence is lacking.

School-related violent acts or threats comprise psychological, physical and sexual violence (**Table 1**). They occur not only on school premises but also on the way to school, at home or in cyberspace. They are enforced by unequal power dynamics and are often the result of gender norms and stereotypes (**Box 1**).

Schools do not exist in social isolation from their communities. Gender inequalities and violence at home, within the community or played out in cyberspace affect children and adolescents in school, and may be replicated or intensified in schools. Children's vulnerability to school-related violence is only increased by poorly enforced legislation, inadequate child protection policies and weak or non-existent reporting mechanisms, which often allow perpetrators to act with impunity.

In schools, manifestations of violence include bullying, corporal punishment, verbal and emotional abuse, intimidation, sexual harassment and assault, gang activity and the presence of weapons. While attention usually focuses on extreme events, the more common and often unnoticed forms of violence cause the greatest harm to the education experience of children and adolescents. These tend to be under-reported, as they often involve taboos.

TABLE 1:
Selected definitions on violence

Issue and source	Definition
Violence	
WHO World Report on Violence and Health, 2002	"... the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community, that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment or deprivation"
Sexual violence	
WHO World Report on Violence and Health, 2002	"any sexual act, attempt to obtain a sexual act, unwanted sexual comments or advances, or acts to traffic, or otherwise directed, against a person's sexuality using coercion, by any person regardless of their relationship to the victim, in any setting, including but not limited to home and work"
Bullying	
Global Education Monitoring Report, 2016	"is repeated exposure to aggressive behavior from peers with the intent to inflict injury or discomfort. It can include physical violence, verbal abuse and the intent to cause psychological harm through humiliation or exclusion"
School-related gender-based violence	
EFA Global Monitoring Report Policy Paper 21, 2015	"Acts or threats of sexual, physical or psychological violence occurring in and around schools, perpetrated as a result of gender norms and stereotypes, and enforced by unequal power dynamics."

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The global community recognised the need to protect children from violence, including in schools, in drawing up the Sustainable Development Goals. Target 16.2 is to "end abuse, exploitation, trafficking and all forms of violence against and torture of children". Target 5.2 is to "eliminate all forms of violence against women and girls in public and private spheres, including trafficking and sexual and other types of exploitation". In the case of education in particular, target 4.a is to "provide safe, non-violent, inclusive and effective learning environments for all" and a thematic indicator focuses on the "percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse".

To collect data on aspects of violence in schools, large-scale, multi-country school-based surveys are increasingly used; some countries also have well-established monitoring mechanisms. Overall, however, consistent evidence on the global prevalence and trends of school-related violence is lacking. To ensure reliable data is gathered, action is needed to bridge differences between the various monitoring methods. This paper, launched to coincide with the International Symposium on School Violence and Bullying: From Evidence to Action, in Seoul, Republic of Korea (January 17–19, 2017), aims to inform the current debate and propose options for the future.

School-related violence causes serious harm to children and adolescents

School-related violence results in lasting damage not only to children and adolescents who are victimized but also to the perpetrators.

In most cases, children and adolescents who experience bullying (most often as a victim but also as a perpetrator) tend to experience depression, loneliness, anxiety, low self-esteem and other forms of distress, as evidence from Australia, Chile, Ghana and Switzerland shows (Fleming and Jacobsen, 2009; Owusu et al., 2011; Perren et al., 2010). In Ghana, upper secondary school students who reported signs of depression in the preceding 12 months were almost twice as likely to have been bullied as those reporting no signs of depression (Owusu et al., 2011). Reported levels of sadness, hopelessness and other symptoms of depression tend to increase as bullying becomes more frequent (Fleming and Jacobsen, 2009).

BOX 1

Gender is a key driving factor behind many forms of school-related violence

All forms of school-related violence are affected by gender-related stereotypes that persist in society. Violence in schools reflects underlying social norms regarding authority and expected gender roles. Dominant conceptions of manhood may lead to tolerance of boys acting out expressions of aggression, violence, sexual power and homophobia. Conversely, expectations of girls can include deference to men and boys, submissiveness and passivity.

Witnessing or experiencing violence in the home can teach children and adolescents that violence is 'normal' and increase the risk that they may bully or perpetrate sexual violence in their own lives. Gender norms often dictate that boys settle disputes with physical violence, and some may enact the gender-based violence observed in their own homes or communities against female students.

Schools represent a critical space for learning, including children's understanding of gender roles. Unchecked gender discrimination and power imbalances in schools encourage attitudes and practices that subjugate school children, uphold unequal gender norms and allow the toleration and continuation of gender-based violence.

Both girls and boys can be victims or perpetrators of school-related violence, but to what extent and in which forms differ. Evidence suggests girls are at greater risk of sexual violence, harassment and exploitation, while boys are more likely to experience frequent and severe physical violence. In 79 countries that participated in the Health Behaviour in School-aged Children (HBSC) survey and the Global School-based Student Health Survey (GSHS) over the 2003-2011 period, 11% of males reported being involved in four or more episodes of physical fighting in the previous year compared with 3% of females.

Boys are also more commonly perpetrators of physical bullying, while girls are more likely to use verbal or psychological violence. In Ethiopia, India and Viet Nam, boys are significantly more likely than girls to experience physical bullying. In India, for instance, 26% of boys report physical bullying compared with 19% of girls. On the other hand, girls are more likely to experience psychological bullying in India and Peru.

Children and adolescents find themselves victims of targeted acts of violence as a result of their real or perceived sexual orientation or gender identity. Many lesbian, gay, bisexual and transgender (LGBT) students experience homophobic and transphobic violence in schools, ranging from 16% in Nepal to 85% in the United States. In Australia, the majority of surveyed intersex people reported being bullied in their schooling years, ranging from name-calling and regular insults to physical violence. Students who are not LGBT but do not conform to gender norms can also be targets.

Sources: Elgar et al., (2015); Jones (2016); Pells et al., (2016); Perlson and Greene (2014); UNESCO (2016); UNESCO and UN Women (2016); UNESCO and UNGEI (2015).

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Bullying may expose children to riskier health behaviours and aggression (Lacey and Cornell, 2013). For instance, in Cape Town and Durban, South Africa, upper secondary school students who perpetrate bullying were much more likely to participate in fighting, theft and vandalism, and to drink alcohol, than those who were not involved in bullying (Liang et al., 2007). In the United States, secondary school students involved in physical bullying and cyberbullying also tended to be involved in substance use, violent behaviour and unsafe sexual behaviour (Litwiller and Brausch, 2013).

In many countries, including the Netherlands, Norway, the Republic of Korea, South Africa and the United States, adolescents and young people who experienced bullying or cyberbullying, as either an offender or a victim, were more likely to have suicidal thoughts and to attempt suicide than those who had not experienced such forms of peer aggression (Crepeau-Hobson and Leech, 2016; Hinduja and Patchin, 2010; Kim et al., 2005; Liang et al., 2007; Roland, 2002; Undheim, 2013). In the Netherlands, for instance, nearly 13% of boys directly bullied and 18% of boys indirectly bullied suffered from suicidal thoughts, according to surveys of more than 4,700 primary school students (Wal et al., 2003).

Children and adolescents who are exposed to school violence are at risk of performing poorly at school. For instance, in West and Central Africa, many girls subjected to school-related violence in the form of rape, forced or coerced sex are more likely to have early and unintended pregnancies and, as a consequence, an increased risk of their education being curtailed (Antonowicz, 2010; Psaki, 2016). In Swaziland, according to a nationally representative study of 1,292 young women, 17% of girls aged 13–17 were pulled out of school because of pregnancy. One-tenth of the young women reported being raped. One fifth of these incidents took place in or on the way to school (Pereznieto et al., 2010).

Bullying can also reduce school achievement for both boys and girls. Analysis of TIMSS 2015 data from mainly developed countries shows that grade 4 students who reported being bullied weekly at school scored 36 points lower in mathematics compared with those who reported that they had almost never been bullied (Mullis et al., 2016). In Botswana, Ghana and South Africa, bullied students perform worse academically than non-bullied students (Kibriya et al., 2016). Similarly, across 15 Latin American countries, students who are bullied score 9.6 to 18.4 points less in mathematics and 5.8 to 19.4 points less in reading than their non-bullied peers (Delprato et al., 2017).

The negative effects of school-related violence extend beyond the school years and into adulthood. Bullying increases the risk of offending later in life by more than half, and being bullied increases the risk of later depression by about half, even after controlling for other major childhood risk factors (Farrington et al., 2012). In the United Kingdom, adults who reported being bullied in childhood were more than twice as likely as other adults to attempt suicide later in life (Meltzer et al., 2011). In Finland, adolescents and young adults involved in violent crimes tend to have school records of bullying and other forms of aggressive behaviour (Luukkonen et al., 2011).

Multiple but uncoordinated tools exist to assess school-related violence

Studies that measure school-related violence, whether committed by adults or by children, have two principal objectives. First, they aim to measure the prevalence or incidence of this type of violence against children in the population. Surveys draw on household or school samples; elicit the responses of children or adults; focus on school-related or other types of violence against children; and aim to gauge national or cross-national prevalence and incidence.

Second, they aim to assess the health, social and educational effects of school-based violence on students' lives, usually through violence-related questions that are part of a broader survey. There is an emphasis on the impact on children's education and in particular on learning achievement.

This section presents a series of cross-national and selected national surveys.

CROSS-NATIONAL SCHOOL SURVEYS…

Administering questionnaires to a sample of students at school is considered the most efficient way to estimate the prevalence of violence against children (or the slightly different notion of child maltreatment) and the most reasonable way to focus on school-related violence (Meinck et al., 2016).

Such surveys are generally of two kinds. School violence questions embedded in learning achievement surveys estimate the prevalence of some forms of school violence. Generic surveys of violence against children

include direct questions on school-related violence or ask indirectly whether a particular type of violence took place at school rather than elsewhere. **Table 2** summarizes the types of questions asked in seven cross-national surveys administered at school, by respondent and type of violence.

TABLE 2:

Cross-national surveys that cover school-related violence, by purpose, respondent and type of violence

Survey	Purpose	Respondent	Physical	Sexual	Emotional	Bullying
		Principal				
PISA	Learning	Principal of secondary school				■
SACMEQ	Learning	Principal of primary school	■	■	■	■
		Student				
GSHS	Health	Student aged 13-17	■		■	■
HBSC	Health	Student aged 11, 13 or 15	■		■	■
PISA	Learning	Student aged 15	■		■	■
PIRLS	Learning	Student in grade 4				■
TIMSS	Learning	Student in grade 4 or 8				■
TERCE	Learning	Student in grade 6	■		■	■

...WITH A FOCUS ON LEARNING OUTCOMES

In its 2015 round, the IEA **Trends in International Mathematics and Science Study (TIMSS)** included questions on school-related violence both for grade 4 and grade 8 students under the safe, orderly and disciplined school section of the student background questionnaire. The idea behind the questions is that a sense of insecurity and a lack of discipline do not facilitate learning. The questions focus on bullying, defined as "aggressive behaviour that is intended to harm students who are physically or psychologically less strong", taking "a variety of forms ranging from name calling to inflicting physical harm". The formulation of the questions at both grade levels is identical, with the exception of an additional question on cyber-bullying for grade 8 students (**Figure 1**).

The same questions are also administered as part of the **Progress in International Reading Literacy Study (PIRLS)** to grade 4 students.

As illustrated in **Figure 2**, the results of the 2015 TIMSS show that, across participating countries, about 45% of grade 4 students reported having been bullied at least once a month. National averages varied from 78% in South Africa and 66% in Bahrain to around 25% in Kazakhstan and the Republic of Korea (Mullis et al., 2016).

The OECD **Programme for International Student Assessment (PISA)** asked students and school principals questions about school violence in its 2015 round. First, under the school section of the student background questionnaire, the sampled 15-year old students were asked two sets of questions: a) whether they had experienced any of eight behaviours from other students (these match closely the behaviours and their frequency in the TIMSS questionnaire; the results are expected to be released in an OECD report on student well-being in April 2017); and b) whether they had experienced any of six behaviours from teachers (**Figure 3**).

Second, under the school climate section of the school background questionnaire, the principals of the sampled secondary schools were asked *"to what extent is the learning of students hindered by ... students intimidating or bullying other students"* with four options on the strength of the problem: not at all; very little; to some extent; a lot. The percentage of students in schools where the principal reported that bullying hindered student learning to some extent or a lot ranged from 1% in Israel to 46% in Trinidad and Tobago. Among OECD countries, it ranged from 2% in Luxembourg to 35% in the Netherlands, with an average of 11%, although it is clear that this is not a measure of prevalence (**Figure 4**).

FIGURE 1:

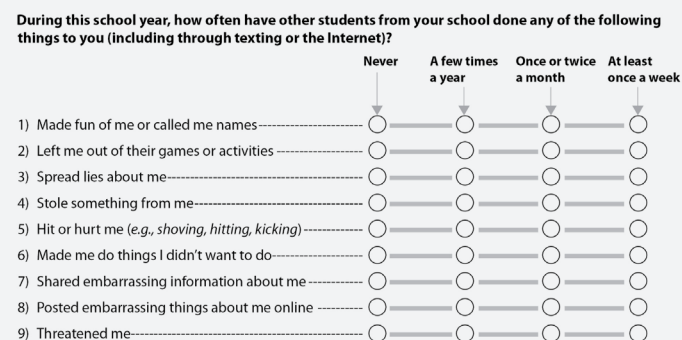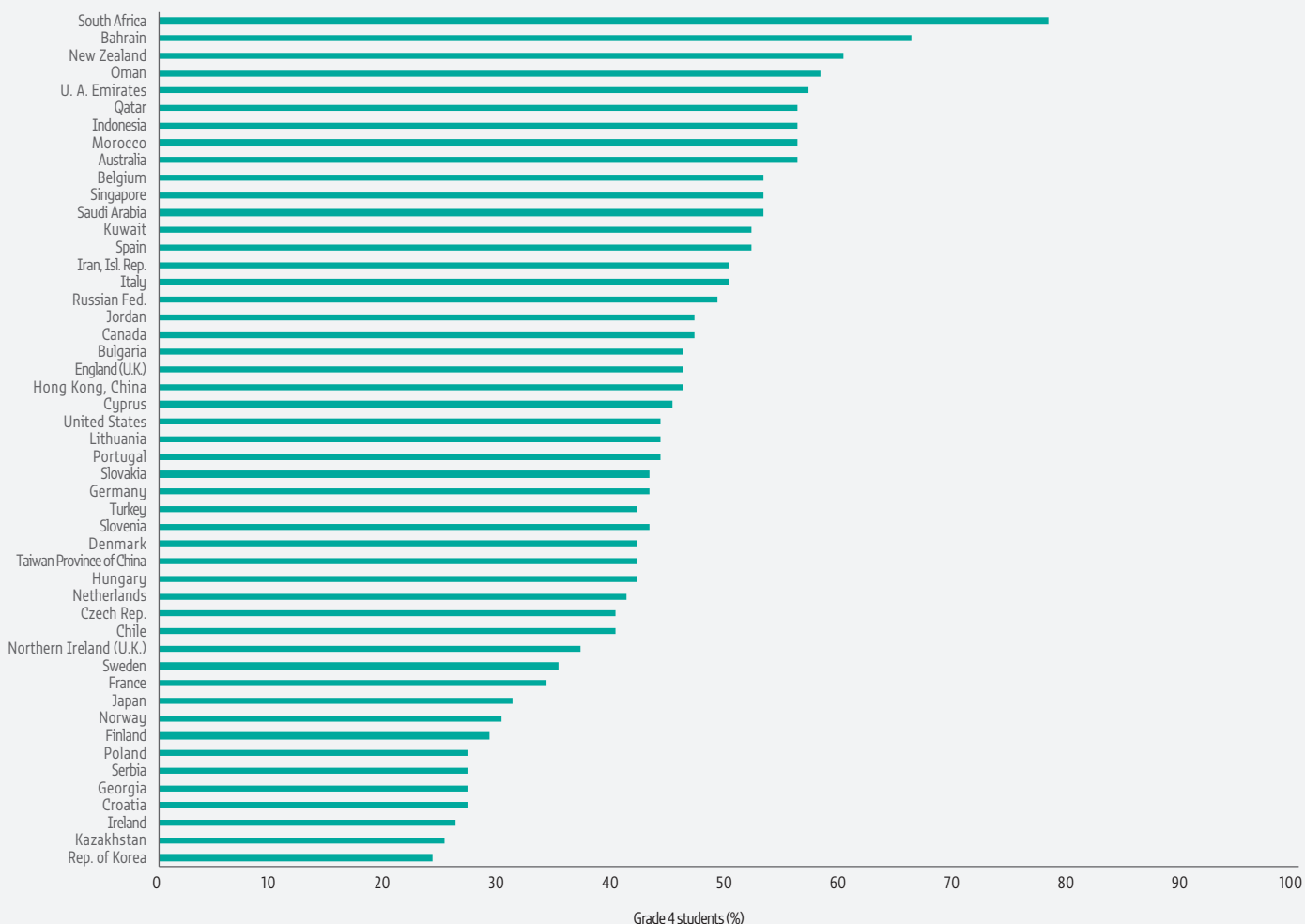**Questions on school-related violence in the 2015 TIMSS student questionnaire**

During this school year, how often have other students from your school done any of the following things to you (including through texting or the Internet)?

	Never	A few times a year	Once or twice a month	At least once a week
1) Made fun of me or called me names	○	○	○	○
2) Left me out of their games or activities	○	○	○	○
3) Spread lies about me	○	○	○	○
4) Stole something from me	○	○	○	○
5) Hit or hurt me (*e.g., shoving, hitting, kicking*)	○	○	○	○
6) Made me do things I didn't want to do	○	○	○	○
7) Shared embarrassing information about me	○	○	○	○
8) Posted embarrassing things about me online	○	○	○	○
9) Threatened me	○	○	○	○

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FIGURE 2:

Percentage of grade 4 students who reported being bullied at least once a month, 2015


| | Grade 4 students (%) |

Source: Mullis et al., (2016).

FIGURE 3:

Questions on school-related violence in the 2015 PISA student questionnaire

ST038	During the past 12 months, how often have you had the following experiences in school? (Please select one response in each row.)	Never or almost never	A few times a year	A few times a month	Once a week or more
ST038Q01NA	I got called names by other students.	□1	□2	□3	□4
ST038Q02NA	I got picked on by other students.	□1	□2	□3	□4
ST038Q03NA	Other students left me out of things on purpose.	□1	□2	□3	□4
ST038Q04NA	Other students made fun of me.	□1	□2	□3	□4
ST038Q05NA	I was threatened by other students.	□1	□2	□3	□4
ST038Q06NA	Other students took away or destroyed things that belonged to me.	□1	□2	□3	□4
ST038Q07NA	I got hit or pushed around by other students.	□1	□2	□3	□4
ST038Q08NA	Other students spread nasty rumours about me.	□1	□2	□3	□4

ST039	During the past 12 months, how often did you have the following experiences at school? (Please select one response in each row.)	Never or almost never	A few times a year	A few times a month	Once a week or more
ST039Q01NA	Teachers called on me less often than they called on other students.	□1	□2	□3	□4
ST039Q02NA	Teachers graded me harder than they graded other students.	□1	□2	□3	□4
ST039Q03NA	Teachers gave me the impression that they think I am less smart than I really am.	□1	□2	□3	□4
ST039Q04NA	Teachers disciplined me more harshly than other students.	□1	□2	□3	□4
ST039Q05NA	Teachers ridiculed me in front of others.	□1	□2	□3	□4
ST039Q06NA	Teachers said something insulting to me in front of others.	□1	□2	□3	□4

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FIGURE 4:
Percentage of students in secondary schools where the principal reported that bullying hindered student learning, 2015
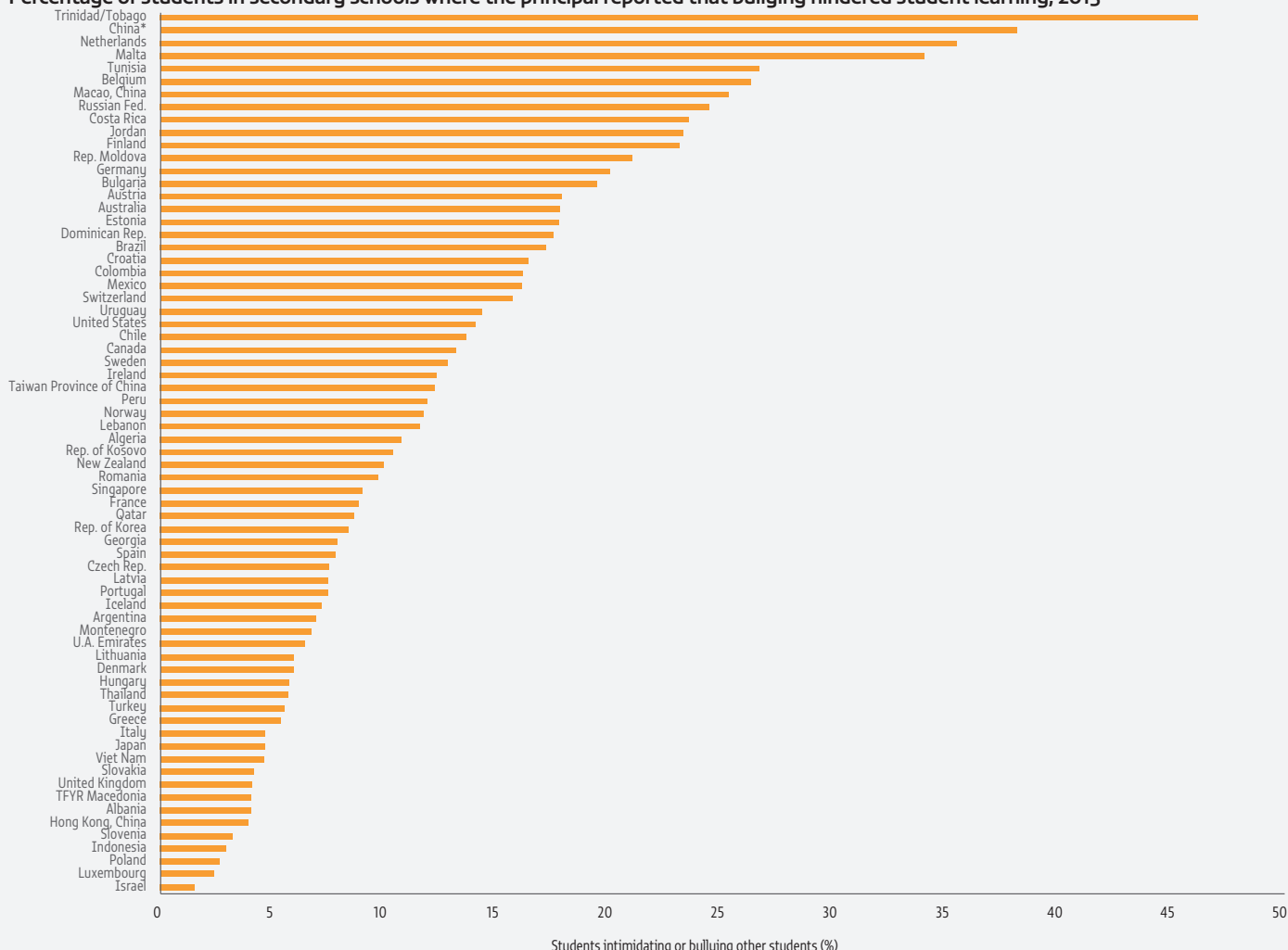
Source: OECD (2016)
Note: China refers to Beijing, Shanghai, Jiangsu and Guangdong.

The **Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ)** survey in 15 countries asked principals of the sampled primary schools in the third round (2007) two questions related to the severity of several violent behaviours, not only towards students but also towards teachers (**Figure 5**). The questionnaire of the fourth round (2013) has not been released yet.

In six countries, including Kenya and Zambia, over 40% of school principals reported in the third round of SACMEQ that pupil–pupil sexual harassment had occurred either 'sometimes' or 'often'. Teachers were also reported to be perpetrators, with an average of 39% of school principals

stating that teacher–pupil harassment had occurred in their schools, with the range varying from one-fifth of surveyed schools in Mozambique to over three-quarters in Seychelles (UNESCO and UNGEI, 2015).

The UNESCO LLECE **Tercer Estudio Regional Comparativo y Explicativo (TERCE)**, which took place in 15 Latin American countries, included questions about violence in the background questionnaires. First, school principals and parents were asked about violence in the vicinity of the school. In particular, responses were solicited on how likely it was to observe in the school neighbourhood drug trafficking, vandalism, fights, robberies and aggravated assaults. Based on parental responses, an index was

FIGURE 5:

Question on school-related violence in the 2007 SACMEQ principal questionnaire

About how often does the school have to deal with the following behaviours of pupils?
(Please tick the appropriate box for __each__ statement.)

		Never	Sometimes	Often	
15.08	Vandalism by pupils	☐	☐	☐	SPUPPR08
15.09	Theft by pupils	☐	☐	☐	SPUPPR09
15.10	Intimidation or bullying of pupils by other pupils	☐	☐	☐	SPUPPR10
15.11	Intimidation / verbal abuse of teachers or staff by pupils	☐	☐	☐	SPUPPR11
15.12	Physical injury to staff by pupils	☐	☐	☐	SPUPPR12
15.13	Sexual harassment of pupils by other pupils	☐	☐	☐	SPUPPR13
15.14	Sexual harassment of teachers by pupils	☐	☐	☐	SPUPPR14
15.17	Fights among pupils	☐	☐	☐	SPUPPR17

About how often does the school have to deal with the following behaviours of teachers?
(Please tick the appropriate box for __each__ statement.)

		Never	Sometimes	Often	
16.04	Intimidation or bullying of pupils by teachers	☐	☐	☐	STCHPR04
16.05	Sexual harassment of teachers by other teachers	☐	☐	☐	STCHPR05
16.06	Sexual harassment of pupils by teachers	☐	☐	☐	STCHPR06
16.07	Use of abusive language by teachers	☐	☐	☐	STCHPR07

FIGURE 6:

Questions on school-related violence in the 2013 TERCE principal and parent questionnaires

In the neighborhood or community in which the school is located, how probable is that the following situations occur?

DQFIT19_01	Explicit sale of drugs or drug consumption
DQFIT19_03	Acts of vandalism
DQFIT19_05	Fights between neighbors
DQFIT19_07	Fights with weapons
DQFIT19_10	Aggressions as a result of which somebody gets seriously (…)
DQFIT19_11	Robberies

created of perceptions of the neighbourhood where the school was located (**Figure 6**).

Second, two sets of questions were asked of grade 6 students. The first set referred to feelings towards other classmates, such as fear and being threatened, or actual bullying behaviours, such as being made fun of, left out, or forced to do things. The second set referred to classroom conditions, such as exchanges of insults between students (or from students to teachers), physical fights and exclusion (**Figure 7**).

Analysis by the GEM Report shows that across TERCE participating countries, psychological bullying was twice as prevalent as physical bullying. The prevalence of physical bullying varied from 9% in Costa Rica to 22% in the Dominican Republic, while rates of psychological bullying varied from 24% in Mexico to 35% in Peru (**Figure 8**).

…AND WITH A FOCUS ON STUDENT HEALTH AND WELL-BEING

The Global School Health Surveys (GSHS) were developed by the World Health Organization (WHO) in collaboration with UNICEF, UNESCO, and UNAIDS; and with technical assistance from the United States Centres for Disease Control. They are school-based surveys conducted primarily among students aged 13–17 to provide data on health behaviours and protective factors among students. There is a violence and unintentional injury module in the two versions of the questionnaire. The presentation below is based on the generic questionnaire, while there are individual variations for each country.

In the core questionnaire, there is a question on physical fights between students (with a 12-month reference period) and two questions on bullying (with a 1-month reference period), the first of which has only been included since 2009 (**Figure 9**). In the expanded questionnaire, there are more detailed questions on school-related violence in the violence and unintentional injury module (**Table 3**).

Analysis of the GSHS data revealed that many adolescent girls and boys are victims of bullying (**Figure 10**). Between 2010 and 2012, the rates at which children reported being bullied in the previous 30 days varied significantly, from 11% of boys and 15% of girls

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FIGURE 7:
Questions on school-related violence in the 2013 TERCE student questionnaire

Do some of these situations happen to you at school?

DQA6IT19_01	… I am afraid of some of my classmates
DQA6IT19_02	… I feel threatened by some classmates
DQA6IT19_03	… I am scared that one of my classmates is going to hit me
DQA6IT19_04	… My classmates make fun of me
DQA6IT19_05	… My classmates leave me alone
DQA6IT19_06	… My classmates force me to do (…)

Have some of these situations happened?

DQPIT24_01	… A student insulted or threatened another student
DQPIT24_02	… A student hit or hurt another student
DQPIT24_03	… A student was excluded from a game or activity organized by (…)
DQPIT24_04	… A student insulted or threatened a teacher

FIGURE 8:
Percentage of grade 6 students who reported being bullied when in school, by type, 2013
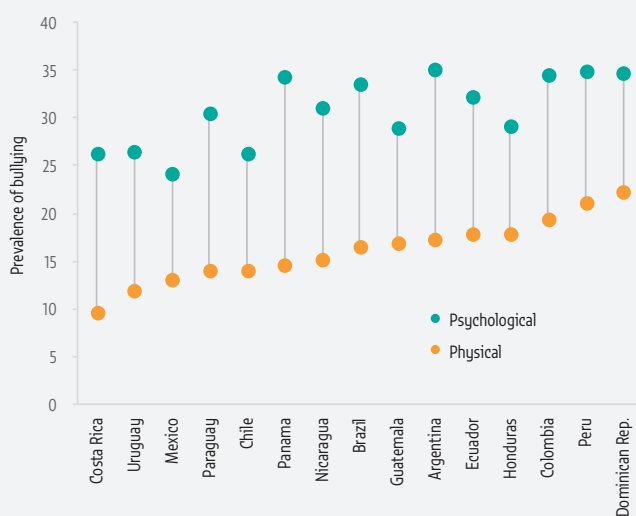
Source: GEM Report team analysis based on TERCE data.

FIGURE 9:
Questions on school-related violence in the 2013 GSHS student core questionnaire

The next question asks about physical fights. A physical fight occurs when two students of about the same strength or power choose to fight each other.

2. During the past 12 months, how many times were you in a physical fight?

   - A 0 times
   - B 1 time
   - C 2 or 3 times
   - D 4 or 5 times
   - E 6 or 7 times
   - F 8 or 9 times
   - G 10 or 11 times
   - H 12 or more times

The next 2 questions ask about bullying. Bullying occurs when a student or group of students say or do bad and unpleasant things to another student. It is also bullying when a student is teased a lot in an unpleasant way or when a student is left out of things on purpose. It is not bullying when two students of about the same strength or power argue or fight or when teasing is done in a friendly and fun way.

6. During the past 30 days, on how many days were you bullied?

   - A 0 days
   - B 1 or 2 days
   - C 3 to 5 days
   - D 6 to 9 days
   - E 10 to 19 days
   - F 20 to 29 days
   - G All 30 days

7. During the past 30 days, how were you bullied most often?

   - A I was not bullied during the past 30 days
   - B I was hit, kicked, pushed, shoved around, or locked indoors
   - C I was made fun of because of my race, nationality, or color
   - D I was made fun of because of my religion
   - E I was made fun of with sexual jokes, comments, or gestures
   - F I was left out of activities on purpose or completely ignored
   - G I was made fun of because of how my body or face looks
   - H I was bullied in some other way

FIGURE 10:

Percentage of 13- to 15-year-olds who reported having been bullied on one or more of the previous 30 days, 2010–2012
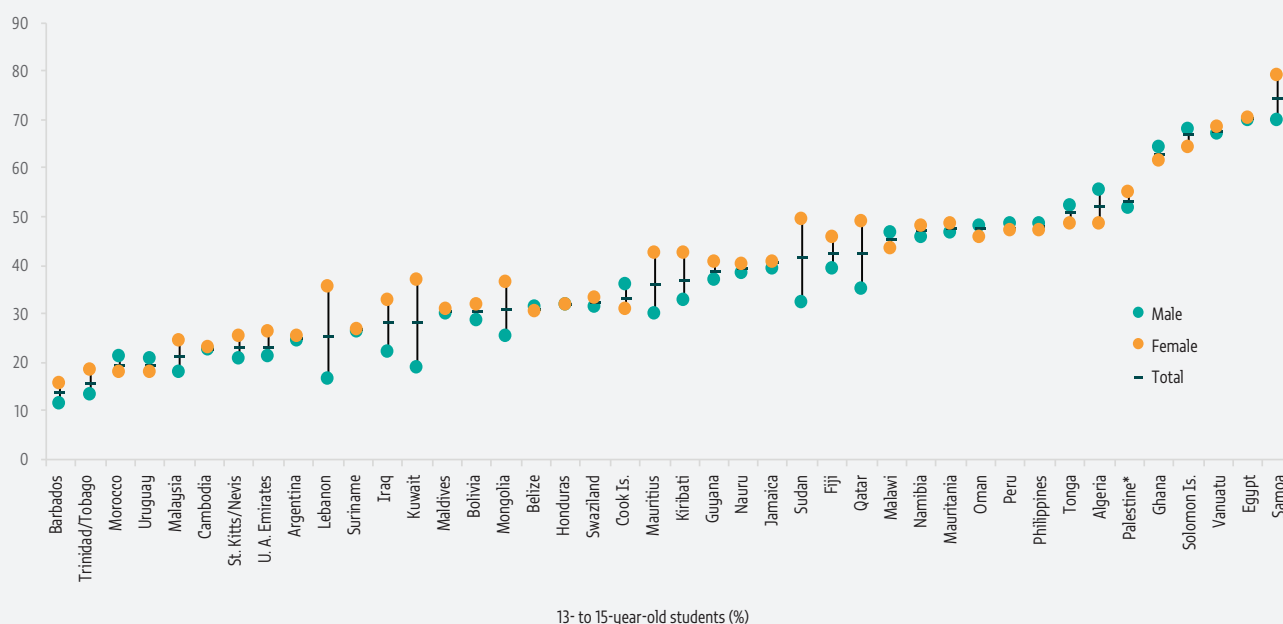
Note: Data for Palestine refer to the West Bank.
Source: GEM Report team analysis (2016) based on 2010–2012 GSHS data.

TABLE 3:

Questions on school-related violence in successive GSHS student expanded questionnaires

	2003-08	2009-12	2013-
During the past 30 days, on how many days did you carry a weapon, such as a gun, knife, club or COUNTRY SPECIFIC OPTIONS, on school property?	■	■	■
During the past 30 days, on how many days did you not go to school because you felt you would be unsafe at school or on your way to or from school?	■	■	■
During the past 30 days, how many times has someone threatened or injured you with a weapon, such as a gun, knife, or club, on school property?	■	■	■
During the past 30 days, how many times has someone stolen or deliberately damaged your property, such as your car, clothing, or books, on school property?	■	■	■
During the past 12 months, how many times were you in a physical fight on school property?	■	■	■
During the past 12 months, how many times were you verbally abused by a teacher?	■		
During the past 12 months, did your teacher ever hit, slap, or physically hurt you on purpose?		■	■

in Barbados to 69% of boys and 79% of girls in Samoa. Being bullied differs between countries in terms of gender. In Kuwait, Lebanon and Sudan, girls' reports of bullying are higher than boys' by about 17% to 19%, while in the Cook Islands and Algeria, boys' reports are higher by about 5% and 7% respectively.

The **Health Behaviour in School-Aged Children Survey (HBSC)** was developed by the WHO Regional Office for Europe. Since 1985-86, it has collected data every four years on the health and well-being of 11-, 13- and 15-year-old students. While the emphasis is on health outcomes, such as obesity, health behaviour (such as physical activity) and risk behaviour (such as use of tobacco and alcohol), there are also questions on bullying and, for the first time in the 2013-14 survey, on cyberbullying (**Box 2**).

While the definition of bullying and the frequency options are identical to those put forward in the GSHS, the reference period is the two months preceding the survey. Another difference is that the HBSC includes a question on perpetrators – not just on victims – of bullying. Young people were asked how often they had taken part in bullying other students at school. While 23% of 15-year-olds had been bullied at least once in the previous two months, with no gender difference, 26% admitted to have bullied others. Boys were 50% more likely to have been bullies (World Health Organization, 2016).

Cyberspace is sometimes used as a forum that extends the school environment

In recent years, mobile phones, the Internet and social media have transformed the nature of bullying. Cyberbullying, defined as "an aggressive, intentional act carried out by a group or individual, using electronic forms of contact, repeatedly and over time against a victim who cannot easily defend him or herself" has become a pervasive threat to the health and well-being of adolescents and young people. Cyberbullying allows individuals to extend face-to-face bullying to an online environment where actions can have instant, widespread and permanent effects. In many cases, a significant association has been found between cyberbullying and bullying experiences in school. In a web-based survey of over 1,400 12- to 17-year-olds the United States, for instance, 72% of respondents reported at least one online incident of bullying within the previous year, 85% of whom had also experienced bullying in school.

Sources: Juvonen and Gross; (2008); Smith et al., (2008); Stanbrook, (2014).

In the case of cyberbullying, young people were asked whether they had experienced anyone sending mean instant messages, wall-postings, emails and text messages. Among 15-year-olds, 11% had been bullied at least once in this way during the previous two months. In response to an additional question, 9% of 15-year-olds said an unflattering or inappropriate picture of them had been posted online without their permission.

NATIONAL SURVEYS

In addition to cross-national surveys that touch upon school-related violence, national surveys are carried out. Often these are independent efforts, not linked to surveys in other countries.

In **Chile**, the Child Maltreatment Survey has been taking place every six years since 1994 with the support of UNICEF. In 2012, there were questions on maltreatment, abuse or threats at school during the year before the survey (**Figure 11**). Grade 8 students were asked whether they had been victims of ridicule, physical harm, fight, threats or rejection by their classmates. They were also

FIGURE 11:

Questions on school-related violence in the Child Maltreatment Survey in Chile

69. Have you ever suffered these situations at school? Select the frequency with which they have occurred to you during the last year. *Select just one alternative per question: Never (1), Once (2), Sometimes (3), or Frequently (4).*

		Never	Once	Sometimes	Frequently
1	Have they made fun of you or ridiculed you	1	2	3	4
2	Have they inflicted physical harm on you (kick, hit, push)	1	2	3	4
3	Have they insulted you	1	2	3	4
4	Have they fought with you	1	2	3	4
5	Have they threatened you	1	2	3	4
6	Have they rejected and isolated you	1	2	3	4
7	Another, which? …….	1	2	3	4

70. If you answered "Sometimes" or "Frequently" to any of the alternatives of the previous question (question 69), indicate what do you think is **the main reason** that those situations happened to you. *Select just one alternative.*

1	For being physically different (fatter, thinner, taller, shorter, with bigger ears, with bigger nose)
2	Because boys and girls that mistreat me have problems at their homes
3	For my personality (shy, quiet, introvert)
4	For having some kind of disability
5	Because the teacher and the school allow this to happen
6	For being or having indigenous characteristics
7	For being gay or lesbian
8	Because there are neither punishments nor sanctions for those that mistreat or abuse
9	For my school performance (good or bad)
10	For my socioeconomic status
11	Other, which? …….

asked to give their view of what the main reason might have been, such as their appearance, poverty, sexuality or personality (UNICEF, 2015).

A similar approach was followed in the National Survey of School Health in **Brazil**, which used a self-administered questionnaire to ask a nationally representative sample of grade 9 students, aged 13 to 15, how often did their school mates 'belittle, mock, scorn, intimidate or scoff' at them in the previous month to the point that they became 'hurt, bothered, annoyed, offended, or humiliated'. About 7% of students responded that this happened 'most of the time' or 'always', while 'sometimes' was not considered as incidence of bullying. In half of these cases, the reason was not identified, while a third of bullied students claimed that they were bullied because of their appearance, which in turn was correlated with students being too thin or too fat (Oliveira et al., 2015).

In **India**, the Study on Child Abuse collected information on physical abuse from four groups of children: those at home, in school, in institutions and in the street. Among the 34% of children aged 5-17 who had been beaten by non-family members, 45% had most often been beaten by teachers. Questions were also asked about sexual abuse. Among young adults aged 18 to 24, 4% reported that they had been sexually assaulted by a teacher (India Ministry of Women and Child Development, 2007).

In the **United States**, there is a bewildering array of measurement approaches to bullying – capturing not only the experience of victimization and perpetration but also that of being a bystander. A recent compendium has listed 33 tools with smaller or larger differences in their target groups, behaviours, frequency options – as well as their quality in terms of validity and reliability (Hamburger et al., 2011).

In **Germany**, a nationally representative survey focused on violence against teachers. About 23% of respondents claimed that they had been the target of abuse, defamation, bullying, threats or harassment at least once in the previous five years. According to the survey, 6% of the teachers had been even physically attacked by students during this period (forsa., 2016).

The **Violence Against Children (VAC)** surveys have measured physical, emotional and sexual violence against children based on a household sample focusing on young people aged 13 to 24. They have been administered in eight developing countries, including six in sub-Saharan Africa.

The perpetrator of physical abuse is one of the key questions. For example, in the **Nigeria** survey, 38% of females and 42% of males aged 13 to 17 reported having experienced physical violence in the previous 12 months. In about 85% of cases this had been the teacher. The questionnaire also asks about where an incident of sexual abuse took place. Among 18- to 24-year-old women, 25% reported having been victims of sexual abuse before the age of 18; of those, 15% said that this took place in the school. By contrast, 11% of 18- to 24-year-old men reported having been victims of sexual abuse before the age of 18; but, of those, 25% said that this took place in the school (Nigeria NPC et al., 2015).

The **Young Lives (YL)** study follows the lives of 12,000 children in Ethiopia, India (Andhra Pradesh and Telangana states), Peru and Viet Nam to assess the causes and effects of child poverty. It follows two cohorts, born in 1994-95 and 2001-02. School-related violence has not been addressed in depth, with the exception of corporal punishment. The study asked children at ages 8 and 15 in the previous week whether (a) they had seen a teacher use physical punishment on other students or (b) the teacher had used physical punishment on them. Physical punishment was defined as any action that included 'spanking, beating, punching, twisting child's ears or any other hitting, by using hand or an implement'. The prevalence was highest in **India** at 78% among 8-year-olds and 34% among 15-year-olds; it was lowest in **Viet Nam** at 20% and 1% (Portela and Pells, 2015).

In **Georgia**, the government and UNICEF carried out a study of school violence. The survey is notable for the use of the Child Abuse Screening Tool (ICAST) developed by the International Society for the Prevention of Child Abuse and Neglect (ISPCAN). Three versions of the tool are available, for parents, young adults and children (**Table 4**). The questionnaire for children is available in a version for measuring victimization at home (ICAST CH) and at school or the workplace (ICAST CI). The tools have been tested for their validity and their ability to enable the systematic collection of comparable data across cultures, countries and time. The ICAST tool is one of three that WHO recommends for countries to use if they wish to carry out a national survey of child maltreatment (Meinck et al., 2016).

Questions address three types of violence at school – physical, psychological and sexual – as well as the location and frequency of bullying, and the school climate. About 47% of 11- to 17-year-olds reported having suffered physical or psychological violence, and 6% reported sexual violence (UNICEF, 2008).

TABLE 4:
Three question sets on school-related violence in Georgia using the ICAST CI tool

Sometimes people at school can physically hurt children and adolescents. Thinking about yourself, in the last year, has anyone at school done something like:	
Hurt you or caused pain to you at school?	Made you stand /kneel in a way that hurts to punish you?
Slap you with a hand on your face or head as punishment?	Made you stay outside in the cold or heat to punish you?
Slapped you with a hand on your arm or hand?	Burnt you as punishment?
Twisted your ear as punishment?	Put you into hot or cold water as punishment?
Pulled your hair as punishment?	Took your food away from you as punishment?
Hit you by throwing an object at you?	Forced you to do something that was dangerous?
Hit you with a closed fist?	Choked you?
Kicked you?	Tied you up with a rope or belt at school?
Crushed your fingers or hands as punishment?	Tried to cut you purposefully with a sharp object?
Washed your mouth with a soap or put a pepper in your mouth?	
Was it by: adult; another child; both?	

Sometimes, when children and adolescents are at school people say or do things to make them feel embarrassed, ashamed or bad. In the past year, has anyone at school:	
Sworn at you?	Referred to any health problems you might have in a hurtful way?
Deliberately insulted you?	Stopped you from being with other children to make you feel bad or lonely?
Shouted at you to embarrass or humiliate you?	Tried to embarrass you because you were an orphan or without a parent?
Called you rude or hurtful names?	Embarrassed you because you were poor or unable to buy things?
Purposely made you feel stupid or foolish?	Stole or broke or ruined your belongings?
Referred to your gender/religion or culture in a hurtful way?	Threatened you with bad marks that you didn't deserve?

Sometimes adults or other children and adolescents do sexual things or show sexual things to children and adolescents. Thinking about yourself, has anyone done any of these things to you in the past year at school?
Touched your body in a sexual way or in a way that made you uncomfortable? By "sexual way" we mean touching you on your genitals or breasts.
Showed you pictures, magazines, or movies of people or children doing sexual things?
Made you take your clothes off when it was not for a medical reason?
Opened or took their own clothes off in front of you when they should not have done so?
Did anyone at school make you have sex with them?
Did anyone at school make you touch their private parts when you didn't want to?
Did anyone at school touch your private parts or breasts when you didn't want them to?
Did anyone at school give you money/ things to do sexual things?
Did anyone at school involve you in making sexual pictures or videos?
Did anyone at school kiss you when you didn't want to be kissed?

The ICAST CI questionnaire has been used in a study of school violence in **Uganda**, where 54% of primary school students reported experiencing physical violence from school staff the week before the survey (Devries et al., 2015).

As this overview of cross-national and national studies has shown, many different tools are used around the world to measure school-related violence, including gender-based violence. Differences in researcher and practitioner objectives, study histories, cultural aspects, scientific perspectives, and resource availability have led to a patchwork of instruments. Results from the relevant studies are expressed through very different indicators. Even surveys that use similar indicators produce results with significant discrepancies that are hard to reconcile. Such divergences prevent the kinds of global comparisons that are needed to inform policies and monitor their effectiveness (**Table 5**).

TABLE 5:
Selected consistency issues between cross-national survey questionnaires which assess school-related violence

Issue	Examples
Forms of school-related violence	The GSHS core questionnaire captures physical violence and a collective definition of bullying but not broken down by types of bullying. It does not cover sexual violence, violence from teachers to pupils, or cyberbullying.
Gender focus	In PISA, no question captures a gender dimension of school-related violence.
Recall period and frequency of behaviours	In TIMSS, the recall period is one year (with different frequencies: never; a few times a year; once or twice a month; at least once a week); while in TERCE, the recall period is not defined (and no specific frequencies are offered as options).
Formulations for the same behaviour	In HBSC, the definition of bullying covers "nasty and unpleasant things", being "teased repeatedly" in a way the student does not like or being "deliberately left out of things". In TIMSS, the questions also specify the sharing of embarrassing information or the spreading of lies, stealing, and being hit, hurt or threatened.
Age group of respondents	TIMSS covers grades 4 and 8, while TERCE and SACMEQ cover grade 6. GSHS/HBSC cover 11-, 13- and 15-year-olds, while PISA covers only 15-year-olds.

Three options for a consistent approach to measuring school-related violence

The overview presented here of diverse cross-national and national studies suggests three ways to establish globally comparable measures of school-related violence, in the context of the Sustainable Development Goals and in particular targets 4.a and 16.2.

A **first option** is to accept this diversity and standardize the results of different surveys using the least common denominator of their definitions. For example, a recent estimate of the global prevalence of violence against children during the year before the survey used data on physical, emotional and sexual violence from 112 studies in 96 countries. It reviewed the quality of population-based estimates and then used a triangulation approach to combine data from surveys that met quality criteria. The triangulation approach "is appropriate for comparing, contrasting, and synthesizing research characterized by varying methodologies and diverse limitation when the primary purpose is not to elucidate etiology, but rather to catalyze public health action" (Hillis et al., 2016).

This general idea has been used to synthesize estimates of the prevalence of bullying from five cross-national school-based surveys. Starting from the premise that it is not

possible to rely on absolute estimates of the prevalence of bullying, a measure of relative risk ("whether a country has a high, low or medium risk, compared to other countries using the same survey") was used instead. In 53 countries that took part in more than one survey of bullying, the respective estimates of the prevalence of bullying were correlated. After normalizing the data, the source of the survey was not associated with differences in country estimates of the risk of bullying. Using the normalised data, countries were correctly classified in the three groups of relative risk (Richardson and Hiu, 2016, 2017).

A **second option** is to document the differences of particular tools in an attempt to highlight potential weaknesses, encourage convergence and, eventually, lead to the emergence of a commonly agreed and improved tool.

In support of this idea, the Technical Working Group on Data Collection on Violence against Children of the Child Protection Monitoring and Evaluation Reference Group has published two reports: an analysis of ethical issues, and an inventory and comparison of surveys (CP MERG, 2012, 2014). The advantage of this approach is that it helps open up a dialogue between different stakeholders to reflect critically on their methods. The disadvantage is that many of these tools have been applied for a number of years and research teams behind them are therefore reluctant to make major changes.

For example, a review of the methodological development of the HBSC survey underlined the tension between the need to improve questionnaires and the need to analyse long-term trends in school-related violence, which requires that the tools do not change. "To ensure that inclusion of any new mandatory items meets high reliability standards the items now have to demonstrate high level measurement properties in a minimum of 10 countries across two-three surveys, i.e., there will be a minimum of 8 years before the item is used as a mandatory item to collect data across all countries" (Roberts et al., 2009).

One approach is to develop a new questionnaire that addresses and tackles these inconsistencies from scratch. For example, USAID commissioned the development of a specific toolkit on school-related gender-based violence. It consists of questionnaires addressed to students (in three age groups), teachers, and parents; capturing different forms of violence; and looking from different perspectives, including values and attitudes (RTI International, 2016).

Alternatively, surveys could converge on selected issues, for example in using the same time reference. For example, all tools could refer to the past month when they refer to bullying and corporal punishment and the past year when they refer to other forms of physical violence. Questions about how often students are exposed to violence could also be aligned. Given that the SDGs do not include a global school-related violence indicator, however, there is little demand for more convergence – and it would be unrealistic to expect it.

It would also be counter-productive to expect convergence of questionnaires. Different surveys have contributed valuable insights into new forms of violence (e.g. related to new technologies) or different points of view (e.g. self-reports, peer accounts of interactions and teacher ratings). This type of research into new tools needs to continue.

Instead of pushing towards a new common tool, a **third option** could be for the international community to put its weight behind one of the instruments currently used and promote its use in more countries.

The preferred tool would need to meet key criteria. For example, it would need to apply WHO's internationally agreed definition of violence to describe particular behaviours that reflect the reality of different cultures. It should follow a clear ethical protocol not only in obtaining consent to participate but also in supporting children who disclose an aggravated case of violence. And carefully selected enumerators should be hired and provided with sufficient training to follow correct procedures in administering the questionnaires.

One key consideration in choosing an existing approach is that some of those most widely used around the world focus exclusively on bullying, while others that capture a broader range of school-related violence, such as the ICAST CI tool, are not yet widely used. A more concise variant of an established tool may therefore be warranted.

Agreement on a preferred tool needs to go hand in hand with consensus on the precise definition of the "percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse", the endorsed thematic indicator. This indicator has been singled out for further methodological development in the first half of 2017 by the Technical Cooperation Group on SDG 4 indicators (UIS, 2016). Such a refinement should identify the precise student target

group and type of violence to be targeted; it would be unrealistic for the indicator to cover all students and all types of school-related, including gender-based, violence. It could also help set the criteria to be met, as well as the validation process. The recommendations of the Global Working Group to End School-Related Gender-Based Violence, which address the gender dimension of violence indicators, should be taken into account (UNGEI, 2016).

Once the indicator for monitoring the global prevalence of school-related violence has been refined and the preference for a particular tool established, there will need to be sufficient support to popularize the tool and fund the surveys that will serve as vehicles for the relevant questions.

Conclusion

There is now ample evidence of the deep harm that school-related violence causes to children's health and educational achievement, and to society at large. This is borne out by a diverse set of surveys of children, young people and teachers that include questions on different aspects of violence, including its gender dimensions. While the different tools used by countries and international organizations to raise awareness offer a wide range of insights into school-related violence, their diversity prevents a global picture from emerging. In response to such diversity, this paper offers three options on how to proceed toward a global indicator.

Regardless of the chosen option, a number of key considerations need to be made both by those working toward a globally comparable measure and those working on improving national measures.

First, while the different tools collectively capture all forms of school-related violence, many of the more widely used individual measures capture only a subset of the different manifestations of school related violence. Many, for example, tend to focus on bullying rather than sexual violence. It is necessary to capture the widest possible set of harmful behaviours.

Second, it is necessary to ensure that there is an explicit gender lens in questions addressing school-related violence, because gender is a major factor behind many of these forms of violence.

Third, more collaborative work is needed to ensure that questions related to violent behaviour in the school environment are asked in a consistent way. This includes consistency in the way questions are put to different respondents, such as students and teachers. In addition, these questions need to be formulated in ways that can inform policy responses.

Finally, there is a need for consistency on all matters related to time. This includes the age group of students responding to the questions, the period during which violent behaviours are supposed to have taken place, and the frequency with which these surveys are administered.

References for this paper can be found online at the following link: http://en.unesco.org/gem-report/lets-decide-how-measure-school-violence#sthash.HP9TK398.dpbs