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What do we know about preventing school violence? A systematic review of systematic reviews

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ABSTRACT

Many children across the world are exposed to school violence, which undermines their right to education and adversely affects their development. Studies of interventions for school violence suggest that it can be prevented. However, this evidence base is challenging to navigate. We completed a systematic review of interventions to reduce four types of school violence: (a) peer violence; (b) corporal punishment; (c) student-on-teacher violence and (d) teacher-on-student violence. Reviewers independently searched databases and journals. Included studies were published between 2005 and 2015; in English; considered school-based interventions for children and measured violence as an outcome. Many systematic reviews were found, thus we completed a systematic review of systematic reviews. Only systematic reviews on interventions for intimate partner violence (IPV) and peer aggression were found. These reviews were generally of moderate quality. Research on both types of violence was largely completed in North America. Only a handful of programmes demonstrate promise in preventing IPV. Cognitive behavioral, social-emotional and peer mentoring/mediation programmes showed promise in reducing the levels of perpetration of peer aggression. Further research needs to determine the long-term effects of interventions, potential moderators and mediators of program effects, program effects across different contexts and key intervention components.

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Systematic review; school violence; school-based; peer aggression; intimate partner violence

Introduction

School violence undermines children's right to education and adversely affects their development. The long term consequences are also costly for broader society (Burton & Leoschut, 2013). Worryingly, children across the world report exposure to violence at school (Due, Holstein, & Soc, 2008).

Although bullying is a major focus of school violence research, violence in schools encompasses much more. Bullying is defined as repeated aggressive episodes where there is a power

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imbalance between the bully and his/her victim (Menesini & Salmivalli, in press). Bullying is thus a subset of peer violence, a broader group of behaviors that include 'the intentional use of physical force or power, threatened or actual, …. that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation' (Krug, Dahlberg, Mercy, Zwi, & Lozano, 2002, p. 4). School violence thus includes any violence between students, corporal punishment of students by teachers (Burton & Leoschut, 2013), other forms of violence directed at students by teachers such as verbal aggression or rape (Lee, 2015), and violence directed by students at teachers (Dzuka & Dalbert, 2007; Wilson, Douglas, & Lyon, 2011). Furthermore, school violence is specifically defined as violence occurring on school premises, while traveling to or from school, or during a school-sponsored event (http://www.cdc.gov/violenceprevention/youthviolence/schoolviolence/).

A number of interventions have been tested for their potential to prevent school violence. These may be *universal* (all students participate; Mrazek & Haggerty, 1994). Others may target students at increased risk for violence or those already demonstrating violent behaviors, known respectively as *selected* and *indicated* interventions (Mrazek & Haggerty, 1994). Additionally, interventions using a *whole-school* approach intervene at multiple levels within a school (Gevers & Flisher, 2012), whereas *discrete* interventions work only with a particular aspect of the school, for example just the students (Gevers & Flisher, 2012). *Comprehensive* programmes address a range of risk behaviors, whereas *specific* programmes address a particular problem (Gevers & Flisher, 2012). Such complexity can make it challenging to determine exactly which interventions are the most effective for different types of school violence.

A number of reviews of school violence interventions have synthesized the literature and so addressed a variety of these issues; thus, following Mikton and Butchart's (2009) approach to understanding interventions to prevent child maltreatment, we aimed to complete a systematic review of systematic reviews that addressed the question: What do we know about preventing school violence?

Methods

Search strategy

Pairs of research assistants each independently searched 49 electronic databases, 3 clinical trial registries and 10 online journals for articles on school violence (see Appendix A). Searches were limited to papers in English and in publication years 2005–2015, except for those addressing corporal punishment. Two searches of abstracts were conducted. The first used search terms: *school AND (violen* OR aggress* OR bully* OR bulli*)*, while the second used the search terms *school* AND *'corporal punishment'*. Literature on corporal punishment was sought from 1980 to 2015, because of the small body of work completed on this type of violence in schools (there is a large body of work on parental corporal punishment; Gershoff & Grogan-Kaylor, 2016). Experts in the field who were part of the kNOw Violence in Childhood Project School's Learning Group were also consulted about relevant studies.

Studies were considered relevant if they:

(1) Were in English;

(2) Included change in violent behavior or one of its synonyms (such as aggression, externalizing behavior/problems, conduct behavior/problems or intimate partner violence [IPV]) as an outcome;
(3) Addressed an intervention for violent behavior that was implemented at, or recruited participants from, school; and
(4) Included pre-primary, primary or secondary school students.

We focused on change in behavior because changes in knowledge and attitudes alone are not sufficient to change behavior (De La Rue, Polanin, Espelage, & Pigott, 2014; Whitaker, Murphy, Eckhardt, Hodges, & Cowart, 2013). In addition, articles with (a) suicide, (b) school shootings and (c) teacher-on-teacher violence as an outcome were excluded. Information and communication technology interventions (which relate more to cyberbullying), psychopharmacological interventions, and interventions which extended across multiple domains like multisystemic therapy (Henggeler, Melton, Brondino, Scherer, & Hanley, 1997), were also excluded.

The initial search identified a large number of relevant systematic reviews, and we therefore decided to do *a systematic review of systematic reviews,* rather than a systematic review of primary studies (Mikton & Butchart, 2009). Research assistants then screened the full text of reviews to determine whether they met an additional inclusion criterion: the review included at least three primary studies about interventions which were implemented at school or recruited participants from school (see Appendix B and C respectively, for included and excluded reviews).

Data extraction

The quality of the relevant reviews was assessed, and descriptive information captured (see Appendix D for extraction document).

We used the AMSTAR tool to assess methodological quality of each review (Shea et al., 2009). AMSTAR scores between 0 and 4 indicate that a review is of poor quality, scores between 5 and 8 indicate moderate quality, and scores of 9–11 indicate high quality (Mikton & Butchart, 2009). A second reviewer checked 42% of the AMSTAR scores. An intra-class correlation coefficient of above .80 was achieved, indicating a good level of coding consistency (Aspland & Gardner, 2003).

Results

Our initial screening identified over 400 systematic reviews. A second round of screening found 36 that were eligible for inclusion (see Figure 1). These only addressed interventions for IPV and peer aggression.

A small number of narrative reviews and primary studies (which were excluded) were identified on student-on-teacher violence, teacher-on-student violence and corporal punishment in schools.

IPV

Five reviews of interventions for IPV were identified. On average, these were of moderate quality (see Table 1).

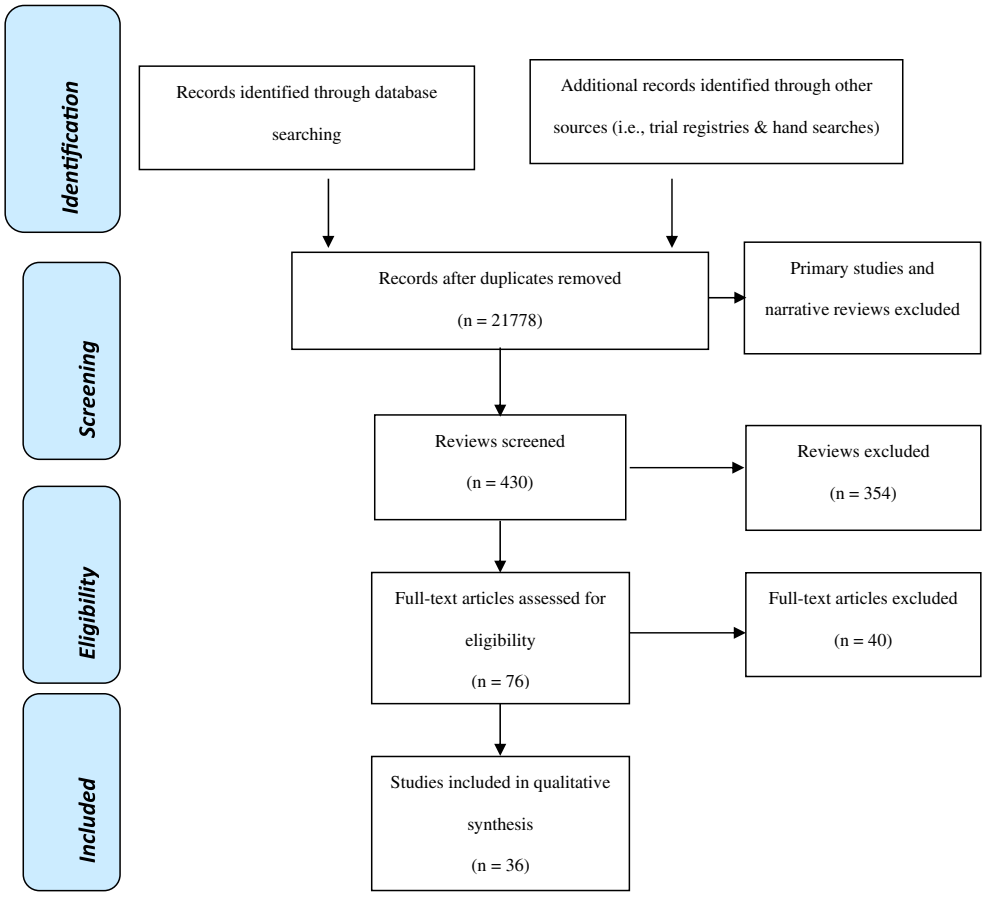

Figure 1. PRISMA flowchart.

Descriptions of programmes to prevent IPV

Since a number of school-based IPV prevention programmes have been studied using randomised controlled trials (RCTs) – the strongest evaluation design – we report only on these 11 programmes (see Table 2).

All programmes were universal and largely specific to IPV, and barring two (the building-based version of Shifting Boundaries, which targeted the whole school; Taylor, Stein, Mumford, & Woods, 2013; and the Safe Dates poster and theatre elements; Foshee et al., 2005) were discrete. Interventions were aimed at high school students of both genders, with the lone exception of Coaching Boys into Men, which focused only on boys (Miller et al., 2013).

All but one of the primary studies included in the reviews were completed on the North American continent (10 studies), and largely in the USA. One study by Jewkes et al. (2008) was conducted in the African region (South Africa), and none in any other region. Yet rates of IPV are highest in Africa, the Eastern Mediterranean and South East Asia, followed by the Americas (Stöckl, Devries, & Watts, 2015). Most programmes have thus been tested in contexts that need them least.

Table 1. Quality of reviews on intimate partner violence.

Review	AMSTAR score	No. of studies included in review	No. of school-based interventions included	No. of school-based interventions studied in RCTs
DeGue et al. (2014)	4	35	6	6
De Koker et al. (2014)	6	8	8	8
De La Rue et al. (2014)	10	23	23	10
Whitaker et al. (2006)	6	11	10	4
Whitaker et al. (2013)	4	9	4	4

Table 2. Intimate partner violence programmes assessed in RCTs with behavioral outcomes.

Programme	Target population, type of program and country of study	Implementer	No. of sessions and duration	Delivery mechanism
1. Dating Violence Prevention Program (Avery-leaf, Cascardi, O'Leary, & Cano, 1997)	11th and 12th grade students Universal, discrete, specific Study conducted in New York	Teachers	1 week	Psychoeducation on 'courtship' aggression
2. Safe Dates (Foshee et al., 1998, 2005, 2000, 1996)	8th and 9th grade students Universal, whole school, specific Study conducted in North Carolina	Teachers	10 45-min sessions	Lecture, poster contest, peer theatre production; Also includes a community component (crisis line, support groups, material for parents, training of service providers)
3. Safe Dates with booster (Foshee et al., 2004)	This is a trial within the original trial, provided to randomly selected participants after the 2-year follow-up Universal, whole school, specific	Health educator	–	Newsletter containing information drawing on the Safe Dates curriculum; personal telephone call
4. Ending Violence (Jaycox et al., 2006)	9th grade students Universal, discrete, specific Study conducted in California	Attorneys	3 days	Lecture and discussion of legal issues
5. Stepping Stones (Jewkes et al., 2008)	Secondary school students Universal, discrete, comprehensive Study conducted in rural South Africa	Project staff	50 for 6–8 weeks outside of school hours	Discussion, role-plays, drama
6. Fourth R: Skills for Youth Relationships (Wolfe et al., 2009)	9th grade students Universal, discrete, comprehensive Study conducted in Canada	Teacher	21 sessions over 7 weeks	Videos, handouts, role-play
7. Law and Justice Curriculum (Taylor et al., 2010a, 2010b)	6th and 7th grade students Universal, discrete, specific Study conducted in Ohio	–	5 sessions	Knowledge-based curriculum
8. Interaction-based Treatment (Taylor et al., 2010a, 2010b)	6th and 7th grade students Universal, discrete, specific Study conducted in Ohio	–	5 sessions	Identifying unwanted behavior, setting boundaries, bystander intervention
9. Shifting Boundaries classroom-level (Taylor, Stein, Woods, & Mumford, 2011; Taylor et al., 2013)	6th and 7th grade students Universal, discrete, specific Study conducted in New York	Teachers	8 weeks	Lecture and discussion about identifying unwanted behavior and setting boundaries
10. Shifting Boundaries school-level (Taylor et al., 2011, 2013)	6th and 7th grade students Universal, whole-school, comprehensive Study conducted in New York	–	8 weeks	'Building-based restraining orders'; school violence protocols with emphasis on reporting to teachers; awareness posters; student-created 'hotspot' map
11. Coaching Boys Into Men (Miller et al., 2013, 2012)	Male middle-school students in sports teams Universal, discrete, specific Study conducted in the USA	Sports coaches	11 brief discussions (10–15 min) during sports season	Discussion

Evidence for programmes to prevent IPV

Safe Dates (Foshee et al., 2005), the Fourth R (Wolfe et al., 2009), Stepping Stones (Jewkes et al., 2008) and the building-level version of Shifting Boundaries (Taylor et al., 2013) stand out as the only programmes that achieved positive effects (see Table 3). Teachers, project staff and health educators implemented these programmes. The duration of the latter three programmes seemed to average around 7 weeks. However, number of sessions ranged from 10 to 21. Safe Dates (Foshee et al., 2005), the Fourth R (Wolfe et al., 2009) and Stepping Stones (Jewkes et al., 2008) are also conspicuous as having been studied in trials with the strongest methods for determining evidence of effect in that they have the longest follow-up periods (3, 2.5 and 2 years, respectively). The Safe Dates trial was also strong in that it measured the widest range of forms of dating violence, and was able to show that effects for several forms of violence persisted over time (Foshee et al., 1998, 2004, 2005, 2000, 1996). Two programmes – the Law and Justice Curriculum (Taylor, Stein, & Burden, 2010a) and Interaction-Based Treatment (Taylor et al., 2010a) – were identified as possibly doing harm, in that they led to increased reporting of perpetration.

No program had been studied in more than one RCT, and so the evidence for any program can at best only be considered promising by two of the current standards for prevention science: Blueprints for Healthy Youth Development (http://www.blueprintsprograms.com), and those of the Society for Prevention Research (Gottfredson et al., 2015). Many of the trials reviewed also had some risk of bias (De Koker, Mathews, Zuch, Bastien, & Mason-Jones, 2014; Whitaker et al., 2006).

Moderation effects are also key in understanding programmes (Gottfredson et al., 2015): Safe Dates has produced evidence that there is no difference in effectiveness by gender, by white vs. other ethnicity, or by whether students had previous experience of dating violence; but the trial of the Fourth R showed that the effect was present only for boys (Whitaker et al., 2013).

Safe Dates thus appears to be the most effective school-based program for preventing dating violence, but the evidence base in general needs much more development.

Peer aggression

We identified a total of 31 reviews addressing effectiveness of interventions to prevent peer aggression. AMSTAR scores (see Table 4) had a mean of 6, indicating that on average the reviews were of moderate quality. Nearly 40% (387) of the primary studies on school-based interventions evaluated the interventions in RCTs, and 213 (22%) utilized quasi-experimental designs. However, many reviews did not provide information on study design.

Descriptions of programmes to prevent peer aggression

Universal interventions were much more commonly included in the reviews than selected and indicated interventions, as were discrete rather than multi-level or whole-school interventions (see Table 5). There were also more specific than comprehensive programmes. Nearly half of all the interventions targeted children of primary school age. Interventions were also generally delivered to both genders.

Most of the interventions were studied in North America, specifically within the USA (see Table 6 and Figure 2). This is exceptionally problematic as countries outside the USA

Table 3. Effectiveness of intimate partner violence prevention programmes.

Programme	Follow-up period[a]	Types of perpetration assessed	Types of victimisation assessed	Perpetration prevention	Victimisation prevention
1. Dating Violence Prevention Program (Avery-leaf et al., 1997)	Immediate post-test	Moderate physical aggression	–	No effect	–
2. Safe Dates (Foshee et al., 1998, 2005, 2000, 1996)	3 years	Moderate & severe physical; sexual; psychological violence	Moderate & severe physical; sexual; psychological violence	Effective at 2 years for all outcomes; at 3 years only for psychological and severe physical perpetration	Effective at 2 years for moderate physical and sexual victimisation; no effect at 3 years
3. Safe Dates with booster (tested against Safe Dates; Foshee et al., 2004)	3 years	Moderate & severe physical; sexual; psychological violence	Moderate & severe physical; sexual; psychological violence	Significant effect only for psychological perpetration	No effect
4. Ending Violence (Jaycox et al., 2006)	6 months	IPV	IPV	No effect	No effect
5. Stepping Stones (Jewkes et al., 2008)	1 year	Physical and sexual IPV, males	Physical and sexual IPV, females	Effective for perpetration by men at 2-year follow-up	No effect
6. Fourth R: Skills for Youth Relationships (Wolfe et al., 2009)	2.5 years	Moderate physical perpetration	–	Effective	–
7. Law and Justice Curriculum (Taylor et al., 2010a, 2010b)	6 months	Sexual violence	–	Increased reporting (possibly because of increased awareness)	–
8. Interaction-based Treatment (Taylor et al., 2010a, 2010b)	6 months	Sexual violence with dating partner	Sexual violence with dating partner	Increased reporting (possibly because of increased awareness)	No effect
9. Shifting Boundaries classroom-level (Taylor et al., 2011, 2013)	6 months	Prevalence and frequency of IPV	Prevalence and frequency of IPV	No effect	No effect
10. Shifting Boundaries school-level (Taylor et al., 2011, 2013)	6 months	Prevalence and frequency of IPV	Prevalence and frequency of IPV	No effect	Reductions in prevalence and frequency
11. Coaching Boys Into Men (Miller et al., 2013, 2012)	1 year	IPV perpetration	–	No effect	–

[a]We report only the results from the longest possible follow-up period.

Table 4. Quality of reviews on peer aggression.

Review	AMSTAR score	No. of studies included in review	No. of studies with school-based intervention and effects for violence[a]	No. of school-based studies using randomised controlled trials	No. of school-based studies using quasi-experimental designs
Allen-Meares, Montgomery, and Kim (2013)	3	18	3	1	2
Barnes, Smith, and Miller (2014)	4	25	20	13	7
Blank et al. (2010)	3	37	6	4	–
Bond, Woods, Humphrey, Symes, and Green (2013)	6	38	5	0	5
Bonell, Wells, et al. (2013)	7	10	4	3	1
Durlak, Weissberg, Dymnicki, Taylor, and Schellinger (2011)	5	213	112	–	–
Dymnicki, Weissberg, and Henry (2011)	4	26	26	–	–
Fagan and Catalano (2013)	4	18	9	7	2
Farahmand, Grant, Polo, Duffy, and DuBois (2011)	8	21	5	5	0
Gansle (2005)[b]	4	27	22	–	–
Gavine, Donnelly, and Williams (2016)	7	16	12	7	5
Hahn et al. (2007)	7	65	65	–	14
Hale, Fitzgerald-Yau, and Mark Viner (2014)	6	50	8	8	–
Leff, Waasdorp, and Crick (2010)	4	10	9	7	2
Limbos et al. (2007)	5	41	22	–	–
Moestue, Moestue, and Muggah (2013)	5	18	4	3	1
Mytton, DiGuiseppi, Gough, Taylor, and Logan (2006)	8	51	34	34	0
Oliver, Reschly, and Wehby (2011)	4	12	4	4	0
Park-Higgerson, Perumean-Chaney, Bartolucci, Grimley, and Singh (2008)	5	26	26	26	0
Reddy, Newman, De Thomas, and Chun (2009)	9	29	22	4	18
Reese, Prout, Zirkelback, and Anderson (2010)[c]	4	188	59	–	–
Sancassiani et al. (2015)	8	22	3	3	0
Schindler et al. (2015)	6	31	31	–	–
Sklad et al. (2012)	6	75	35	–	–
Stoltz et al. (2012)	6	24	24	18	6
Tolan et al. (2013)	9	46	3	–	–
Vidrine (n.d.)	6	10	10	8	2
Vreeman and Carroll (2007)	4	26	11	2	9
Wilson and Lipsey (2006a)	9	47	47	40	7
Wilson and Lipsey (2006b)	9	73	73	32	41
Wilson and Lipsey (2007)	9	399	249	158	91
Total	-	1692	963	387	213
Mean	5.93				
Percentage[d]				39.77%	21.89%

[a]If the number of studies utilizing a randomised controlled trial design and quasi-experimental design do not equal the number of studies on school-based interventions for the same reviews, this study design information was not specified.
[b]Figures based on the number of comparisons instead of the number of studies.
[c]Figures based on the number of outcome measures instead of studies.
[d]Total of column/total number of studies with school-based interventions.

Table 5. Characteristics of school-based programmes with effects on peer aggression.

Review	Prevention target (*n*; %)[a–c]	Intervention approach (*n*; %)[a,b,d]	Intervention content (*n*; %)[a,b,e]	School level (*n*; %)[a,b,f]	Participant gender (*n*; %)[a,b,g]
Allen-Meares et al. (2013)	U (2; 67%) S (1; 33%) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M(0) D (0) NS (3; 100%)	C (0) S (0) NS (3; 100%)	PP (0) P (2; 67%) H (0) C – PP & P (0) C – P & H (1; 33%) NS (0)	M (0) F (0) B (3; 100%) NS (0)
Barnes et al. (2014)	U (14; 70%) S (5; 25%) I (1; 5%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (20; 100%) NS (0)	C (0) S (11; 55%) NS (9; 45%)	PP (0) P (19; 95%) H (0) C – PP & P (0) C – P & H (1; 5%) C – (0) NS (0)	M (1; 5%) F (0) B (19; 95%) NS (0)
Blank et al. (2010)	U (6; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (6; 100%) M (0) D (0) NS (0)	C (0) S (1; 17%) NS (5; 83%)	PP (0) P (0) H (1; 17%) C – PP & P (0) C – P & H (2; 33%) C – (0) NS (3; 50%)	M (0) F (0) B (5; 83%) NS (1; 17%)
Bond et al. (2013)	U (0) S (0) I (5; 100%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (3; 60%) D (2; 40%) NS (0)	C (3; 60%) S (2; 40%) NS (0)	PP (0) P (3; 60%) H (0) C – PP & P (0) C – P & H (1; 20%) C – (0) NS (1; 20%)	M (0) F (0) B (5; 100%) NS (0)
Bonell, Wells, et al. (2013)	U (4; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (1; 25%) M (0) D (3; 75%) NS (0)	C (0) S (3; 89%) NS (1; 11%)	PP (0) P (2; 50%) H (0) C – PP & P (1; 25%) C – P & H (1; 25%) C – (0) NS (0)	M (0) F (0) B (4; 100%) NS (0)
Durlak et al. (2011)	U (112; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (112; 100%)	C (0) S (0) NS (112; 100%)	PP (0) P (0) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (112; 100%)	M (0) F (0) B (0) NS (112; 100%)
Dymnicki et al. (2011)	U (26; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (26; 100%)	C (0) S (0) NS (26; 100%)	PP (0) P (0) H (0) C – PP & P (26; 100%) C – P & H (0) C – (0) NS (0)	M (0) F (0) B (0) NS (26; 100%)
Fagan and Catalano (2013)	U (2; 22%) S (3; 33%) I (1; 12%) U & S (3; 33%) U & I (0) S & I (0) NS (0)	W (0) M (7; 78%) D (2; 22%) NS (0)	C (0) S (2; 22%) NS (7; 78%)	PP (2; 22%) P (6; 67%) H (0) C – PP & P (0) C – P & H (1; 11%) C –(0) NS (0)	M (1; 11%) F (0) B (8; 89%) NS (0)

(*Continued*)

Table 5. (*Continued*).

Review	Prevention target (*n*; %)[a–c]	Intervention approach (*n*; %)[a,b,d]	Intervention content (*n*; %)[a,b,e]	School level (*n*; %)[a,b,f]	Participant gender (*n*; %)[a,b,g]
Farahmand et al. (2011)	U (2; 40%) S (3; 60%) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (5; 100%)	C (0) S (5; 100%) NS (0)	PP (0) P (4; 80%) H (1; 20%) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (0) F (0) B (5; 100%) NS (0)
Gansle (2005)	U (0) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (22; 100%)	W (0) M (0) D (0) NS (22; 100%)	C (0) S (0) NS (22; 100%)	PP (0) P (0) H (3; 15%) C – PP & P (7; 35%) C – P & H (10; 50%) C – (0) NS (0)	M (0) F (0) B (0) NS (20; 100%)
Gavine et al. (2016)	U (12; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (5; 42%) D (7; 58%) NS (0)	C (0) S (0) NS (12; 100%)	PP (0) P (5; 42%) H (2; 36%) C – PP & P (0) C – P & H (5; 42%) C – (0) NS (0)	M (0) F (0) B (0) NS (21; 100%)
Hale et al. (2014)	U (7; 78%) S (1; 12%) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (2; 43%) M (3;37) D (3; 37%) NS (0)	C (8; 100%) S (0) NS (0)	PP (0) P (7; 87%) H (0) C – PP & P (0) C – P & H (1; 13%) C – (0) NS (0)	M (0) F (0) B (8; 100%) NS (0)
Hahn et al. (2007)	U (65; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (1; 2%) M (0) D (0) NS (64; 98%)	C (0) S (0) NS (65; 100%)	PP (0) P (34; 52%) H (4; 6%) C – PP & P (6; 9%) C – P & H (21; 33%) C – (0) NS (53; 100%)	M (0) F (0) B (0) NS (65; 100%)
Leff et al. (2010)	U (6; 67%) S (0) I (3; 33%) U & S (0) U & I (0) S & I (0) NS (0)	W (1; 11%) M (2; 22%) D (6; 67%) NS (0)	C (0) S (9; 100%) NS (0)	PP (1; 11%) P (5; 56%) H (0) C – PP & P (2; 22%) C – P & H (1; 11%) C – (0) NS (0)	M (6; 67%) F (3; 33%) B (0) NS (0)
Limbos et al. (2007)	U (17; 77%) S (5; 23%) I (0) U & S (0) U & I(0) S & I (0) NS (0)	W (0) M (0) D (0) NS (22; 100%)	C (0) S (0) NS (22; 100%)	PP (0) P (0) H (2; 9%) C – PP & P (3; 14%) C – P & H (16; 73%) C – (1; 4%) NS (0)	M (0) F (0) B (0) NS (22; 100%)
Moestue et al. (2013)	U (3; 75%) S (0) I (1; 25%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (1; 25%) D (3; 75%) NS (0)	C (0) S (3; 75%) NS (1; 25%)	PP (0) P (1; 25%) H (0) C – PP & P (1; 25%) C – P & H (0) C – (0) NS (2; 50%)	M (0) F (0) B (4; 100%) NS (0)

Table 5. (*Continued*).

Review	Prevention target (*n*; %)[a–c]	Intervention approach (*n*; %)[a,b,d]	Intervention content (*n*; %)[a,b,e]	School level (*n*; %)[a,b,f]	Participant gender (*n*; %)[a,b,g]
Mytton et al. (2006)[h]	U (0) S (0) I (0) U & S (0) U & I (0) S & I (34; 100%) NS (0)	W (0) M (0) D (0) NS (34; 100%)	C (0) S (0) NS (34; 100%)	PP (0) P (22; 65%) H (0) C – PP & P (0) C – P & H (12; 35%) C – (0) NS (0)	M (12; 35%) F (0) B (22; 65%) NS (0)
Oliver et al. (2011)	U (4; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (1; 25%) D (3; 75%) NS (0)	C (0) S (4; 100%) NS (0)	PP (0) P (4; 100%) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (0) F (0) B (3; 75%) NS (1; 25%)
Park-Higgerson et al. (2008)	U (7; 27%) S (17; 65%) I (1; 4%) U & S (1; 4%) U & I (0) S & I (0) NS (0)	W (0) M (10; 39%) D (16; 61%) NS (0)	C (7; 27%) S (19; 73%) NS (0)	PP (0) P (19; 73%) H (3; 11%) C – PP & P (2; 8%) C – P & H (2; 8%) C – (0) NS (0)	M (3; 11%) F (0) B (23; 89%) NS (0)
Reese et al. (2010)	U (0) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (59; 100%)	W (0) M (0) D (0) NS (59; 100%)	C (0) S (0) NS (59; 100%)	PP (0) P (0) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (59; 100%)	M (0) F (0) B (0) NS (59; 100%)
Reddy et al. (2009)	U (0) S (8; 36%) I (14; 64%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (22; 100%)	C (0) S (0) NS (22; 100%)	PP (0) P (0) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (22; 100%)	M (0) F (0) B (0) NS (22; 100%)
Sancassiani et al. (2015)	U (3; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (3; 100%) M (0) D (0) NS (0)	C (2; 67%) S (1; 33%) NS (0)	PP (0) P (2; 67%) H (1; 33%) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (3; 100%) F (0) B (0) NS (0)
Schindler et al. (2015)	U (0) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (31; 100%)	W (0) M (0) D (0) NS (31; 100%)	C (0) S (0) NS (31; 100%)	PP (31; 100%) P (0) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (0) F (0) B (0) NS (31; 100%)
Sklad et al. (2012)	U (35; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (35; 100%)	C (0) S (0) NS (35; 100%)	PP (0) P (0) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (35; 100%)	M (0) F (0) B (0) NS (35; 100%)

(*Continued*)

Table 5. (*Continued*).

Review	Prevention target (*n*; %)[a–c]	Intervention approach (*n*; %)[a,b,d]	Intervention content (*n*; %)[a,b,e]	School level (*n*; %)[a,b,f]	Participant gender (*n*; %)[a,b,g]
Stoltz et al. (2012)	U (0) S (0) I (24; 100%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (13; 54%) D (11; 46%) NS (0)	C (0) S (0) NS (24; 100%)	PP (2; 8%) P (15; 63%) H (0) C – PP & P (5; 21%) C – P & H (0) C – (0) NS (2; 8%)	M (6; 25%) F (0) B (18; 25%) NS (0)
Tolan et al. (2013)	U (0) S (2; 67%) I (1; 33%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (2; 67%) D (1; 33%) NS (0)	C (0) S (0) NS (3; 100%)	PP (0) P (1; 33.33%) H (1; 33.33%) C – PP & P (0) C – P & H (1; 33.33%) C – (0) NS (0)	M (0) F (0) B (2; 67%) NS (1; 33%)
Vidrine (n.d.)	U (0) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (10; 100%)	W (0) M (0) D (0) NS (10; 100%)	C (0) S (10; 100%) NS (0)	PP (6; 60%) P (4; 40%) H (0) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (0) F (0) B (10; 100%) NS (0)
Vreeman and Carroll (2007)	U (5; 46%) S (3; 27%) I (1; 9%) U & S (0) U & I (1; 9%) S & I (0) NS (1; 9%)	W (3; 27%) M (2; 18%) D (6; 55%) NS (0)	C (2; 18%) S (9; 82%) NS (0)	PP (0) P (6; 55%) H (1; 9%) C – PP & P (0) C – P & H (4; 36%) C – (0) NS (0)	M (0) F (1; 9%) B (10; 91%) NS (0)
Wilson and Lipsey (2006b)	U (73; 100%) S (0) I (0) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (73; 100%)	C (0) S (0) NS (73; 100%)	PP (14; 19%) P (47; 64%) H (12; 16%) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (8; 11%) F (6; 8%) B (59; 81%) NS (0)
Wilson and Lipsey (2006a)	U (0) S (17; 36%) I (30; 64%) U & S (0) U & I (0) S & I (0) NS (0)	W (0) M (0) D (0) NS (47; 100%)	C (0) S (0) NS (47; 100%)	PP (0) P (31; 66%) H (16; 34%) C – PP & P (0) C – P & H (0) C – (0) NS (0)	M (14; 30%) F (1; 2%) B (32; 68%) NS (0)
Wilson and Lipsey (2007)	U (89; 36%) S (0) I (0) U & S (0) U & I (0) S & I (117; 47%) NS (43; 17%)	W (0) M (21; 8%) D (228; 92%) NS (0)	C (0) S (0) NS (249; 100%)	PP (0) P (178; 72%) H (50; 20%) C – PP & P (21; 8%) C – P & H (0) C – (0) NS (0)	M (43; 17%) F (17; 7%) B (179; 72%) NS (10; 4%)

(Continued)

Table 5. (*Continued*).

Review	Prevention target (*n*; %)[a–c]	Intervention approach (*n*; %)[a,b,d]	Intervention content (*n*; %)[a,b,e]	School level (*n*; %)[a,b,f]	Participant gender (*n*; %)[a,b,g]
Total across reviews	U (494; 51.30%) S (65; 6.75%) I (81; 8.41%) U & S (5; 0.52%) U & I (1; 0.10%) S & I (151; 15.68%) NS (166; 17.24%)	W (17; 1.77%) M (70; 7.27%) D (311; 32.29%) NS (565; 58.67%)	C (22; 2.28%) S (79; 8.20%) NS (862; 89.51%)	PP (56; 5.82%) P (417; 43.30%) H (94; 9.76%) C – PP & P (68; 7.06%) C – P & H (69; 7.17%) C – (1; 0.10%) NS (258; 26.79%)	M (88; 9.14%) F (28; 2.91%) B (440; 45.69%) NS (407; 42.26%)

[a]% = number of studies on school-based interventions with effects for peer aggression with characteristic/total number of studies on school-based interventions with effects for peer aggression.
[b]NS = not specified.
[c]U = universal, S = selected, I = indicated.
[d]W = whole-school, M = multilevel, D = discrete.
[e]C = comprehensive, S = specific.
[f]PP = pre-primary school, P = primary school, H = high school.
[g]F = female-only participants, M = male-only participants, B = participants of both genders.
[h]All descriptives and effects reflect studies using measures of the level or extent of actual aggressive behavior or physical acts of aggression, either observed or reported only.

show comparable, if not higher; levels of peer aggression (for instance, see; Chen & Avi Astor, 2010).

Evidence for programmes to prevent peer aggression

We analyzed effectiveness in reducing peer victimization (see Table 7) and perpetration of peer aggression (see Table 8) separately. Less than half the studies used RCTs to examine program effects, thus some caution is required when interpreting findings relating to effectiveness of interventions.

Prevention of victimization. Only eight reviews considered program effectiveness for reducing peer *victimisation*. The specific type of victimization explored in evaluations was not often specified, but when it was, the focus was on physical and relational victimization. The vast majority of programmes were universal in terms of target, and the majority of these scored poorly in terms of effectiveness. The single selective intervention was found to be ineffective. Most were discrete interventions and of these, only cognitive behavioral programmes showed promise for preventing victimization. Violence prevention programmes showed some promise in preventing victimization only when implemented as a whole-school intervention. No harmful effects were noted in this area overall. These findings tentatively suggest that discrete, cognitive-behavioral programmes that specifically target the prevention of victimisation show promise, and that consideration should be given to ways they can be included in whole-school interventions.

Programmes to prevent perpetration. All 31 reviews considered the capacity of school-based interventions to reduce *perpetration* of peer aggression. Intervention effects on the perpetration of aggression or violence (verbal or physical) in particular were considered in

Table 6. No. of studies by country, by WHO regions.

WHO regions	No. of studies
North America (total)[a]	562
USA	527
Canada	35
Europe (total)	14
UK	6
Italy	2
Norway	2
Israel	1
Netherlands	1
Finland	1
Spain	1
South America (total)	7
Argentina	2
Columbia	2
Brazil	1
Jamaica	1
Mexico	1
Western Pacific (total)	7
Australia	6
China	1
South East Asia (total)	1
India	1
Africa (total)	0
Eastern Mediterranean (total)	0
Not Specified	372
Total Relevant Studies	963

[a]We decided to split the Americas region into two: North (USA and Canada) and South (all other countries in the Americas), because of the vastly disproportionate amount of research typically conducted in North America.

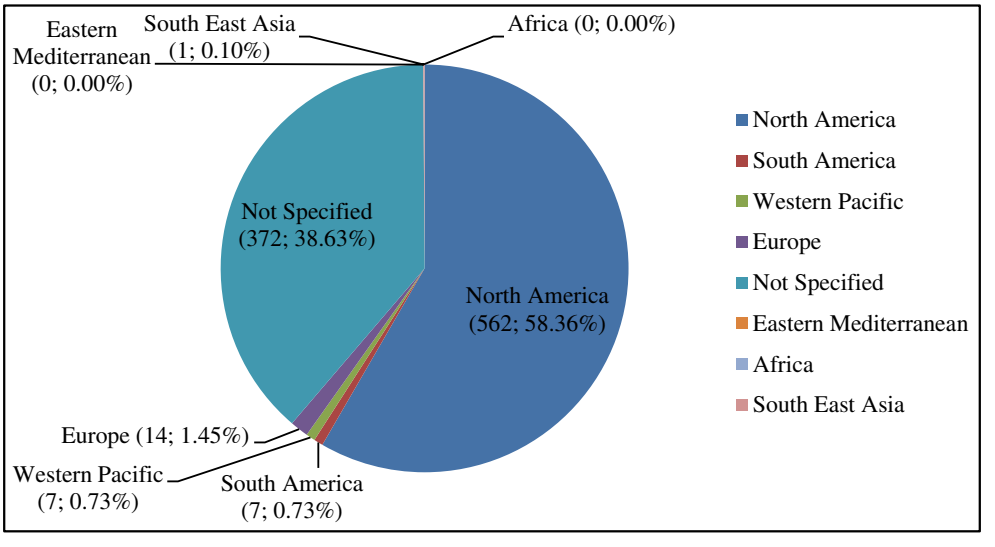

Figure 2. WHO regions covered by peer aggression programmes.

nearly every review, followed by studies that assessed broader outcomes that may include aggression, such as externalizing behavior.

Universal interventions seem to have undergone the most testing, followed by selected interventions, interventions where this information was not specified, and then indicated

Table 7. Effectiveness of peer aggression programmes to prevent victimisation.

	Prevention target				Intervention approach				Harmful effects	Outcome behavior[a]	Significant moderators
Review	Universal: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Selected: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Indicated: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Not specified: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g]	Whole-school: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g] – IT[h]	Multi-level: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g] – IT[h]	Discrete: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g] – IT[h]	Not specified: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g] – IT[h]			
Barnes et al. (2014)	NS:1 (1)[f]						NS:1 (1)[f] – 5		No	4	Prevention target (universal vs selected)
Blank et al. (2010)[i]	NS: 7 (1)[f]				NS: 7 (1)[f] – 10				No	1	Not considered
Bonell, Wells, et al.(2013)	PT: 5 (2)[f] FU: 7 (1)[f]						PT: 5 (2)[f] – 9 FU: 7 (1)[f] – 9		No	1; 2; 3; 4	Not considered
Gavine et al. (2016)[j]	FU: 7 (1)[f] NS: 5 (3)[f]					FU: 7 (1)[f] – 1 NS: 4 (1)[f] – 1	NS: 6 (2)[f] – 1		No	1; 2; 3; 4	Not considered
Hale et al. (2014)	FU: 4 (1)[f]						FU: 4 (1)[f] – 9		No	2	Not considered
Leff et al. (2010)	NS: 1 (2)[f]				NS: 1 (1)[f] – 1		NS: 1 (1)[f] – 1		No	2; 4	Not considered
Sancassiani et al. (2015)	PT: 7 (1)[f]				PT: 7 (1)[f] – 4				No	1	Not considered
Vreeman and Carroll (2007)[k]		PT: 7 (1)[f]					PT: 7 (1)[f] – 4		No	1	Not considered

[a]1 – Victimisation (specific type not specified); 2 – Physical victimsation; 3 – Verbal victimisation; 4 – Relational victimization.
[b]Post-test effects.
[c]Follow-up effects.
[d]Post-test or follow-up measurement was not specified in review.
[e]Effectiveness rating based on rubric. We rated the effectiveness of interventions reviewed according to the following rubric: (1) Found overall to be effective (i.e. peer aggression reduced in 100% of the effects, or as reported by a meta-analysis); (2) Found to be mostly effective (i.e. peer aggression reduced in 75% or more of the reviewed studies' effects as a result of the intervention); (3) Found to be slightly effective (i.e. peer aggression reduced in 56–74% of the reviewed studies' effects as a result of the intervention); (4) Overall mixed effects (i.e. peer aggression reduced in 45–55% of the reviewed studies' effects as a result of the intervention); (5) A minority of studies found an effect (i.e. peer aggression reduced in 26–44% of the reviewed studies' effects as a result of the intervention); (6) Found to be mostly ineffective (i.e. peer aggression reduced in 25% or less of the reviewed studies' effects as a result of the intervention); (7) Found overall to be ineffective (i.e. no effects/change on peer aggression overall, or as reported by a meta-analysis).
[f]Number of primary studies used in calculating effect.
[g]Based on effect derived from meta-analysis.
[h]Intervention type: 1 – Violence prevention programmes (also includes conflict training, modified discipline, anger management); 2 – Classroom management programmes; 3 – Life skills programmes (also includes problem solving skills training, perspective taking skills training and coping skills training); 4 – Social-emotional programmes (also includes social skills programmes); 5 – Cognitive behavioral interventions (also includes cognitive interventions and interventions for behavior modification) or social cognitive interventions; 6 – Peer mediators or mentoring; 7 – ECD/ECE; 8 – Combined; 9 – Other; 10 – Not specified.
[i]Many study outcomes were not clear. Only the studies that explicitly discussed school-based interventions for the outcomes of interest were considered.
[j]Conservatively coded as multilevel instead of whole-school because they did not indicate at which levels they intervened.
[k]Effects for victimization were only extracted for studies which did not also have effects on bullying as it was assumed the victimization would relate to bullying instead of peer aggression.

Table 8. Effectiveness of peer aggression programmes to prevent perpetration.

	Prevention target				Intervention approach						
Review	Universal: PT[b]/FU[c]/NS[d]: E[e] (n)[f/g]	Selected: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Indicated: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Not specified: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g]	Whole-school: PT[b]/FU[c]/NS[d]: E[e] (n)[f/g] – IT[h]	Multi-level: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g] – IT[h]	Discrete: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g] – IT[h]	Not specified: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g] – IT[h]	Harmful effects	Outcome behavior[a]	Significant moderators
Allen-Meares et al. (2013)	NS:1 (2)[f]	PT: 1 (1)[f]						NS: 1 (2)[f] –5 PT: 1 (1)[f] – 9	No	1; 4	Not considered
Barnes et al. (2014)	NS:3 (15)[f]	NS: 3 (6)[f]					NS: 3 (20)[f] – 5		Yes	1; 2; 4	Prevention target (universal vs selected)
Blank et al. (2010)[i]	NS: 3 (6)[f]				NS: 1 (2)[f] – 3 NS: 3 (4)[f] – 10				No	1	Not considered
Bond et al. (2013)[i]			PT: 2 (5)[f] FU: 1 (3)[f]			PT: 2 (3)[f] – 9 FU: 1 (2)[f] – 9	PT: 1 (2)[f] – 9 FU: 1 (1)[f] – 9		No	1; 4	Not considered
Bonell, Wells, et al. (2013)	PT: 5 (2)[f] FU: 6 (3)[f]				FU: 7 (1)[f] – 9		PT: 5 (2)[f] – 9 FU: 5 (2)[f] – 9		No	1; 2	Not considered
Durlak et al. (2011)	PT: 1 (112)[g] FU: 1 (21)[g]							PT: 1 (112)[g] – 4 FU: 1 (21)[g] – 4	No	3 (including 1)	None
Dymnicki et al. (2011)	PT: 1 (26)[g]							PT: 1 (26)[g] – 1	Yes	1	Not considered
Fagan and Catalano (2013)[j]	PT: 4 (3)[f]	FU: 3 (4)[f]	PT: 4 (1)[f]	PT: 1 (1)[f] FU: 4 (1)[f]		FU: 3 (2)[f] – 7 PT: 4 (3)[f] – 8 FU: 3 (3)[f] – 8	PT: 4 (1)[f] – 1 PT: 1 (1)[f] – 4		Yes	1	Not considered
Farahmand et al. (2011)[i]	PT: 4 (2)[f] FU: 7 (1)[f]	PT: 6 (3)[f] FU: 7 (1)[f]						PT: 5 (5)[f] – 9 FU: 7 (2)[f] – 9	Yes	4	Not considered
Gansle (2005)[k]				PT: 1 (22)[g] FU: 1 (9)[g]				PT: 1 (22)[g] – 1; 4; 5 FU: 1 (9)[g] – 1; 4; 5	No	4 (including 1 and 3)	Random assignment and treatment duration[l]
Gavine et al. (2016)[m]	PT: 5 (2)[f] FU: 5 (4)[f] NS: 5 (7)[f]					PT: 7 (1)[f] – 1 FU: 6 (2)[f] – 1 NS: 5 (3)[f] – 1	PT: 1 (1)[f] – 1 NS: 4 (3)[f] – 1 FU: 3 (1)[f] – 3 FU: 6 (1)[f] – 9 NS: 1 (1)[f] – 9		Yes	1	Not considered
Hahn et al. (2007)[n]	NS: 1 (65)[g]							NS: 1 (30)[g] – 4 NS: 1 (6)[g] – 5 NS: 1 (2)[g] – 6 NS: 1 (25)[g] – 9	No	1; 2; 3; 4	Not considered

Hale et al. (2014)	PT: 1 (2)[f] FU: 1 (4)[f]	PT: 1 (1)[f]			PT: 1 (1)[f] – 4 FU: 1 (1)[f] – 9	PT: 1 (1)[f] – 5 FU: 1 (1)[f] – 8 FU: 1 (1)[f] – 9	PT: 1 (1)[f] – 4 FU: 1 (1)[f] – 9		No	1	Not considered
Leff et al. (2010)	PT: 5 (4)[f] NS: 1 (1)[f]		NS: 1 (3)[f]			NS: 1 (2)[f] – 5	PT: 4 (2)[f] – 1 NS: 1 (1)[f] – 1 PT: 7 (1)[f] – 2 PT: 1 (1)[f] – 4 NS: 1 (1)[f] – 5		No	1; 2	Not considered
Limbos et al. (2007)[o]	NS: 5 (17)[f]	NS: 5 (5)[f]						NS: 5 (22)[f] – 1	No	1	Not considered
Moestue et al. (2013)	PT: 1 (3)[f]		NS: 1 (1)[f]			PT: 1 (1)[f] – 1	NS: 1 (1)[f] – 2 PT: 1 (1)[f] – 4 PT: 1 (1)[f] – 9		No	1; 3	Not considered
Mytton et al. (2006)[p]		PT: 1 (34)[g] FU: 1 (7)[g]						PT: 1 (18)[g] – 1 FU: 1 (2)[g] – 1 PT: 1 (7)[g] – 4/6 FU: 7 (2)[g] – 4/6 PT: 1 (7)[g] – 8 FU: 7 (3)[g] – 8	No	1	School level
Oliver et al. (2011)[q]	PT: 6 (4)[f]					PT: 7 (1)[f] – 2	PT: 5 (3)[f] – 2		No	1; 3; 4	Not analyzed
Park-Higgerson et al. (2008)[r]	PT: 2 (4)[f] FU: 5 (4)[f]	PT: 4 (16)[f] FU: 5 (4)[f]	PT: 4 (1)[f] FU: 4 (1)[f]			PT: 5 (4)[f] – 5 FU: 5 (2)[f] – 5 PT: 7 (1)[f] – 8 FU: 7 (1)[f] – 8 PT: 1 (2)[f] – 9 PT: 7 (1)[f] – 10	PT: 1 (1)[f] – 1 PT: 1 (1)[f] – 2 FU: 7 (1)[f] – 3 PT: 4 (4)[f] – 5 FU: 5 (3)[f] – 5 PT: 2 (3)[f] – 8 FU: 5 (1)[f] – 8 PT: 1 (5)[f] – 9		No	1; 2; 4	Not considered
Reddy et al. (2009)		PT: 1 (8)[g] FU: 1 (3)[g]	PT: 1 (12)[g] FU: 1 (3)[g]					PT: 1 (22)[g]–10 FU: 1 (22)[g]–10	No	4	No analysis completed
Reese et al. (2010)[s]				PT: 1 (59)[g]				PT: 1 (59)[g] – 9	No	4	No analysis completed
Sancassiani et al. (2015)	PT: 3 (2)[f]				PT: 7 (1)[f] – 3 PT: 1 (1)[f] – 4				No	1; 3	Not considered
Schindler et al. (2015)				PT: 7 (31)[g]				PT: 7 (31)[g] – 7	No	4 (including 1)	Extent of focus on socio-emotional development

(*Continued*)

Table 8. (*Continued*)

Review	Prevention target				Intervention approach				Harmful effects	Outcome behavior[a]	Significant moderators
	Universal: PT[b]/FU[c]/NS[d]: E[e] (n)[f/g]	Selected: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Indicated: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g]	Not specified: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g]	Whole-school: PT[b]/FU[c]/NS[d]: E[e] (n)[f/g] – IT[h]	Multi-level: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g] – IT[h]	Discrete: PT[b]/FU[c]/ NS[d]: E[e] (n)[f/g] – IT[h]	Not specified: PT[b]/ FU[c]/NS[d]: E[e] (n)[f/g] – IT[h]			
Sklad et al. (2012)[t]	PT: 1 (35)[g] FU: 1 (35)[g]							PT: 1 (35)[g] – 4/5 FU: 1 (35)[g] – 4/5	No	1; 4	Duration of program, school level.
Stoltz et al. (2012)[u]			PT: 1 (24)[g]			PT: 1 (13)[g] – 5	PT: 1 (11)[g] – 5		Yes	4 (including 1, 2 and 3)	Age of participants
Tolan et al. (2013)		NS: 4 (2)[f]	NS: 7 (1)[f]			NS: 4 (2)[f] – 6	NS: 7 (1)[f] – 6		No	1	Not considered
Vidrine (n.d.)[v]				FU: 1 (10)[g]				FU: 1 (10)[g] – 3	No	4 (including 1 and 2)	Age of participants
Vreeman and Carroll (2007)[w]	PT: 3 (4)[f] NS: 7 (1)[f]	PT: 1 (2)[f]	NS: 7 (1)[f] Combination U&I PT: 5 (1)[f]	PT: 1 (1)[f]	PT: 2 (2)[f] – 6 NS: 7 (1)[f] – 10	PT: 7 (1)[f] – 5 PT: 1 (1)[f] – 9	PT: 1 (1)[f] – 3 PT: 4 (2)[f] – 4 PT: 1 (1)[f] – 6 NS: 7 (1)[f] – 6		Yes	1; 2; 4	Not considered
Wilson and Lipsey (2006b)[x]	PT: 1 (73)[g]							PT: 1 (73)[g] – 5	No	1; 3; 4	Socioeconomic status, routine practice, frequency of sessions, implementation quality
Wilson and Lipsey (2006a)[y]			PT: 1 (47)[g]					PT: 1 (47)[g] – 5	No	1; 3; 4	Attrition, special education
S. J. Wilson and Lipsey (2007)[z]	PT: 1 (77)[g]	PT: 1 (108)[g]		PT: 7 (43)[g]		PT: 7 (21)[g] – 4/5/6/9	PT: 3 (228)[g] – 4/5/6/9		No	1; 3	Student socio-economic status, attrition, student risk level, implementation quality

[a]1 – Aggression and/or violence (physical aggression/violence, physical fights or attacks, verbal aggression); 2 – Relational aggression; 3 – Conduct problems/disorder; 4 – Externalizing behaviors.
[b]Post-test effects.
[c]Follow-up effects.
[d]Post-test or follow-up measurement was not specified in review.
[e]Effectiveness rating based on rubric. We rated the effectiveness of interventions reviewed according to the following rubric: (1) Found overall to be effective (i.e. peer aggression reduced in 100% of the effects, or as reported by a meta-analysis); (2) Found to be mostly effective (i.e. peer aggression reduced in 75% or more of the reviewed studies' effects as a result of the intervention); (3) Found to be slightly effective (i.e. peer aggression reduced in 56–74% of the reviewed studies' effects as a result of the intervention); (4) Overall mixed effects (i.e. peer aggression reduced in 45–55% of the reviewed studies' effects as a result of the intervention); (5) A minority of studies found an effect (i.e. peer aggression reduced in 26–44% of the reviewed studies' effects as a result of the intervention); (6) Found to be mostly ineffective (i.e. peer aggression reduced in 25% or less of the reviewed studies' effects as a result of the intervention); (7) Found overall to be ineffective (i.e. no effects/change on peer aggression overall, or as reported by a meta-analysis).
[f]Number of primary studies used in calculating effect.
[g]Based on effect derived from meta-analysis.
[h]Intervention type: 1 – Violence prevention programmes (also includes conflict training, modified discipline, anger management); 2 – Classroom management programmes; 3 – Life skills programmes (also includes problem solving skills training, perspective taking skills training and coping skills training); 4 – Social-emotional programmes (also includes social skills programmes); 5 – Cognitive behavioral interventions (also includes cognitive interventions and interventions for behavior modification) or social cognitive interventions; 6 – Peer mediators or mentoring; 7 – ECD/ECE; 8 – Combined; 9 – Other; 10 – Not specified.
[i]Many study outcomes were not clear. Only the studies that explicitly discussed school-based interventions for the outcomes of interest were considered.
[j]Effects in not specified column represent combined universal and selective programmes.
[k]Figures based on the number of comparisons instead of the number of studies.
[l]Not strictly moderators, but considered their correlation with effect size.
[m]Conservatively coded as multilevel instead of whole-school because they did not indicate at which levels they intervened.
[n]In this review, violence refers to both victimization and perpetration. Placed effects in perpetration table only as these seemed to be more common, and their studies likely followed this trend.
[o]Review provides unconservative estimates of a study's effectiveness. Each study only needed one positive effect to be considered effective overall.
[p]All descriptives and effects reflect studies using measures of the level or extent of actual aggressive behavior or physical acts of aggression, either observed or reported only.
[q]Utilized the effects of the ICC.10 analysis only in determining effectiveness.
[r]Selected interventions seemed to included indicated samples at times, we relied on their classification.
[s]Figures based on the number of outcome measures instead of studies.
[t]Post-test considered effects up to and including 6 months after completion of the intervention. Follow-up included outcomes measured at least 7 months after completion of an intervention.
[u]The multilevel number might be inflated due to this review not separating whole-school interventions.
[v]Effects based on most distal results.
[w]Coded post-test and follow-up information according to their study design information.
[x]Only 74% of the included studies had effects at immediate post-test, thus our results are coded as post-test overall.
[y]Results thought to be most reflective of post-test findings, and selected and indicated intervention effects were combined. There were more indicated than selected interventions, so effects were placed under the former column.
[z]Could not isolate all effects for universal programmes and selected/indicated programmes. As subject risk was selected (42%) and indicated (19%), effects for selected/indicated interventions were thought to be more reflective of selective interventions, thus they were placed under this category. Effects with $p < .10$ were not considered effective in our analysis.

interventions. The majority of these were scored as effective, with 58% of the unspecified interventions scoring a 1 and 89% of the indicated interventions scoring 1. There is some evidence that the effects of universal interventions endure beyond the immediate post-test. For selected and indicated interventions, these effects were largely only found at post-test. Interventions which did not specify their prevention target demonstrated more mixed effects for reducing peer aggression immediately after program completion; however longer-term follow-up effects were largely positive.

With regards to intervention approaches, discrete programmes had the most evidence for effectiveness, followed by multi-level and whole-school programmes – although it should be noted that approach was specified in less than half of the reviews. Socio-emotional programmes have been found to be one of the most promising approaches, while cognitive behavioral and peer mentoring/mediation interventions have also fairly consistently demonstrated positive results. There was a broad range in the duration of these programmes. Socio-emotional programmes generally seemed to offer around 16 sessions. Unfortunately, session number information was often not specified. Program sessions were also implemented at a varying rate; once or twice a week seemed fairly common. Various school (mostly teachers) and research personnel were often involved in their implementation as well. Other types of intervention were effective in some studies but ineffective or harmful in others. Very few studies considered the effectiveness of whole-school programmes, suggesting the need for further research on these types of interventions. Promisingly, across all reviews, harmful effects (i.e. increased reports of perpetration) were reported in very few studies.

Only a handful of the reviews considered moderators of program effects. Well implemented cognitive behavioral interventions and those with more sessions each week were found to be beneficial (Wilson & Lipsey, 2006b). Considering socio-emotional and cognitive behavioral programmes together there was mixed evidence for short program duration to be associated with positive effects (Gansle, 2005; Sklad, Diekstra, De Ritter, Ben, & Gravesteijn, 2012), however a trend towards younger students benefiting more from these types of interventions was found in two reviews (Sklad et al., 2012; Stoltz, van Londen, Dekovic, de Castro, & Prinzie, 2012).

Discussion

There is very little literature on prevention of teacher-on-student violence (including corporal punishment) and student-on-teacher violence, even though these forms of violence seem quite common (see, for instance; Burton & Leoschut, 2013; Chen & Wei, 2011; Lee, 2015). More promisingly, there is a great deal of literature addressing prevention of IPV and even more dealing with peer aggression at school, although there are substantial gaps even here.

One key gap in the field is that studies often only measure one outcome, even where a program is theoretically likely to reduce more than one form of violence. For instance, peer aggression and dating violence share common risk factors (Smallbone & McKillop, 2015), and reductions in dating violence are thus highly likely to follow from interventions to reduce peer violence. Similarly, victimisation is seldom measured as an outcome. Importantly, the field of violence prevention will only be advanced if specific effects on aggressive behavior are reported separately from other forms of externalizing behaviors.

More high quality studies are also needed: RCTs with longer follow-up periods, lower risk of bias, and which explore mediation and moderation effects, will allow us to understand

which programmes have sustained effects, what theoretical perspectives drive effective programmes (and so to understand not only what programmes work, but also why they work), and which programmes are generalizable to which groups (Gottfredson et al., 2015; Whitaker et al., 2006, 2013).

Another bias in the literature is that research on the effectiveness of interventions was almost exclusively completed in wealthier regions, particularly in the USA. This is exceptionally problematic, as school violence is a global problem (see, for instance; Burton & Leoschut, 2013; Chen & Avi Astor, 2010; Due et al., 2008; Fernandez-Fuertes & Fuertes, 2010; Wubs et al., 2009). More studies in high-violence, low-resource contexts are urgently needed.

Some interventions were identified as harmful, in that they led to increasing reports of aggression. This may be because programmes increased awareness and thus increased reporting (Taylor et al., 2010a; Taylor, Stein, & Burden, 2010b), but it may also have been because of adverse reactions to the intervention (DeGue et al., 2014). It may also be an artefact of study design: studies with short follow-up periods will be unable to differentiate an increase in response to heightened awareness from those that actually cause increased aggression, as it takes time for reporting to stabilize in response to awareness and then to decline in response to an effective program.

Another important focus for new studies should be components of effective interventions (Whitaker et al., 2013). This could be done either through developing and testing new programmes that build on what has been learned about effective interventions (Whitaker et al., 2006), or through meta-analytic studies of successful programmes (see, for instance; Kaminski, Valle, Filene, and Boyle, 2008). Studies of this nature assist in identifying the 'active ingredients' in programmes (Embry & Biglan, 2008).

This review does have some limitations. Firstly, we included only systematic reviews, and the information we were able to extract from each review was dependent on what was reported. This strategy means that promising interventions that had not yet been included in a review would have been missed. Secondly, we were unable to determine the extent of primary study duplication across the reviews on peer aggression. Therefore, the true size of the evidence base on school-based violence prevention interventions remains somewhat unclear. Thirdly, we only included studies published in English. Thus, our results do not reflect the findings of any possible reviews on school violence interventions published in other languages.

Despite these limitations, it is clear that a number of violence prevention initiatives have been successfully delivered at school. Several promising interventions to prevent IPV could be identified. Cognitive behavioral, social-emotional and peer mentoring/mediation programmes were effective for preventing perpetration of peer violence, and cognitive behavioral and whole-school violence prevention programmes show promise for preventing peer victimisation. While the field needs considerable development in order to be regarded as having a strong evidence base, the existing literature does provide us with a good foundation for tackling this serious problem.

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Appendix A. List of searched databases, trial registries and online journals

EBSCOHost databases
Academic Search Premier
Business Source Premier
Africa-Wide Information
AHFS Consumer Medication Information
ATLA Religion Database with ATLASerials
CINAHL
Communication & Mass Media Complete
ERIC
Health Source: Nursing/Academic Edition
Humanities International Complete
International Bibliography of Theatre & Dance with Full Text
Library, Information Science & Technology Abstracts
MasterFILE Premier
MEDLINE
Philosopher's Index
PsycARTICLES
PsycCRITIQUES
PsycINFO
PsycTESTS
SocINDEX with Full Text
Teacher Reference Center
ProQuest databases
Environment Abstracts
ERIC
International Bibliography of the Social Sciences (IBSS)
International Index to Performing Arts Full Text
Library and information Science Abstracts (LISA)
PAIS International and PAIS archive
PILOTS: Published International Literature On Traumatic Stress
ProQuest Education Journals
Social Services Abstracts
Sociological Abstracts
OCLC FirstSearch
Medline
ERIC
PubMed
Medline
Wiley Online Library
Sage Journals Online – 2014 Premier Package
Web of Science
Africa Bibliography
British Education Index- the free collections
ERIC (directly at eric.ed.gov)
Cochrane Library
Campbell Collaboration Libraries
Open Grey
BDENF
Global Health
HISA
LILACS
MedCarib
WPRIM

Trial registries
Clinical Trials Registry: www.clinicaltrials.gov
The Pan-African Clinical Trials Registry: http://www.pactr.org/
The WHO violence prevention trials registry: http://www.preventviolence.info/Trials
Aggression and Violent Behavior

Hand search journals
Aggression and Violent Behavior
International Journal of Violence and schools
Journal of School Violence
Journal of Injury and Violence Research
Youth Violence and Juvenile Justice
Violence and Victims
Journal of Aggression, Maltreatment and Trauma
The School Community Journal
Journal of School Health
Journal of Interpersonal Violence
Journal of School Psychology
Journal of Educational Psychology
School Psychology Quarterly
Journal of Applied School Psychology
Contemporary School Psychology
Psychology in the Schools
British Journal of Educational Psychology
School Psychology International
School Psychology Review
Educational Psychology

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Appendix C. Excluded reviews' reasons for exclusion and references

Review	Reason for exclusion
Barlow, Smailagic, Ferriter, Bennett, and Jones (2010)	Too few school-based studies on outcomes of interest included
Baskin et al. (2010)	Unclear if outcomes of interest were included in review, and if they were to what extent
Beelmann and Raabe (2009)	Review of reviews
Bonell et al. (2013)	Protocol of a review, not an actual review
Bowman-Perrott, Burke, Nan, and Zaini (2014)	Too few school-based studies on outcomes of interest included
Candelaria, Fedewa, and Ahn (2012)	Could not clearly determine all of the studies which were school-based and which considered outcomes of interest
Cobb, Sample, Morgen, and Johns (2006)	Could not clearly determine all of the studies which were school-based and which considered outcomes of interest
Edwards and Hinsz (2014)	Too few school-based studies on outcomes of interest included
Ehiri, Hitchcock, Ejere, and Mytton (2007)	Protocol of a review, not an actual review
Fellmeth, Heffernan, Nurse, Habibula, and Sethi (2013)	Could not clearly determine which studies that were included in analysis were school-based
Ferguson, Miguel, Kilburn, and Sanchez (2007)	Effects for bullying and other types of violence were not reported separately. Could not determine extent to which violence outside of bullying was represented in statistics
Grove, Evans, Pastor, and Mack (2008)	Could not clearly determine how many school-based interventions were included, and thus how represented they were in the statistics
R. Hahn et al. (2007)	A published version of this report was also found in our searches and thus used instead.
R. A. Hahn et al. (2005)	Too few school-based studies on outcomes of interest included
Hankin, Hertz, and Simon (2011)	Too few school-based studies on outcomes of interest included
January, Casey, and Paulson (2011)	No clear effects on outcome behaviors of interest i.e., there was no way to determine to what extent aggression was an outcome which was considered in included studies and thus how represented it was in the analysis
Klasen and Crombag (2013)	Too few school-based studies on outcomes of interest included
Kristjansson et al. (2006)	Too few school-based studies on outcomes of interest included
D. M. Maggin, Chafouleas, Goddard, and Johnson (2011)	Did not consider outcomes of interest
Daniel M. Maggin, Johnson, Chafouleas, Ruberto, and Berggren (2012)	Outcome behaviors of interest comprised less than 5% of outcome behaviors considered in review. No way of determining the effects specific to outcome behaviors of interest either

Appendix C. *(Continued)*

Review	Reason for exclusion
Matjasko et al. (2012)	Review of reviews
McCart, Priester, Davies, and Azen (2006)	School-based intervention effects could not be separated from the effects for interventions implemented elsewhere. No way of knowing how many school-based interventions were included either
Meirelles dos Santos and Giglio (2012)	Too few school-based studies on outcomes of interest included
Montgomery and Maunders (2015)	Too few school-based studies on outcomes of interest included
Ozabaci (2011)	Too few school-based studies on outcomes of interest included
Parker and Turner (2013)	Too few school-based studies on outcomes of interest included
Piquero et al. (2008)	Too few school-based studies on outcomes of interest included
Piquero, Jennings, Farrington, and Jennings (2010)	Unclear to what extent outcomes of interest were included and separating school-based effects was impossible to do
Polanin and Espelage (2015)	Primary study
Reichow, Barton, Boyd, and Hume (2014)	Did not consider outcomes of interest
Sentenac et al. (2012)	Too few school-based studies on outcomes of interest included
Silverman et al. (2008)	Too few school-based studies on outcomes of interest included
Singh et al. (2011)	Too few school-based studies on outcomes of interest included
Solomon, Klein, Hintze, Cressey, and Peller (2012)	Unclear to what extent outcomes of interest are included and represented in statistics
Sugimoto-Matsuda and Braun (2014)	Did not consider outcomes of interest.
Ting (2009)	Did not consider outcomes of interest
Vannest, Davis, Davis, Mason, and Burke (2010)	No distinct separation of the effects for the outcome behaviors of interest and other behaviors
Walsh, Zwi, Woolfenden, and Shlonsky (2015)	Too few school-based studies on outcomes of interest included
Weisburd, Telep, Hinkle, and Eck (2008)	Too few school-based studies on outcomes of interest included
Wilson and Institute for Public Policy Studies (2005)	Showed significant similarity to Wilson and Lipsey (2007) article. Later article was chosen to be included in review as it included a greater number of studies and was published more recently

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Edwards, S. R., & Hinsz, V. B. (2014). A Meta-Analysis of Empirically Tested School-Based Dating Violence Prevention Programs. *SAGE Open, 4*(2). doi:10.1177/2158244014535787

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Appendix D. Data extraction document

kNOw Violence Stage 2 Extraction – Meta-analyses and Systematic Reviews

Reviewer	Date of Extraction
Choose an item.	//2016

Citation:	

PART A: SCREENING

			Exclude if:
1)	**Is the publication available in English:**	Choose an item.	**No**
2)	**Review Type:**	Choose an item.	**Review of Reviews**
3)	**Type of violence considered in review**		
a)	**Is violent behaviour (aggression, externalising behaviour/problems, conduct disorder/problems) an outcome which is considered in the review?**	Choose an item.	**No**
4)	**Intervention Type:**		
	a) Does the review include at least three studies which provide the results for an intervention implemented at school/which recruited students from school?	Choose an item.	**No**
	b) If yes, do at least of three of the school-based studies in the review consider intervention effectiveness on the outcome violent behaviour (as described above)?	Choose an item.	**No**
5)	**Relevant:**	Choose an item.	

Part B: AMSTAR

			Yes	No	Can't answer	Comments
1.	Question:	**Was an 'a priori' design provided?**				
	Explanation:	The research question and inclusion criteria should be established before the conduct of the review				
	Note:	Need to refer to a protocol, ethics approval, or pre-determined/a priori published research objectives to score a 'yes'				
2.	Question:	**Was there duplicate study selection and data extraction?**				
	Explanation:	There should be at least two independent data extractors and a consensus procedure for disagreements should be in place				
	Note:	Two people do study selection, two people do data extraction, consensus process or one person checks the other's work				
3.	Question:	**Was a comprehensive literature search performed?**				
	Explanation:	At least two electronic sources should be searched. The report must include years and databases used (e.g. Central, EMBASE, and MEDLINE). Key words and/or MESH terms must be stated and where feasible the search strategy should be provided. All searches should be supplemented by consulting current contents, reviews, textbooks, specialized registers, or experts in the particular field of study, and by reviewing the references in the studies found				
	Note:	If at least two sources + one supplementary strategy used, select 'yes' (Cochrane register/central counts as two sources; a grey literature search counts as supplementary)				
4.	Question:	**Was the status of publication (i.e. grey literature) used as an inclusion criterion?**				
	Explanation:	The authors should state that they searched for reports regardless of their publication type. The authors should state whether or not they excluded any reports (from the systematic review), based on their publication status, language etc.				
	Note:	If review indicates that there was a search for 'grey literature' or 'unpublished literature', indicate 'yes'. SIGLE database, dissertations, conference proceedings, and trial registries are all considered grey for this purpose. If searching a source that contains both grey and non-grey, must specify that they were searching for grey/unpublished lit				
5.	Question:	**Was a list of studies (included and excluded) provided?**				
	Explanation:	A list of included and excluded studies should be provided.				
	Note:	Acceptable if the excluded studies are referenced. If there is an electronic link to the list but the link is dead, select 'no'				
6.	Question:	**Were the characteristics of the included studies provided?**				
	Explanation:	In an aggregated form such as a table, data from the original studies should be provided on the participants, interventions and outcomes. The ranges of characteristics in all the studies analyzed e.g., age, race, sex, relevant socioeconomic data, disease status, duration, severity, or other diseases should be reported				
	Note:	Acceptable if not in table format as long as they are described as above				

7.	Question:	**Was the scientific quality of the included studies assessed and documented?**
	Explanation:	'A priori' methods of assessment should be provided (e.g. for effectiveness studies if the author(s) chose to include only randomized, double-blind, placebo controlled studies, or allocation concealment as inclusion criteria); for other types of studies alternative items will be relevant
	Note:	Can include use of a quality scoring tool or checklist, e.g., Jadad scale, risk of bias, sensitivity analysis, etc., or a description of quality items, with some kind of result for EACH study ('low' or 'high' is fine, as long as it is clear which studies scored 'low' and which scored 'high'; a summary score/range for all studies is not acceptable)
8.	Question:	**Was the scientific quality of the included studies used appropriately in formulating conclusions?**
	Explanation:	The results of the methodological rigor and scientific quality should be considered in the analysis and the conclusions of the review, and explicitly stated in formulating recommendations
	Note:	Might say something such as 'the results should be interpreted with caution due to poor quality of included studies'. Cannot score 'yes' for this question if scored 'no' for question 7
9.	Question:	**Were the methods used to combine the findings of studies appropriate?**
	Explanation:	For the pooled results, a test should be done to ensure the studies were combinable, to assess their homogeneity (i.e. Chi-squared test for homogeneity, I^2). If heterogeneity exists a random effects model should be used and/or the clinical appropriateness of combining should be taken into consideration (i.e. is it sensible to combine?)
10.	Note:	Indicate 'yes' if they mention or describe heterogeneity, i.e., if they explain that they cannot pool because of heterogeneity/variability between interventions
	Question:	**Was the likelihood of publication bias assessed?**
11.	Explanation:	An assessment of publication bias should include a combination of graphical aids (e.g. funnel plot, other available tests) and/or statistical tests (e.g. Egger regression test, Hedges-Olken)
	Note:	If no test values or funnel plot included, score 'no'. Score 'yes' if mentions that publication bias could not be assessed because there were fewer than 10 included studies.
	Question:	**Was the conflict of interest included?**
	Explanation:	Potential sources of support should be clearly acknowledged in both the systematic review and the included studies
	Note:	To get a 'yes', must indicate source of funding or support for the systematic review AND for each of the included studies
		Total AMSTAR Score:

Part C: Extraction

Please extract the descriptive information from each study first. Information relating to each field needs to be marked with an 'X' if relevant to the review. If a field is relevant, please also specify the number of primary studies in the review this information pertains to. If the information in a particular field is not specified please specify this using the NS (not specified) option.

Descriptive information

1.	No. of studies in review	Not specified
2.	No. of studies on school-based interventions with violent behavior as an outcome	Not specified
3.	No. of studies on school-based interventions with ONLY attitudes towards violence as an outcome	Not specified

Prevention target	Characteristic relevant	No. of primary studies
1 Universal only		
2 Selected only		
3 Indicated only		
4 Combination		
5 Not specified		
Approach		
1 Whole-school only		
2 Discrete only		
3 Combination		
4 Not specified		
Content		
1 Comprehensive only		
2 Specific only		
3 Combination		
4 Not specified		
School level		
1 Pre-primary only		
2 Primary only		
3 High only		
4 Combination PP + P		
5 Combination P + H		
6 Combination all		
7 Not specified		
Participant gender		
1 Female-only		
2 Male-only		
3 Mixed		
4 Not specified		
Study design		
1 Randomised controlled trial		
2 Quasi-experimental		
3 Not specified		
WHO regions	*Characteristic relevant*	*No. of primary studies for each country in region*
1 North America		
2 South America		
3 Western Pacific		
4 Europe		
5 Eastern Mediterranean		
6 Africa		
7 South East Asia		
8 Not specified		

Effects information

1. For meta-analyses with school-based interventions which have effects on violence overall please mark the appropriate column in the table below with an 'X'.

Reduction in violence (effective)	No effect on violence (ineffective)	Increase in violence (harmful)

2. For reviews where primary studies' effects need to be individually extracted, please add the name of each primary study which needs to have their effects extracted first. Then, for each of these relevant primary studies mark the appropriate column in the table below with an 'X'.

No.	Primary study name	Reduction in violence (effective)	No effect on violence (ineffective)	Increase in violence (harmful)
1				
2				
3				
4				
5				
6				
7				
	Sub-totals:			
	Grand total number of effects:			

3. Were harmful effects reported or found?
   Yes/No
4. Did the reviews include individual primary studies with effect sizes on relevant outcomes?
   Yes/No
5. Specific type of outcome behavior considered in review (e.g. physical aggression): _____
   _____
6. Specific type of intervention considered in review (e.g. social-emotional program): ___
   _____