



Rapid Review: What is the effectiveness of school-based interventions for gender- and sexual orientation-based violence against 2SLGBTQI+ individuals?

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The authors declare they have no conflicts of interest to report.

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Executive Summary

Background

Gender- and sexual orientation-based violence (GSOBV) refers to violence directed at a person because of their gender identity or sexual orientation and is a prevalent issue in schools. Violence against students who identify as Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer, Intersex and other sexual and gender diverse communities (2SLGBTQI+) can contribute to increased risk of physical and mental health issues, such as substance use, depression, anxiety, and suicidal ideation.

School-based interventions seek to change behaviour and prevent GSOBV through various levels of influence, as depicted in a socio-ecological model (**Figure 1**). Single-level interventions act at only one level of the model, while multi-level interventions act across several levels.

This rapid review seeks to identify, appraise, and summarize available research evidence to support evidence-informed decision making in public health. It was conducted to help inform a provincial school-based initiative to prevent GSOBV.

This rapid review includes evidence available up to March 19, 2025, to answer the question:

What is the effectiveness of school-based interventions for gender- and sexual orientation-based violence against 2SLGBTQI+ individuals?

Key Points

- Single-level, group-based educational interventions for students that promote acceptance of the 2SLGBTQI+ community likely improve attitudes and perceptions towards 2SLGBTQI+ community members and reduce self-reported feelings of homophobia and transphobia (the certainty of evidence is moderate, and findings are unlikely to change as new evidence emerges). Conversely, these interventions may result in little to no change in discrimination, harassment, or bullying of 2SLGBTQI+ community members (the certainty of evidence is low, and these findings are likely to change as new evidence emerges).
- No studies of multilevel interventions aimed at addressing structural factors influencing violence against 2SLGBTQI+ students were identified.
- Single-level educational learning interventions may not be sufficient to affect behaviour change. Findings support investigation of more comprehensive, multi-level interventions that address structural factors in schools that affect violence against 2SLGBTQI+ students.

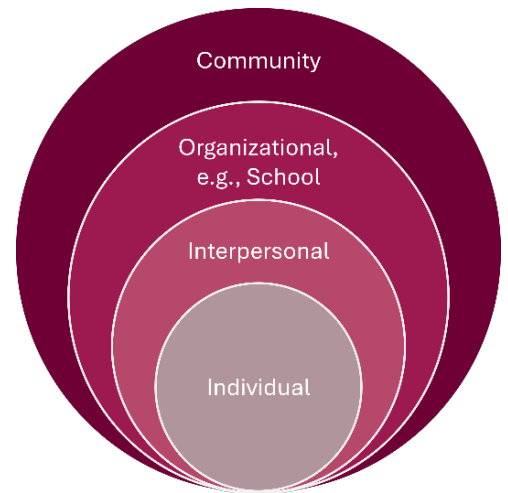


Figure 1: Socio-ecological model for influencers of behaviour change

Overview of Evidence and Knowledge Gaps

- This review includes eight studies of interventions, including two randomized controlled trials, one quasi-experimental study, and five single-group pre-post intervention studies. These studies compared outcomes to control groups or the same group at baseline prior to the intervention.
- Studies were conducted in various countries, including two in the USA, and one each in Canada, Hungary, Israel, Italy, the Netherlands, and New Zealand. All studies took place in public, secular schools. Two studies focused on middle school students (ages 12-13), while six concentrated on high school students (ages 14-18).
- All interventions were group-based educational interventions for students. Therefore, all are considered single-component interventions. No evidence was identified for interventions that targeted interpersonal, organizational, or community-level factors that may address the structural determinants of GSOBV.
- Most studies reported outcomes related to attitudes and perceptions, such as homophobia and transphobia. Only two studies reported on behaviours and acts of violence toward 2SLGBTQI+ students.
- Three interventions incorporated socio-emotional learning elements, such as empathy building, emotional literacy, communication, and problem-solving. There was no apparent difference in outcomes for these interventions compared to interventions that focused solely on increasing acceptance of 2SLGBTQI+ community members.
- Four interventions were single sessions lasting 1 to 2 hours, while the other four were delivered over multiple sessions spanning several weeks. There was no apparent difference in outcomes based on the intervention duration.
- Our ability to determine the relative effectiveness of interventions is limited because of the heterogeneity in measuring and reporting outcomes. It was not possible to identify whether various components of interventions, such as socio-emotional learning or intervention duration, influenced their effectiveness.
- Most studies did not report the gender or sexual orientation of participants and only mentioned binary genders. It is not possible to determine how well these findings reflect the diverse experiences of 2SLGBTQI+ students or how these experiences intersect with other identities (e.g., race) and lived experiences.

Methods

A description of the development of the NCCMT's Rapid Evidence Service, including an overview of the rapid review process and rationale for methodological decisions, has been published ([Neil-Sztramko *et al.* 2021](#)).

Research Question

This rapid review addresses the following research question, developed in collaboration with public health decision makers:

What is the effectiveness of school-based interventions for gender- and sexual orientation-based violence against 2SLGBTQI+ individuals?

The study protocol was registered in PROSPERO ([CRD420251001204](#)).

Search

The search strategy was based on that described in a recent systematic review and network meta-analysis ([Melendez-Torres *et al.* 2024](#)). The search strategy was augmented for an additional focus on the 2SLGBTQI+ community.

On March 19, 2025, the following databases were searched using key terms, including: "sexual and gender minorities", "discrimination", "prejudice", "gender-based violence", "sexism", "homophobia", "schools", "students":

- [MEDLINE](#)
- [Embase](#)
- [CINAHL](#)
- [APA PsycInfo](#)
- [Cochrane Library](#)
- [ERIC](#)

A copy of the full search strategy is available in [Appendix 1](#).

Study Selection Criteria

The titles and abstracts of a proportion of results (10%) were screened in duplicate to confirm reviewer agreement; disagreements were resolved through consensus or consulting with a third reviewer. The remaining results were screened by a single reviewer. The full texts of results included at title and abstract screening were retrieved and screened by a single reviewer. Continuous artificial intelligence (AI) reprioritization was used to sort results during screening, but all references were screened manually.

English-language, peer-reviewed sources and sources published ahead of print before peer review were included.

	Inclusion Criteria	Exclusion Criteria
Population	Children aged 12–18 years who are attending school. School staff, including teachers and administrators.	
Intervention	<p>School-wide interventions seeking to address GSOBV against 2SLGBTQI+ individuals. These interventions could include one or more of:</p> <ul style="list-style-type: none"> individual behavioural intervention (e.g. individual learning modules or apps) group or classroom-based intervention or practices (e.g., as part of health education; delivering GSOBV prevention content in other academic sessions; delivery of content in groups during school hours) network-based approaches, such as public opinion leader interventions (peer to peer) staff training and other service provision in schools (e.g. to recognise and respond better to sexual violence) local and school policy change to address structural factors relating to GSOBV, or to change school responses to GSOBV. 	<p>Interventions that did not seek to address GSOBV, e.g., an intervention for a health promotion topic that also measured GSOBV outcomes</p> <p>Secondary prevention interventions that aim to reduce the impact of GSOBV rather than prevent GSOBV from occurring.</p>
Comparisons	No intervention, waitlist control, other interventions, outcomes prior to intervention	
Outcomes	<p>GSOBV perpetration or victimisation, including harassment and bullying on the basis of gender or sexuality, including homophobic and transphobic bullying; internet-mediated GSOBV, such as unwanted sexting or forwarding of sexts; unwanted sexual contact, such as groping; sexual harassment or assault</p> <p>GSOBV-related harm reduction behaviours, help-seeking behaviours and bystander behaviours</p> <p>Knowledge and attitudes related to GSOBV, such as bystander attitudes and GSOBV-condoning norms</p> <p>Mental health indicators for 2SLGBTQI+ students</p> <p>Outcomes may be quantitative self-reported, teacher-reported, or in official school reports</p>	
Setting		Low- or middle-income countries, as defined by the Wellcome Trust
Time	Published 2015-2025	
Study design	Randomized controlled trials, quasi-experimental studies, single-arm pre-post-interventions	Cross-sectional studies, case reports, qualitative studies

Data Extraction and Synthesis

Data relevant to the research question, including study design, setting, location, population characteristics, interventions or exposures, and outcomes, when reported in the included studies, were extracted by one reviewer and verified by a second.

Information on the social determinants of health (based on the PROGRESS-Plus framework) was extracted where reported ([O'Neill *et al.* 2014](#)).

The results were synthesized descriptively due to the variation in methodology and outcomes for the included studies.

Public Partner Engagement in the Review Process

One public partner with lived experience was consulted in the rapid review process. They provided feedback on the review's analysis and interpretation of findings. The public partner provided feedback on the initial draft and approved the final report.

Appraisal of Evidence Quality and Certainty

The quality of included evidence was evaluated using critical appraisal tools, as indicated by the study design below. Quality assessment was completed in duplicate by two independent reviewers; conflicts were resolved through discussion or by a third reviewer.

Study Design

Quasi-experimental

Randomized Controlled Trial

Critical Appraisal Tool

JB I [Checklist for Quasi-Experimental Studies](#)

JB I [Checklist for Randomized Controlled Trials](#)

Completed quality assessments for each included study are available on request.

The Grading of Recommendations, Assessment, Development and Evaluations ([GRADE](#)) ([Schünemann *et al.* 2013](#)) approach was used to assess the **certainty in the findings** in **quantitative research** based on eight key domains.

In the GRADE approach to quality of evidence, **observational studies**, as included in this review, provide **low quality** evidence, and this assessment can be further reduced based on:

- High risk of bias
- Inconsistency in effects
- Indirectness of interventions/outcomes
- Imprecision in effect estimate
- Publication bias

and can be upgraded based on:

- Large effect
- Dose-response relationship
- Accounting for confounding.

The overall certainty in the evidence for each outcome was determined, considering the characteristics of the available evidence (observational studies, some not peer-reviewed, unaccounted-for potential confounding factors, different tests and testing protocols, lack of valid comparison groups). A judgement of 'overall certainty is very low' means that the findings are very likely to change as more evidence accumulates.

In addition to considering the quality and certainty of the included evidence, the findings from this rapid review should be interpreted in the context of the methodological restrictions inherent in a rapid review process ([Garritty *et al.* 2024](#)). For example, limited database searching and single reviewer screening may result in missed studies.

Findings

Summary of Evidence

This rapid review included nine publications. Two studies (Burford, 2017 and Lucassen, 2015) reported different outcomes for the same intervention study, and were therefore treated as a single study for this analysis. Therefore, the analysis is based on eight single studies. The certainty of the key findings included in this review is as follows:

What is the effectiveness of school-based interventions for gender- and sexual orientation-based violence against 2SLGBTQI+ individuals?

Key Outcome	Evidence included		Certainty of Evidence (GRADE)
	Study design	n*	
Educational interventions for students that promote acceptance of 2SLGBTQI+ community members may improve attitudes and perceptions of 2SLGBTQI+ community members and may reduce self-reported feelings of homophobia and transphobia.	RCT Single group pre-post intervention study	1 5	⊕⊕⊕○ MODERATE ¹
Educational interventions for students that promote acceptance of 2SLGBTQI+ community members may result in little to no difference in discrimination, harassment or bullying of 2SLGBTQI+ community members.	RCT Quasi-experimental study	1 1	⊕⊕○○ LOW ²

¹ In the GRADE approach to certainty of evidence, experimental studies, as included in this review, provide moderate certainty evidence.

² In the GRADE approach to certainty of evidence, experimental studies, as included in this review, provide moderate certainty evidence; this was downgraded to **low** due to imprecision.

Table 1: Single Studies

Reference	Study Design	Participants	Setting	Intervention	Summary of Findings	Study Quality
Burford et al. 2017 and Lucassen & Burford, 2015	Single-arm pre-post intervention	n=234 students ages 12-15 48% girl; 46% boy; 3% other; 4% NR	2 public schools, Auckland, New Zealand	One-time session gender and sexuality diversity workshop facilitated by Rainbow YOUTH, a non-profit organization in New Zealand. A workshop provided cultural competency training, discrimination awareness, and empathy building. Single-level intervention	Compared to before the intervention, students reported improved attitudes and perceptions of gender diverse individuals (p<0.001) and had a great understanding of the experiences of sexuality-diverse individuals (p<0.001) immediately following the session. 96% agreed the workshop should be offered in schools, while >75% agreed the intervention would reduce bullying of gender-diverse students.	Moderate
Burk et al. 2018	Quasi-experimental study	n=21,075 students ages 13-18 66% girl; 34% boy 5% identifying as “LGB” (n=663 girls; 335 boys)	113 public schools, British Columbia, Canada	“Out in Schools” film screening and discussions facilitated by 2SLGBTQI+ identifying adults. Screening of 2SLGBTQI+ centred film informed discussions of prejudice and bullying toward 2SLGBTQI+ students and staff. Schools held one or multiple events. Single-level intervention	Compared to schools that had not hosted events, schools that had hosted one event found lower odds of self-reported experiences of discrimination for “LGB” girls (aOR=0.64, 95% CI=0.44, 0.95) but not “LGB” boys. “LGB” boys had lower odds of harassment (aOR=0.54, 95% CI=0.33, 0.89), but there was no significant change for “LBG” girls. There were no significant changes in exclusion for either “LGB” girls or boys. With each cumulative event, schools found lower odds of experiences of discrimination (aOR=0.84, 95% CI=0.72, 0.98), harassment (aOR=0.84, 95% CI=0.74, 0.96), and exclusion (aOR=0.84, 95% CI=0.73, 0.97) for “LGB” boys, but not girls.	Moderate
Eick et al. 2016	Single-arm pre-post intervention	n=272 students, mean age 15 59% girl; 41% boy	3 secular Jewish schools, Israel	One-time panel session of 2SLGBTQI+ speakers facilitated by Hoshen, a national non-profit. Panelists shared personal experiences to increase empathy for 2SLGBTQI+ experiences. Single-level intervention	Compared to scores before the intervention, attitudes toward homosexuality were improved (p<0.001) immediately following the session.	Moderate

Espelage et al. 2015	Randomized controlled trial	n=3651 students, mean age 11 58% girl, 52% boy	36 public schools, Midwest USA	<p>“Second Step: Student Success through Prevention” program to address broad risk and protective factors for all children.</p> <p>Lessons focused on empathy, communication, bullying (including sexual harassment), emotion regulation, program solving, substance abuse prevention, stereotypes or prejudice over the three schoolyears</p> <p>Teachers received 4-hour training to support lesson delivery.</p> <p>Single-level intervention</p>	Compared to control schools, there were no significant effects on bullying, cyberbullying, sexual harassment, homophobic name-calling or delinquency in schools that received the intervention at the end of the three-year intervention.	Moderate
Iuso et al. 2022	Single-arm pre-post intervention	n=191 students ages 12-14 53% girl; 47% boy	1 school in Foggia, Italy	<p>Psychoeducational lessons facilitated at the Unit of Clinical Psychology at University of Foggia to improve knowledge, self-awareness, and behaviour regarding sexuality and homophobic bullying.</p> <p>Lessons included emotional literacy, relational communication without stereotypes, and violence prevention, held over two months</p> <p>Single-level intervention</p>	Compared to before to the intervention, scores for homophobia towards lesbians (5.4% on Modern Homophobia Scale; $p<0.0001$) and gay men (9.4% on Modern Homophobia Scale; $p<0.0001$) were lower at the end of the 2-month intervention	High
Kesler et al. 2023	Randomized controlled trial	n=1597 students, mean age 15 51% girl; 28% boy; 1% non-binary 14% identifying as queer	20 public schools in Midwest and southern USA	<p>“High School FLASH” program facilitated by public health to provide sexual education and reduce homophobia and transphobia within schools.</p> <p>Lessons focused on visibility, affirmation and inclusion language for 2SLGBTQI+ students over 15 sessions</p> <p>Single-level intervention</p>	Compared to a sexual health-focused curriculum, participants held less homophobic and transphobic beliefs (values on Modern Homophobia Scale NR; $p<0.01$) at 3- and 12-months post-intervention.	Moderate

Kroneman et al. 2019	Single-arm pre-post intervention	n=318 students ages 13-18 42% girl; 48% boy	4 schools in the Netherlands	<p>Series of lessons facilitated by 2SLGBTQI+ members of local university of applied science.</p> <p>Lessons focused on social issues, personal experiences of 2SLGBTQI+ facilitators, forming identities and promoting respect over 6 weeks.</p> <p>Single-level intervention</p>	<p>Compared to before the intervention, there were mixed results regarding attitudes toward sexual orientation and gender diversity:</p> <p>2 of 4 schools reported less positive attitudes (p=0.017 and p=0.011); 1 school reported more positive attitudes in girls (p=0.019) but not boys, and 1 school reported no significant change for girls or boys at the end of the 6-week intervention</p> <p>2 schools reported that girls felt it was more acceptable to disclose LGB identity after the intervention (p<0.001 for both) but no significant change for boys at the end of the 6-week intervention</p>	Moderate
Orosz et al. 2016	Single-arm pre-post intervention	n=105 students ages 14-20 44% girl; 56% boy	7 schools in Hungary	<p>One-time Living Library Program facilitated by volunteer adults identifying as 2SLGBTQI+.</p> <p>Student “readers” engaged with volunteer “books” who shared their lived experiences in 20-minute conversations.</p> <p>Single- level intervention</p>	Compared to students who did not engage with 2SLGBTQI+ volunteers, students had higher acceptance and willingness to engage with 2SLGBTQI+ community members, and lower levels of prejudice (values on Social Distance scale NR; p<0.05) immediately following the session.	Moderate

Abbreviations: **NR**: not reported; **aOR**: adjust odds ratio; **CI**: confidence interval

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