



REVIEW

Prevalence and Characteristics of School Bullying in Children and Adolescents: Evidence from a Systematic Review (2000–2024)

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ABSTRACT

Bullying among school-aged children and adolescents remains a major public health and educational concern worldwide. This systematic review aimed to determine the global prevalence, common types, and associated factors of bullying among secondary school students to inform effective prevention strategies. A comprehensive literature search was conducted across PubMed, Scopus, Google Scholar, Web of Science, Embase, Pakmedinet, and PsycINFO for studies published between January 2000 and December 2024. Of the 1,609 articles initially identified, 160 met the inclusion criteria, and 52 studies were ultimately included in the final analysis. Data were extracted on study design, geographic distribution, prevalence rates, forms of bullying, and identified factors. The findings revealed that bullying is highly prevalent worldwide, with particularly high rates reported in lower-middle-income and high-income countries and among students attending public secondary schools. Verbal bullying emerged as the most common form across regions, followed by physical and relational or psychological bullying, while cyber-bullying and sexual bullying were reported less frequently. The review highlights significant regional and socio-economic variations in bullying patterns and emphasizes the persistent nature of this problem. Overall, bullying remains a widespread issue affecting the well-being of children

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and adolescents globally, underscoring the need for coordinated, culturally sensitive, and evidence-based prevention efforts involving schools, families, healthcare providers, and policymakers to mitigate its impact and promote safer school environments.

Keywords: Bullying Prevalence; Types of Bullying; Children; Adolescents; Systematic Review

1. Introduction

Bullying is a significant public health concern globally, affecting children and adults in various ways. Bullying is a persistent, hostile act directed at an individual by a single person or group, causing a power imbalance and impacting a significant portion of children in schools as bullies, victims, or both^[1]. School bullying involves using physical or social power to harm others, taking various forms such as physical aggression, verbal abuse, social manipulation, sexual harassment, and electronic or cyber bullying^[2]. Violence is the most common form of violence in high schools, and bullying is categorized into bullies, victims, and bully-victims^[3]. With the rise of internet use and social media as dominant communication methods, cyber bullying and traditional bullying often occur together, with cyber bullying potentially being worse than traditional bullying. This highlights the need for effective strategies to combat bullying in schools and beyond^[4].

Peer-to-peer violence is a significant global issue, with approximately one-third of adolescents around the world experiencing bullying victimization. Across global reviews, reported prevalence of traditional bullying varies widely, from about 6–61% in East Asia and 12.6–83% in Gulf countries, largely because studies use different definitions, recall periods, and instruments^[5,6]. A recent multi-country study conducted across 13 European and Asian countries reported an overall prevalence of victimization of approximately 29%, with traditional bullying 18% occurring more frequently than cyber-bullying 5%, alongside considerable cross-national variation^[6]. Similarly, an European Union (EU)-level meta-analysis of representative samples (up to 2018) estimated pooled prevalence rates of cyber-victimization and cyber-perpetration at 9.6% and 11.9%, respectively. Notably, national estimates of cyber-victimization ranged widely from 2.8% to 31.5%, underscoring significant heterogeneity across settings^[7].

Bullying is strongly linked to depression, anxiety, low self-esteem, self-harm, and suicidal thoughts in adolescents across regions^[8]. Bullying also undermines academic performance and school engagement, particularly among girls, who report decreased motivation, lower grades, absenteeism, and more anxiety and low self-esteem^[9,10]. Gender, socioeconomic status, and school climate remain key risk factors, with low family income and low parental education linked to higher bullying involvement and cyber-victimization, especially among females^[9,11]. Competitive and high-pressure school climates increase bullying risk partly by eroding students' sense of school belonging, with gender moderating these effects^[8]. Lack of social support from parents, teachers, and peers further predicts bullying involvement, depressive symptoms, self-harm, and suicidal thoughts, while strong family, peer, and school relationships, along with positive coping styles, provide a protective effect^[12]. Implementation of anti-bullying and broader school mental-health programs still faces barriers, including limited resources, insufficient training, adaptation issues, and inconsistent policy enforcement, especially in under-resourced settings^[1,6].

Rapid news coverage and social media have exacerbated school bullying among children and teenagers, who are exposed to their social surroundings and often use bullying as a dispute resolution strategy. A study showed that violence remains widespread in schools; a 10-year forensic review from Türkiye found that physical violence accounted for 80% of documented school violence and bullying cases, with sexual and psychological violence also present, highlighting the widespread issue of bullying in schools^[13]. School bullying is a prevalent issue, but research mainly focuses on community. It is crucial to identify causes and risk factors to reduce bullying and victimization. Adolescent bullying is more challenging than adulthood, as it is more common than child bullying. Bullying is under-researched in various regions, and research on adolescent and child bullies and their victims is limited. This study highlights the lack of

research on bullying among school teenagers and the lack of anti-bullying initiatives. It aims to assess the prevalence and determinants of bullying in secondary schools in nine regions over the past few years, quantifying and categorizing bullying based on age country income level, age category, school setting and region. Geographically diversified analysis is needed for delivering bullying therapy. The study supports stress-reduction school-based health therapies and identifies reasons and prevalence of bullying.

2. Methods

The systematic review was conducted in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines^[3]. The review protocol was registered on the Open Science Framework (OSF) (Link: <https://osf.io/ac2x9>). The review focused on the prevalence and types of school bullying victimization in children and adolescents (**Table 1**).

Table 1. PICO Framework.

Component	Description
Population (P)	Children and adolescents (≤ 18 years) enrolled in schools worldwide.
Intervention/Exposure (I)	Experience of school bullying victimization
Comparison (C)	Not applicable (observational prevalence studies).
Outcome (O)	Prevalence, subtypes, and patterns of school bullying victimization.

2.1. Information Sources and Search Strategy

We systematically searched PubMed, Scopus, Google Scholar, Web of Science, Embase, Pakmedinet, and PsycINFO for studies published between January 2000 and December 2024. The search aimed to identify original studies reporting the prevalence of school bullying victimization. Cross-references from included studies and review articles were also screened for additional relevant publications. Keywords and Medical Subject Headings (MeSH) used included: prevalence, types, schools, bullying, crime, victims, children, adolescents.

The PubMed search strategy was as follows:

("bullying" OR "school bullying" OR "peer victimization" OR "victimization");
 AND ("prevalence" OR "epidemiology" OR "types");
 AND ("child" OR "children" OR "adolescent" OR "adolescents");
 AND ("school" OR "schools").

2.2. Eligibility Criteria

Inclusion Criteria:

- Original, observational studies reporting quantitative data.
- Full-text available and published in English.
- Reporting prevalence of school bullying victimization

among children and adolescents.

- Both published and unpublished reports.

Exclusion Criteria:

- Studies focusing on bullying perpetration as a predictor.
- Outcomes reported as subscales of larger constructs.
- Interventional, qualitative, case series/reports, letters, conference abstracts, systematic reviews, meta-analyses, or animal studies.
- Duplicate/overlapping data or non-English publications.

2.3. Study Selection Process

Titles and abstracts were independently screened in a double-blind fashion. Conflicts were resolved by discussion. Full texts of potentially eligible studies were reviewed, and exclusions were documented using EndNote X9. Data extracted included:

- Study setting;
- Gender distribution;
- Age category;
- Prevalence and types of school bullying victimization;
- Country-level characteristics.

Countries were classified by World Bank income levels and United Nations regional groupings to enable standardized subgroup analyses and identify global socio-economic patterns.

2.4. Quality Assessment

Study quality was evaluated using the Joanna Briggs Institute (JBI) checklist, considering sample frame, participants, setting, data collection, statistical analysis, and response rates. Scores ranged 0–9 and were classified as:

- High quality/low risk: >70%
- Moderate quality/medium risk: 50–70%
- Low quality/high risk: <50%

Risk of bias was assessed for each study across relevant

domains (Appendix A, Table A1).

2.5. Study Selection and PRISMA Flow

The search yielded 1,609 records: Google Scholar (920), PubMed (230), Scopus (35), Web of Science (187), Embase (123), Pakmedinet (7), and PsycINFO (107). After removing 1,269 duplicates, titles and abstracts of 340 studies were screened, resulting in 180 irrelevant studies excluded. Full texts of 160 articles were assessed, and 23 reports were excluded based on eligibility criteria. Ultimately, 52 studies were included in the final systematic review (Figure 1).

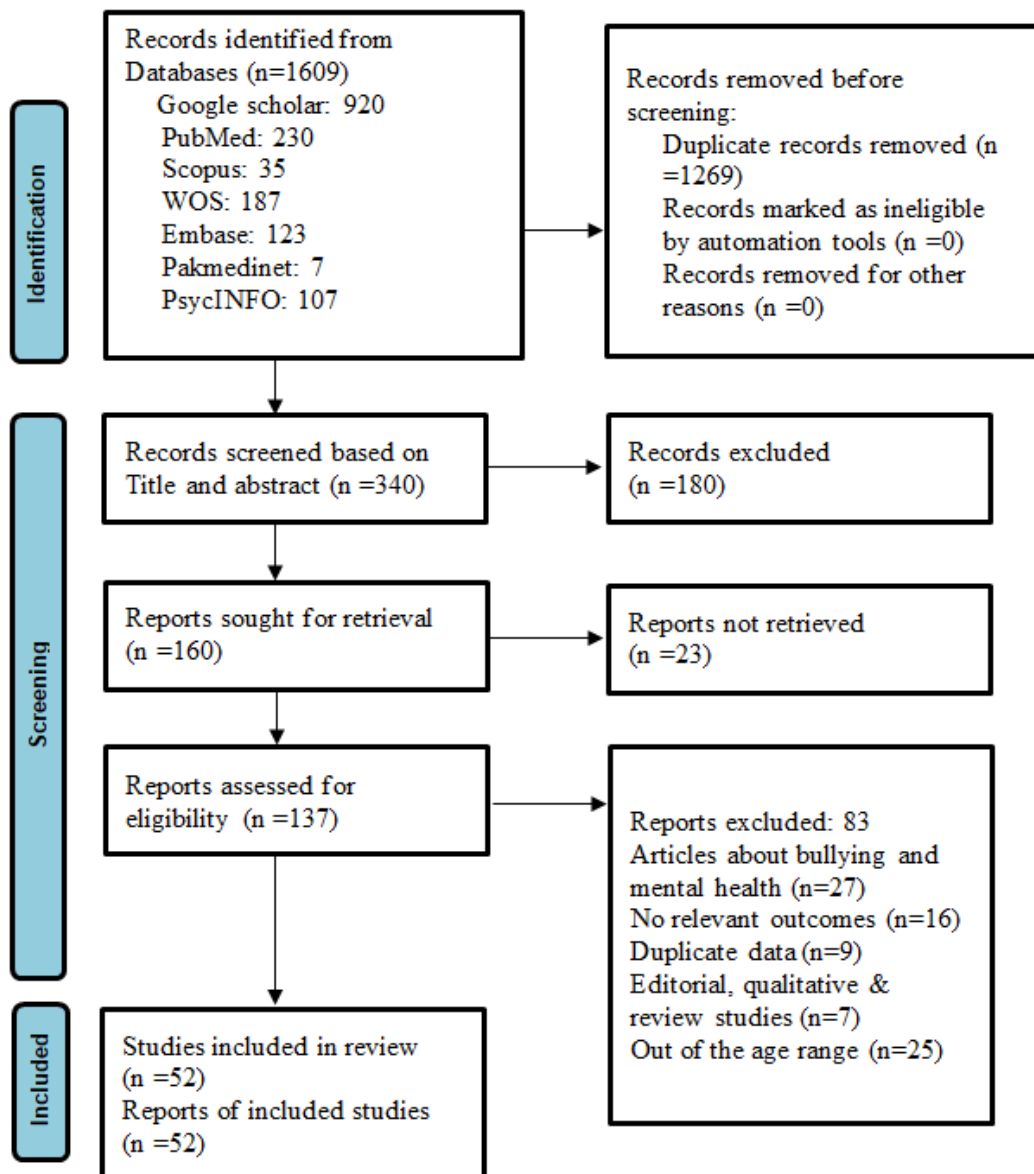


Figure 1. PRISMA Flow Diagram.

2.6. Statistical Synthesis

No meta-analysis was conducted because of the high heterogeneity across study settings, measurement tools, and reporting methods. Instead, a narrative synthesis was performed, which emphasized the prevalence rates of overall bullying as well as specific forms, examined subgroup analyses based on gender, age, country income level, and region, and provided the foundation for conclusions drawn from observed trends across the included studies.

3. Results

3.1. Characteristics of Included Studies

A total of 52 studies were included in this review, all of which employed a cross-sectional study design. The sample sizes of the included studies varied substantially, ranging from 209 to 28,563 participants, reflecting differences in study scope and population coverage. The majority of studies were conducted in High income countries ($n = 22$) and Lower middle income countries ($n = 19$), whereas a smaller proportion were carried out in upper-middle-income countries ($n = 11$) (**Table 2**).

Geographically, the included studies were distributed across multiple world regions. However, the largest proportion originated from the Middle East and North Africa, indicating a growing research interest in school bullying within this region. Regarding school settings, thirty two studies were conducted in public schools, followed by seventeen in mixed school settings, while only three studies were con-

ducted exclusively in private schools. These variations in geographical distribution, income level, and school setting highlight the diversity of contexts in which school bullying has been investigated, which may partly explain differences in reported prevalence rates across studies (**Table 2**).

3.2. Prevalence of School Bullying in the Children and Adolescents

Across the 52 included studies, the reported prevalence of school bullying varied widely, ranging from 9% to 71.2%. This substantial variation may reflect differences in study populations, measurement tools, definitions of bullying, and cultural contexts across the included studies. With respect to the study populations, 22 studies focused on children, 33 studies examined adolescents, and two studies included both children and adolescents. The predominance of studies involving adolescents suggests that bullying research has primarily focused on this age group, likely due to the increased social interaction and peer influence during adolescence. Gender differences in bullying involvement were also reported across several studies. In general, boys were more frequently involved in bullying behaviors compared with girls, although the magnitude of this difference varied across studies and settings. These variations may reflect cultural norms, gender roles, and differences in reporting patterns, which influence how bullying behaviors are expressed and documented. Detailed information regarding prevalence estimates and gender distribution across studies is presented in **Table 2** and **3**.

Table 2. Characteristics of Studies Included in the Systematic Review.

Study	Study Design	Country	Sample Size (N)	Country Income Level	Continent	School Setting	Age Category	School Bullying N (%)	Prevalence of School Bullying by Types					School Bullying by Gender		Quality Score
									Physical	Verbal	Cyber	Psychological	Sexual	M N (%)	F N (%)	
1. Solberg and Olweus (2003) ^[14]	Cross-sectional	Norway	5,171 M:2,627 F: 2,544	HIC	Europe & Central Asia	Public	Adolescents	652(12.6%)	N/A	N/A	N/A	N/A	N/A	245(4.73%)	407(7.8%)	7
2. Kim et al. (2004) ^[15]	Cross-sectional	Korea	1756 M:963 F:793	HIC	East Asia & Pacific	Public	Children	702(40%)	288 (16.4%)	387 (22%)	N/A	754(42.9%)	N/A	421(43.7%)	284(35.8%)	7
3. Kshirsagar et al. (2007) ^[16]	Cross-sectional	India	500 M:188 F:312	LMIC	South Asia	Mixed	Children	157(31.4%)	25(5%)	229(45.8%)	N/A	72(14.4%)	N/A	68(36.2%)	89(28.5%)	6
4. Rivers et al. (2009) ^[17]	Cross-sectional	UK	1990 M:1095 F:895	HIC	Europe & Central Asia	Public	Adolescents	1,441(72.4%)	N/A	N/A	N/A	N/A	N/A	772 (70.5%)	669 (74.7%)	9
4. Hurley (2009) ^[18]	Cross-sectional	Canada	234 M:90 F:144	HIC	North America	Public	Adolescents	145(62.4%)	42(18.3%)	54(23.7%)	N/A	56(20.4%)	N/A	23(25.5%)	65(45.1%)	7
5. Panayiotis et al. (2010) ^[19]	Cross-sectional	Cyprus	1645 M:793 F:852	HIC	Europe and Central Asia	Public	Adolescents & Children	279(17%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	6
7. de Moura et al. (2011) ^[20]	Cross-sectional	Brazil	1,119 M:566 F:509	UMIC	Latin America and the Caribbean	Public	Children	196(17.6%)	698(62.4%)	840(75.1%)	N/A	336(30.1%)	12(1.1%)	N/A	N/A	6
8. Gan et al. (2014) ^[21]	Cross-sectional	USA	1087 M:533 F:554	HIC	North America	Public	Adolescents	597(55%)	304 (28%)	434(40%)	195(18%)	347(32%)	N/A	282 (53%)	310(56%)	8
9. Garmaroudi et al. (2012) ^[22]	Cross-sectional	Iran	1803	UMIC	Middle East and North Africa	Mixed	Adolescents	992(55%)	829(46%)	1316(73%)	N/A	793(44%)	N/A	N/A	N/A	7
10. Jansen et al. (2012) ^[23]	Cross-sectional	Netherlands	6376 M: 3251 F:3125	HIC	Europe and Central Asia	Public	Children	2,123(33.3%)	1,020(16%)	1,402(22%)	N/A	1,721(27%)	N/A	N/A	N/A	8
11. Al-Saadoon et al. (2014) ^[24]	Cross-sectional	Oman	1,229 M:554 F:675	HIC	Middle East and North Africa	Public	Adolescents	940 (76.5)	809 (65.8%)	582 (29.8)	560 (28.7)	N/A	N/A	422 (76.1%)	518 (76.7)	7
12. Alex-Hart et al. (2014) ^[25]	Cross-sectional	Nigeria	1160 M:606 F:554	LMIC	Sub-Saharan Africa	Mixed	Adolescents	954(82.2%)	444(38.2%)	159(13.7%)	N/A	168 (14.4%)	N/A	509 (84.0%)	445(80.3%)	6
13. Owuamanam and Makinwa (2015) ^[26]	Cross-sectional	Nigeria	600 M:300 F:300	LMIC	Sub-Saharan Africa	Public	Adolescents & Children	168(28%)	190(31.6%)	267(44.5%)	N/A	350(58.3%)	N/A	112(37.3%)	53(17.7%)	6
14. Musa (2016) ^[27]	Cross-sectional	Kenya	411 M:199 F:212	LMIC	Sub-Saharan Africa	Mixed	Adolescents	218(53%)	214(52.0%)	167(40.6%)	72(17.5%)	323(78.5%)	72(17.5%)	96(48.2%)	122(57.7%)	6

Table 2. Cont.

Study	Study Design	Country	Sample Size (N)	Country Income Level	Continent	School Setting	Age Category	School Bullying N (%)	Prevalence of School Bullying by Types					School Bullying by Gender		Quality Score
									Physical	Verbal	Cyber	Psychological	Sexual	M N (%)	F N (%)	
15. Adekeye et al. (2016) ^[28]	Cross-sectional	Nigeria	400 M:206 F:194	LMIC	Sub-Saharan Africa	Public	Adolescents	173(43.2%)	N/A	N/A	N/A	N/A	N/A	107(51.9%)	66(34.0%)	7
16. Rigby and Johnson (2016) ^[29]	Cross-sectional	Australia	1688 M:775 F:913	HIC	East Asia and Pacific	Public	Children and adolescents	956(15%)	251(14.9%)	443(26.3%)	356(21.1%)	712 (42.2%)	64(3.8%)	288(37.2%)	382(49.3)	7
17. Tonono (2017) ^[30]	Cross-sectional	South Africa	209	UMIC	Sub-Saharan Africa	Private	Children and adolescents	63(30%)	126(60.2%)	127(60.8%)	138 (66.0%)	197(94.2%)	N/A	31 (15%)	36(17.5%)	6
18. Sanapo (2017) ^[31]	Cross-sectional	Philippine	340 M:184 F:156	LMIC	East Asia and Pacific	Public	Children	138(40.6%)	67(19.7%)	205(60.5%)	43(12.6%)	12(3.45%)	N/A	(60.9%)	(39.1%)	6
19. Ramos-Jiménez et al. (2017) ^[32]	Cross-sectional	Mexico	2347 M:1185 F:1162	UMIC	Latin America and the Caribbean	public	Children and adolescents	1,009(43%)	312(13.3%)	1,495(63.7%)	N/A	1,384(59%)	N/A	562 (47.5%)	447(38.4%)	7
20. Tan et al. (2017) ^[33]	Cross-sectional	Malaysia	27458 M:13110 F:14348	UMIC	East Asia and Pacific	Public	Adolescents	4,448(16.2%)	1,3281(48.4%)	N/A	N/A	N/A	N/A	2,452 (18.7%)	1,966(13.7%)	8
21. Machimbarrena and Garaigordobil (2018) ^[34]	Cross-sectional	Spain	1,993 M:1000 F:972	HIC	Europe & Central Asia	Mixed	Children	476(23.9%)	1(0.1%)	717(36.6%)	13 (0.7%)	N/A	N/A	N/A	N/A	7
22. Hesapcioglu and Tural (2018) ^[35]	Cross-sectional	Turkey	1375 M:920 F:455	UMIC	Europe and Central Asia	Mixed	Adolescents	544(39.6%)	N/A	N/A	N/A	N/A	N/A	406(44.2%)	112(24.6%)	6
23. Marcum (2018) ^[36]	Cross-sectional	USA	214 M:105 F:109	HIC	North America	Public	Children	182(85%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7
24. AlJaffer et al. (2018) ^[37]	Cross-sectional	Saudi Arabia	350	HIC	Middle East and North Africa	Mixed	Adolescents	62 (17.7%)	N/A	N/A	N/A	N/A	N/A	62(17.7%)	N/A	6
25. Le et al. (2019) ^[38]	Cross-sectional	Vietnam	1167 M:525 F:642	LMIC	East Asia and Pacific	Public	Adolescents	388(33.3%)	N/A	N/A	N/A	N/A	N/A	443(84.3%)	411(64%)	8
26. Nazir (2019) ^[39]	Cross-sectional	Kashmir	1103 M:501 F:502	LMIC	South Asia	Public	Adolescents	285(25.8%)	N/A	N/A	N/A	N/A	N/A	142(28.3%)	117(23.3%)	6
27. Shahzadi et al. (2019) ^[40]	Cross-sectional	Pakistan	400 M:200 F:200	LMIC	South Asia	Mixed	Adolescents	151(50.5%)	172(43.2%)	77(19.3%)	N/A	208(51.9%)	N/A	N/A	N/A	7
28. Raji et al. (2019) ^[41]	Cross-sectional	Nigeria	450 M:230 F:220	LMIC	Sub-Saharan Africa	Mixed	Children	295 (65.6%)	391(86.8%)	102 (22.7%)	N/A	38 (8.4%)	N/A	N/A	N/A	7

Table 2. Cont.

Study	Study Design	Country	Sample Size (N)	Country Income Level	Continent	School Setting	Age Category	School Bullying N (%)	Prevalence of School Bullying by Types				School Bullying by Gender		Quality Score	
									Physical	Verbal	Cyber	Psychological	Sexual	M N (%)		F N (%)
29. Galal et al. (2019) ^[42]	Cross-sectional	Egypt	476 M:260 F:216	LMIC	Middle East and North Africa	Mixed	Adolescents	366(77.8%)	174(36.5)	178(37.4%)	N/A	72(15.1%)	50 (66.7%)	173 (66.5%)	102 (47.2)	9
30. Ranjith et al. (2019) ^[43]	Cross-sectional	India	419 M:227 F:192	LMIC	South Asia	Private	adolescents	407 (97.1%)	330 (78.8%)	400(95.5%)	N/A	276 (65.9%)	N/A	N/A	N/A	6
31. Alcazaren (2019) ^[44]	Cross-sectional	Philippines	368 M:149 F:215	LMIC	East Asia and Pacific	Mixed	Adolescents	364 (98.9%)	364 (98.9%)	347(94.3%)	N/A	364 (98.9%)	N/A	59(39.5%)	63(29.3%)	6
32. Alrokba et al. (2019) ^[45]	Cross-sectional	Saudi Arabia	268 M:123 F:145	HIC	Middle east	Private	Children	138(51.5%)	12(8.7%)	2(1.6%)	N/A	5 (3.6%)	N/A	N/A	N/A	6
33. Silva et al. (2020) ^[46]	Cross-sectional	Brazil	1402	LMIC	Latin America and the Caribbean	Mixed	Adolescents	387(27.6%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	7
34. Rana et al. (2020) ^[47]	Cross-sectional	India	667 M:410 F:257	LMIC	South Asia	Mixed	Adolescents	170(25.6%)	218(32.7%)	367(55.1%)	18(2.7%)	168(25.2%)	N/A	129(31.5%)	41(16.3%)	7
35. Arslan et al. (2020) ^[48]	Cross-sectional	Turkey	456 M:217 F:239	UMIC	Europe and Central Asia	Public	Adolescents	123(27%)	N/A	N/A	N/A	N/A	N/A	81 (37.1%)	41(17.1%)	8
36. Hassan et al. (2020) ^[49]	Cross-sectional	Egypt	792 M:372 F:420	LMIC	Middle East and North Africa	Public	Children	372(46.7%)	139(37.6%)	157(42.4%)	N/A	131(35.4%)	N/A	93(25%)	92(22%)	6
37. Shahrour et al. (2020) ^[50]	Cross-sectional	Jordan	1083 M:373 F:710	UMIC	Middle East and North Africa	Public	Adolescents	75(7%)	15(1.4%)	23 (2.1%)	10 (1%)	19(1.8%)	N/A	N/A	N/A	8
38. Chhabria et al. (2020) ^[51]	Cross-sectional	India	435 M:242 F:170	LMIC	South Asia	Public	Adolescents	307(70.57%)	176(40.46%)	239(55.17%)	68(15.86%)	N/A	N/A	126 (74.12%)	168 (69.42%)	7
39. Haddad et al. (2020) ^[52]	Cross-sectional	Saudi Arabia	517 M:231 F:286	HIC	Middle East and North Africa	Public	Children	187 (36.2%)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9
40. Skilbred-Fjeld et al. (2020) ^[53]	Cross-sectional	Norway	4531 M:1822 F:2644	HIC	Europe and Central Asia	Public	Adolescents	226(5%)	N/A	N/A	226(5%)	N/A	N/A	N/A	N/A	7
41. Gardner (2020) ^[54]	Cross-sectional	USA	239 M:102 F:137	HIC	North America	Public	Adolescents	186(78%)	131(55%)	229(96%)	N/A	N/A	N/A	37(37%)	86(63%)	8
42. Albdour et al. (2020) ^[55]	Cross-sectional	USA	150 M:105 F:68	HIC	North America	Public	Adolescents	45(30%)	15(10%)	23(15.3%)	N/A	24(16%)	N/A	43(40.9%)	19(27.9%)	9
43. Jambi (2020) ^[56]	Cross-sectional	Saudi Arabia	570 M: 190 F:380	HIC	Middle East and North Africa	Public	children	74(13%)	105(18.5%)	75(13.2%)	26(4.7%)	63(11.1%)	19(3.5%)	N/A	N/A	6

Table 2. Cont.

Study	Study Design	Country	Sample Size (N)	Country Income Level	Continent	School Setting	Age Category	School Bullying N (%)	Prevalence of School Bullying by Types					School Bullying by Gender		Quality Score
									Physical	Verbal	Cyber	Psychological	Sexual	M N (%)	F N (%)	
44. Salman et al. (2021) ^[57]	Cross-sectional	Pakistan	294	LMIC	South Asia	Mixed	Children	174(54%)	5 (2.9%)	44 (25.3%)	N/A	125(42.5%)	N/A	84(48.3%)	90(51.7%)	6
45. Wang et al. (2021) ^[58]	Cross-sectional	China	10528	UMIC	East Asia and Pacific	Public	Children	7,685(73.0%)	7,685(73%)	7,685(73%)	N/A	6,106(58%)	N/A	5,408 (74%)	5,120(71%)	8
46. Radwan et al. (2021) ^[59]	Cross-sectional	Egypt	1535 M:939 F:596	LMIC	Middle East and North Africa	Mixed	Children	219(14.3%)	53 (3.5%)	76(5%)	31(2%)	81 (5.3%)	5(0.32)	153(16.3%)	66(11.1%)	6
47. Pillay (2021) ^[60]	Cross-sectional	South Africa	435 M:190 F:245	UMIC	Sub-Saharan Africa	Public	Children	208(47.8%)	55(12.6%)	169(38.9)	18 (4.1%)	31(7.13%)	N/A	117(61.5%)	156 (63.6)	6
48. Abdulrazzaq et al. (2021) ^[61]	Cross-sectional	Iraq	450 M:222 F:228	UMIC	Middle East and North Africa	Public	Children	152(33.8%)	45 (10%)	69(15.3%)	N/A	N/A	N/A	85(38.7%)	65(28.89%)	6
49. Aldughayyim et al. (2021) ^[62]	Cross-sectional	Saudi Arabia	560 M:296 F:259	HIC	Middle East and North Africa	Mixed	Adolescents	266(47.5)	170 (30.3%)	149(26.6%)	N/A	95(16.9%)	N/A	145(49%)	132 (51%)	6
50. Källmén and Hallgren (2021) ^[63]	Cross-sectional	Sweden	28,563 M:15881 F:12682	HIC	Europe and Central Asia	Public	Adolescents	3,296(11.5%)	N/A	N/A	N/A	N/A	N/A	1162(7.32%)	2,134(16.8%)	8
51. Alsalem et al. (2021) ^[64]	Cross-sectional	Saudi Arabia	300 M:137 F:163	HIC	Middle East and North Africa	Mixed	adolescents	194(64.7%)	51(17.0%)	125(41.7%)	N/A	18(6.0%)	N/A	N/A	N/A	7
52. Elmahdy et al. (2022) ^[65]	Cross-sectional	Saudi Arabia	461 M:185 F:276	HIC	Middle East and North Africa	Public	Adolescents	163(35.3%)	45 (27.6%)	124 (75.6%)	46(28.2%)	46(28.2%)	N/A	82(17.78%)	81(17.57%)	7

Table 3. Prevalence of Specific Forms of School Bullying and Characteristics of the Included Studies.

Category	Subcategory	Number of Studies	% of Total (n = 52)
Bullying Subtype	Verbal bullying	37	71.2%
	Physical bullying	36	69.2%
	Relational/Psychological	35	67.3%
	Cyber-bullying	13	25.0%
	Sexual bullying	5	9.6%
Income Level	Low-income	0	0.0%
	Lower-middle-income	19	36.5%
	Upper-middle-income	11	21.2%
Region	High-income	22	42.3%
	East Asia and Pacific	6	11.5%
	Europe and Central Asia	6	11.5%
	Latin America and Caribbean	3	5.8%
	Middle East and North Africa	13	25.0%
School Setting	South Asia	7	13.5%
	Sub-Saharan Africa	7	13.5%
	North America	5	9.6%
	Public	32	61.5%
Age Group	Private	3	5.8%
	Mixed	17	32.7%
	Children	22	42.3%
	Adolescents	33	63.5%
	Children-adolescents	2	3.8%

3.3. Overall Prevalence of Specific Forms of School Bullying

Table 3 also summarizes key characteristics of the included studies, including income level, geographic region, school setting, and age group. Regarding bullying subtypes, the findings show a strong predominance of traditional forms of bullying. Verbal bullying (71.2%) was the most frequently reported subtype, followed closely by physical bullying (69.2%) and relational/psychological bullying (67.3%). This indicates that most studies continue to focus on direct, face-to-face forms of victimization. In contrast, cyber-bullying (25.0%) and sexual bullying (9.6%) were comparatively less represented, suggesting that digital and sexual forms of bullying remain underexplored in the literature despite their growing relevance in contemporary school environments.

In terms of income level, the majority of studies were conducted in high-income countries (42.3%), followed by lower-middle-income countries (36.5%) and upper-middle-income countries (21.2%), while no studies originated from low-income settings. This highlights a clear geographic and economic imbalance in the evidence base, indicating limited representation of the most resource-constrained contexts. With respect to geographical distribution, the studies were most commonly conducted in the Middle East and North Africa region (25.0%), followed by South Asia (13.5%) and

Sub-Saharan Africa (13.5%), while North America (9.6%) and Latin America and the Caribbean (5.8%) were less represented. Europe and Central Asia, and East Asia and the Pacific each contributed 11.5% of studies. Overall, this reflects moderate global coverage, although representation remains uneven across regions. For school setting, most studies were conducted in public schools (61.5%), followed by mixed settings (32.7%), while private schools (5.8%) were least represented. This suggests that bullying research is primarily concentrated in public education systems. Finally, regarding age groups, the majority of studies focused on adolescents (63.5%), followed by children (42.3%), with a small proportion including both groups (3.8%). This indicates a stronger research emphasis on adolescent populations, likely due to higher reported rates of bullying during this developmental stage. Overall, the evidence base is dominated by studies from higher-income countries and public school settings, with a strong focus on traditional forms of bullying and adolescent populations. However, gaps remain in low-income country representation, private school settings, and emerging forms of bullying such as cyber and sexual bullying (**Table 3**).

4. Discussion

Bullying in schools constitutes a significant public health issue impacting children and adolescents globally, leading to detrimental consequences for their mental, emo-

tional, and academic well-being. Understanding the prevalence of bullying, its various forms, and its differential effects on diverse groups is crucial in devising effective prevention and intervention strategies. This knowledge is essential for addressing the multifaceted nature of bullying and improving outcomes for affected individuals. All studies included in this review utilized a cross-sectional design, with sample sizes ranging from 209 to 28,563 participants, reflecting the breadth and scale of research on school bullying. Research was predominantly conducted in lower-middle-income and high-income countries, with fewer studies originating from upper-middle-income nations. The studies spanned all major global regions, with a concentration in the Middle East and North Africa. Most investigations were conducted in public schools, followed by mixed school settings, while relatively few were carried out in private schools. School bullying prevalence varied widely across studies, ranging from 5% to 98.9%, with the majority focusing on adolescents and only a few including broader age groups. Boys were generally more frequently involved as both perpetrators and victims. Across all studies, verbal bullying emerged as the most common form, followed by physical and relational or psychological bullying; whereas cyber-bullying was less prevalent and sexual bullying was the least studied. The variation in prevalence across studies is influenced by methodological differences, cultural contexts, and local policies. Limitations such as cross-sectional designs and self-report bias, along with differing definitions and instruments, contribute to this heterogeneity.

Bullying prevalence varies widely across studies, ranging from 5% to 98.9%. Recent research indicates that adolescent victimization remains a significant issue, with prevalence rates varying depending on the type and context of victimization. For example, a population-based study in Norway found that 2.9% of adolescents experienced image-based sexual abuse and 4.3% experienced physical sexual victimization within a year, highlighting new forms of digital victimization alongside traditional types^[66]. Another study reported a prevalence rate of 12.5%^[67]. These findings suggest that school bullying is more prevalent than previously thought, with variations in reported rates influenced by factors such as study population composition, sample size, and the number of studies conducted. Differences in definitions of bullying and the instruments used for measurement further

explain the variability in prevalence across countries^[68].

Verbal bullying remains the most prevalent form globally, with studies showing it has the highest frequency and the most significant negative impact on adolescent mental health across diverse regions^[69]. Age-related development in social and verbal skills tends to reduce physical bullying but may increase indirect or relational forms, which are strongly linked to low self-esteem and depressive symptoms^[70]. School anti-violence policies have been effective in reducing physical bullying but may unintentionally shift bullying toward verbal or relational types, which require targeted interventions^[66,68]. Cyber-bullying presents unique challenges due to the permanence and wide reach of digital content, complicating detection and intervention efforts; it often co-occurs with traditional bullying and is associated with severe mental health outcomes, including depression, suicidal ideation, and self-harm^[68]. Protective factors such as parental support can mitigate some negative mental health impacts of bullying, highlighting the importance of family involvement in intervention programs^[69,71].

Recent studies indicate that men exhibit higher physical and direct aggression, while women show more relational aggression and greater affective empathy. Empathy deficits, including “anti-empathy,” partly explain sex differences in aggression across genders^[72]. Men’s impulsivity and anger-driven risk-taking increase aggressive behavior, whereas neuroticism predicts both affective and cognitive aggression in both sexes. Social and cultural factors further shape gender differences by influencing perceived consequences and reinforcing learned gender roles^[73].

Geographically, higher prevalence of bullying was observed in lower-middle-income and high-income countries compared to upper-middle-income nations, possibly reflecting differences in reporting mechanisms, educational resources, supervision, cultural norms, and stigma. Recent research shows bullying victimization remains highly prevalent globally, with the highest rates in the Eastern Mediterranean and African regions and lower rates in Europe. Regional disparities reflect the influence of school management, peer support, cultural norms, and anti-bullying legislation^[74]. Socioeconomic factors, including lower wealth and academic performance, increase victimization risk, while peer and parental support serve as protective factors. These findings highlight the need for culturally and regionally tailored pre-

vention strategies to effectively reduce bullying^[75].

4.1. Implications

4.1.1. Theoretical Implications

In the context of this systematic review, which includes studies from diverse geographic regions and predominantly from lower-middle- and high-income countries, the findings underscore the necessity of adopting a complex and contextually grounded theoretical framework to understand school bullying among children and adolescents. The wide variation in prevalence highlights that bullying is not a uniform construct but is shaped by cultural norms, socioeconomic conditions, and institutional environments. A socio-ecological perspective is particularly relevant, as it captures the interaction of individual behaviors with peer relationships, school climate, and broader societal influences.

The predominance of adolescent-focused studies situates bullying within developmental processes such as identity formation and peer hierarchy, aligning with developmental and social dominance theories. Gender disparities observed across studies further support gender role and hegemonic masculinity frameworks, while the notable presence of relational aggression calls for more nuanced interpretations of gendered behaviors. Additionally, the limited exploration of cyber-bullying indicates a gap in existing theoretical models, necessitating the incorporation of digital ecological perspectives to reflect evolving social interactions. Variations across school settings (particularly public versus private schools) further highlight the importance of institutional theory in shaping bullying dynamics. Overall, these findings support the development of a hybrid theoretical model integrating socio-ecological, developmental, gender-based, and digital dimensions to provide a comprehensive and globally relevant understanding of school bullying.

4.1.2. Practical Implications

Within the diverse settings represented in this review—spanning multiple regions, income levels, and predominantly public school environments—the findings highlight the importance of designing and implementing culturally sensitive and context-specific bullying prevention strategies. The substantial variation in prevalence across studies suggests that interventions should be informed by localized data, enabling policymakers and educators to tailor programs according to

the specific needs of their populations.

Given the higher concentration of research among adolescents and in public schools, these settings should be prioritized for intervention, while also addressing the relative gaps in private schools and low-income countries. School-based programs should focus on the most commonly reported forms of bullying—verbal, physical, and relational—through curricula that enhance empathy, communication skills, and positive peer interactions. At the same time, emerging concerns such as cyber-bullying should be addressed through digital literacy and online safety education.

Gender-sensitive approaches are essential to account for differences in bullying patterns, while early identification and reporting mechanisms should be strengthened to ensure timely intervention. A whole-school approach is recommended, involving trained counselors, psychologists, and support staff, alongside continuous professional development for teachers to effectively manage and prevent bullying. Furthermore, strengthening surveillance systems and adopting standardized, evidence-based tools will enhance monitoring and evaluation efforts. Collectively, these strategies are essential to address school bullying as a significant public health concern across varied sociocultural and institutional contexts.

4.2. Limitations and Future Research Directions

This study identifies several methodological limitations, including the use of purely cross-sectional data, which precludes causal inference, and the reliance on self-reported data that may introduce recall bias. Additionally, varied definitions and measurement tools contribute to heterogeneity. The focus on bullying victims overlooks broader determinants like household income and mental health. Notably, there are regional gaps, particularly underrepresentation of European countries, and potential language biases that limit generalizability. While publication year was accounted for, it does not facilitate formal trend analysis regarding changes in bullying prevalence over time.

Future research should utilize longitudinal and mixed-methods designs to explore the causal relationships between bullying and its psychosocial effects. Emphasis on cyber-bullying necessitates investigating factors like family support and mental health. The role of artificial intelligence (AI) tech-

nologies, such as natural language processing and predictive analytics, in monitoring and mitigating bullying behaviors should also be assessed, with a focus on ethically sensitive interventions like chat-bots and early warning systems for at-risk youth. This research aims to enhance strategies for understanding and addressing bullying in children and adolescents.

5. Conclusions

The study found a higher prevalence of bullying victimization in low middle-income and high income countries, particularly among adolescents and students in public school settings, with male students more likely to experience bullying than their female peers. Verbal bullying was the most common, followed by physical and psychological bullying. Family physicians should address adolescents' psychological concerns during adolescent care appointments. Furthermore, schools should establish a comprehensive bullying prevention group, including school workers, parents, and healthcare physicians. Promoting student engagement in structured, enjoyable extracurricular activities may also support self-esteem development and reduce susceptibility to bullying.

Author Contributions

Conceptualization, K.J., M.R., Q.A., and A.K.; methodology, K.J. and M.R.; software, A.K.; validation, M.R., Q.A., and A.K.; formal analysis, K.J.; investigation, K.J., M.R., Q.A., and A.K.; resources, A.K.; data curation, M.R.;

writing—original draft preparation, K.J.; writing—review and editing, M.R., Q.A., and A.K.; visualization, Q.A.; supervision, A.K.; project administration, M.R.; funding acquisition, A.K. All authors have read and agreed to the published version of the manuscript.

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Data Availability Statement

No new data were created or generated in this study. All data was presented in this work.

AI Use Statement

During the preparation of this manuscript, the authors used ChatGPT (OpenAI) solely for language refinement. No AI tools were used for data analysis, interpretation, or generation of scientific content. All outputs were critically reviewed and edited by the authors. The authors take full responsibility for the integrity and accuracy of the work.

Appendix A

Table A1. Joanna Briggs Institute (JBI) Quality Assessment.

Authors	Quality Score (/9)	% Yes	Risk of Bias
1. Solberg and Olweus (2003) ^[14]	7	77.8%	Low
2. Kim et al. (2004) ^[15]	7	77.8%	Low
3. Kshirsagar et al. (2007) ^[16]	6	66.7%	Moderate
4. Rivers et al. (2009) ^[17]	9	100%	Low
4. Hurley (2009) ^[18]	7	77.8%	Low
5. Panayiotis et al. (2010) ^[19]	6	66.7%	Moderate
7. de Moura et al. (2011) ^[20]	6	66.7%	Moderate
8. Gan et al. (2014) ^[21]	8	88.9%	Low
9. Garmaroudi et al. (2012) ^[22]	7	77.8%	Low
10. Jansen et al. (2012) ^[23]	8	88.9%	Low

Table A1. Cont.

Authors	Quality Score (/9)	% Yes	Risk of Bias
12. Al-Saadoon et al. (2014) ^[24]	7	77.8%	Low
13. Alex-Hart et al. (2014) ^[25]	6	66.7%	Moderate
14. Owuamanam and Makinwa (2015) ^[26]	6	66.7%	Moderate
15. Musa (2016) ^[27]	6	66.7%	Moderate
16. Adekeye et al. (2016) ^[28]	7	77.8%	Low
17. Rigby and Johnson (2016) ^[29]	7	77.8%	Low
18. Tonono (2017) ^[30]	6	66.7%	Moderate
19. Sanapo (2017) ^[31]	6	66.7%	Moderate
20. Ramos-Jiménez et al. (2017) ^[32]	7	77.8%	Low
21. Tan et al. (2017) ^[33]	8	88.9%	Low
22. Machimbarrena and Garaigordobil (2018) ^[34]	7	77.8%	Low
23. Hesapcioglu and Tural (2018) ^[35]	6	66.7%	Moderate
24. Marcum (2018) ^[36]	7	77.8%	Low
25. AlJaffer et al. (2018) ^[37]	6	66.7%	Moderate
26. Le et al. (2019) ^[38]	8	88.9%	Low
27. Nazir (2019) ^[39]	6	66.7%	Moderate
28. Shahzadi et al. (2019) ^[40]	7	77.8%	Low
29. Raji et al. (2019) ^[41]	7	77.8%	Low
30. Galal et al. (2019) ^[42]	9	100%	Low
31. Ranjith et al. (2019) ^[43]	6	66.7%	Moderate
32. Alcazaren (2019) ^[44]	6	66.7%	Moderate
33. Alrokba et al. (2019) ^[45]	6	66.7%	Moderate
35. Silva et al. (2020) ^[46]	7	77.8%	Low
36. Rana et al. (2020) ^[47]	7	77.8%	Low
37. Arslan et al. (2020) ^[48]	8	88.9%	Low
38. Hassan et al. (2020) ^[49]	6	66.7%	Moderate
39. Shahrouf et al. (2020) ^[50]	8	88.9%	Low
40. Chhabria et al. (2020) ^[51]	7	77.8%	Low
41. Haddad et al. (2020) ^[52]	9	100%	Low
42. Skilbred-Fjeld et al. (2020) ^[53]	7	77.8%	Low
43. Gardner (2020) ^[54]	8	88.9%	Low
44. Albdour et al. (2020) ^[55]	9	100%	Low
45. Jambi (2020) ^[56]	6	66.7%	Moderate
46. Salman et al. (2021) ^[57]	6	66.7%	Moderate
47. Wang et al. (2021) ^[58]	8	88.9%	Low
48. Radwan et al. (2021) ^[59]	6	66.7%	Moderate
49. Pillay (2021) ^[60]	6	66.7%	Moderate
50. Abdulrazzaq et al. (2021) ^[61]	6	66.7%	Moderate
51. Aldughayyim et al. (2021) ^[62]	6	66.7%	Moderate
52. Källmén and Hallgren (2021) ^[63]	8	88.9%	Low
53. Alsaleem et al. (2021) ^[64]	7	77.8%	Low
54. Elmahdy et al. (2022) ^[65]	7	77.8%	Low

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