



Research Article

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Received: 18 September 2022 / Accepted: 26 December 2022 / Published: 5 January 2023

## Global Research Trends in School Bullying: A Bibliometric Analysis

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DOI: <https://doi.org/10.36941/jesr-2023-0009>

### Abstract

School bullying is recognised as a global issue that raises academic and practitioner concerns because of its adverse consequences on students' physical, mental, and subjective well-being. This study aims to comprehensively examine the area of research on school bullying by performing a bibliometric analysis of 634 publications between 1996 and August 2022 from the Scopus database. Apart from that, this study highlights the prolific and most influential countries, authors, sources and journal articles in the area, and the research topics on which researchers have been working. The findings showed that the USA, the UK, and China are the most productive countries in school bullying. Note that Smith, P.K. from UK and Espelage, D.L. from the US are the most active and among the most influential authors. The *Journal of School Violence* and the *International Journal of Bullying Prevention* are the most active journals, and the *Journal of Adolescent Health and Aggressive Behavior* are the most cited journals. Meanwhile, the journal article by Wang, Iannotti, and Nansel (2009) is the most cited article, being published in the most cited journals. Several areas that are currently well explored, such as victimisation, prevention, and cyberbullying, have been discovered. The analysis also presented some recently investigated keywords, such as mental health, peer aggression, bullying perpetration, and self-control, which can be explored further. This paper's findings trace the trend and contribute to the scholarly literature on collective school bullying knowledge.

**Keywords:** Bibliometric Analysis, Science Mapping, School Bullying, Education Research

## 1. Introduction

Bullying is the aggressive activity that a person purposefully engages in repeatedly to cause hurt or distress to another person one perceives as weaker (Olweus, 2003; Tedeschi & Felson, 1994). In the school context, bullying occurs when a student or a group of students uses their influence to hurt other people or other groups through social exclusion, physical harm, verbal abuse, psychological harm, sexual abuse, and cyberbullying (Aidomojie et al., 2022; Hanci & Akça, 2020; O'Higgins et al., 2022). School bullying has become a common type of violence in modern society and is becoming more universally recognised as a significant global issue (Ahmed, et al., 2022; O'Higgins et al., 2022). Education policymakers around the world are becoming more concerned about bullying (Nansel et al., 2004; Rigby, 2007; Rivara et al., 2016), despite the fact that the prevalence of bullying has been shown to differ greatly between countries (Craig et al., 2009; Kallciu et al., 2020; Nansel et al., 2004).

Numerous reviews on school bullying have provided an overview of the issue or focused on specific aspects. In 2015, the American Psychologist released a special issue on bullying and victimisation in schools that concentrated on definitional and assessment concerns in the field (Hymel & Swearer, 2015). Other reviews concentrated on causes (Fulga et al., 2020); risk factors (Farrington & Baldry, 2010; Alvarez-Garca et al., 2015); impact (Hanci & Akça, 2020; Bochaver, 2021; Espelage & Swearer, 2003; Jiménez-Barbero et al., 2020); and prevention (Smith et al., 2003). Assessing school bullying's characteristics and the intellectual framework on which it is built is crucial, given the significance and volume of study on the subject that has recently emerged. Many articles give broad overviews of various elements of bullying in schools, but only a few (Fuentes Cabrera et al., 2019, Peker & Yalcin, 2022, Cretu & Morandau, 2022) have looked at state-of-the-art from a bibliometric point of view.

In contrast to most previous literature reviews that focused on single aspects of school bullying, this study contributes to a more systematic and updated analysis to better understand the landscape of school bullying research. Specifically, this paper addressed the following research question:

- RQ1: What is the trend of research on school bullying published to date?
- RQ2: Which countries contribute significantly to the study of school bullying?
- RQ3: Who are the most prolific authors on school bullying?
- RQ4: What are the most influential publications on school bullying?
- RQ5: What are the main keywords of scientific research on school bullying?

## 2. Literature Review

Bibliometric analysis is a quantitative method for reviewing and analysing previously published works (Ellegaard & Wallin, 2015). Researchers can utilise this methodology to evaluate academic studies in a particular field or subject area. Furthermore, this process encompasses a quantitative and unbiased evaluation of secondary data collected from digital databases such as Scopus and Web of Science (Verma & Gustafsson, 2020). Thus, by implementing a systematic, transparent, and replicable review process (Fahimnia et al., 2015; Linnenluecke et al., 2020; Klarin, 2019), this analysis can raise the review's reliability and quality (Dalpé, 2002).

In recent years, bibliometric analysis has been used in educational research to assess the body of literature published to date and measure research performance. Examples include online learning (Chen et al., 2021; Omar et al., 2021; Shen & Ho, 2020); educational leadership (Hallinger & Kovacevic, 2021); learning strategy (Song et al., 2019; Kushairi & Ahmi, 2021); and ethics (Ali et al., 2021; Poje & Zaman Groff, 2021). These studies have made it possible for academics and practitioners to better understand the state of the art of research and predict the future growth of a particular research topic.

Focusing on school bullying research, Table 1 shows bibliometric studies addressing the topic (Fuentes Cabrera et al., 2019; Peker & Yalcin, 2022; Cretu & Morandau, 2022). A bibliometric analysis was used in an earlier representative piece of bullying literature in the Scopus database, but it focused on bullying research based on race or ethnicity (Fuentes Cabrera et al., 2019). Recently, Peker and

Yalcin's (2022) bibliometric analysis was limited to cyberbullying publications. In the same year, the bibliometric analysis performed by Cretu & Morandau (2022) maps the landscape of bullying and cyberbullying research in the Education and Educational Research category from Clarivate's Web of Science only. Moreover, Cretu and Morandau (2022) also remarked on the importance of expanding future bibliometric analyses of bullying to other databases, such as Scopus, for the broadest possible coverage. Concerning data from different databases, the results of any bibliometric evaluation exercises may differ (Singh et al., 2021).

### 3. Methods

This bibliometric study examined the publications collected in the Scopus science database, compared to the previous bibliometric study of scientific journals, books, and conference proceedings, which has made extensive use of Scopus (e.g., Faruk et al., 2021; Kipper et al., 2020; Malanski et al., 2021). Scopus enables data access through the Search, Discover, and Analyse options to download 43 research publications' data fields, such as source title, abstract, author keywords, year of publication, research area, affiliation, and document type. Additionally, the Scopus platform is frequently regarded as one of the largest curated databases (Singh et al., 2021; Leydesdorff et al., 2010). The recently revised (August 2020) Scopus content coverage guide indicates that it currently contains over 1.7 billion cited references. Hence, this database can provide a comprehensive overview of the world's scientific research output.

#### 3.1 Search strategy

Bibliometric analysis was performed by the Scopus database as of August 2022. The search query TITLE ("school bullying" OR "school-based bullying") has been performed in the Scopus database to search for relevant publications in any language. As titles serve as the first thing that readers see (Zakaria et al., 2021), we use a title-only search strategy to ensure that the found publications are related to school bullying as the key topic and to prevent a high publication drop-out rate (Kücher & Feldbauer-Durstmüller, 2019). Figure 1 shows our search strategy. The search retrieved an initial sample of 634 publications.

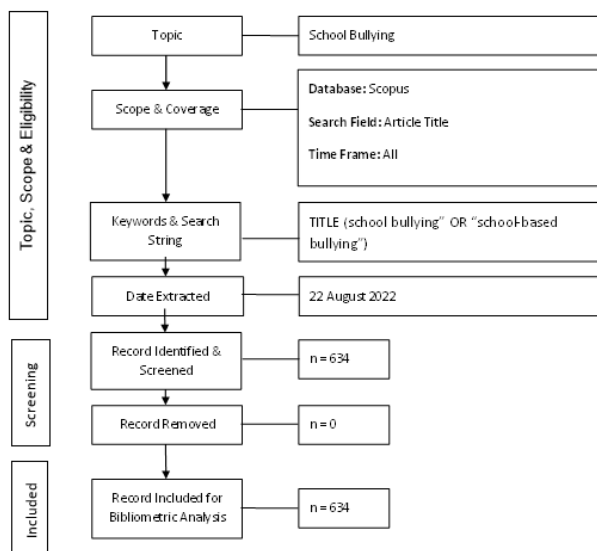


Figure 1: Flow diagram of the search strategy.  
Source: Zakaria et al. (2021)

### 3.2 Data analysis

We performed performance analysis in bibliometric studies (Donthu et al., 2021) to describe the trends in publication (RQ<sub>1</sub>) and the contributing countries (RQ<sub>2</sub>), publications (RQ<sub>3</sub>), sources (RQ<sub>4</sub>), and keywords (RQ<sub>5</sub>) of research on school bullying. The frequency and percentage of each publication, as well as the creation of the necessary graphs, were generated using Microsoft Excel. Meanwhile, the citation metrics were calculated using Harzing's Publish and Perish application. Additionally, we enhanced our investigation by performing a science mapping analysis using VOSviewer (version 1.6.18). Note that VOSViewer is a free software tool to extract citation information, bibliographical information, and keywords to perform network visualisation of co-authorship and co-citation among authors. Furthermore, the same tool was utilised to map the intellectual structure of school bullying through keyword co-occurrence analysis and bibliographic coupling analysis of documents.

## 4. Results

In this section, we present the research we did to figure out the status of publications about school bullying in the Scopus database.

### 4.1 Trends in Publication

Figure 2 presents the number of publications on school bullying. The initial study was published in 1996, and then there was an emerging slow-increasing trend till 2002. After 2003, the number of school bullying publications began to grow rapidly. The increase in prevalence indicates the awareness of bullying is widespread in school contexts, and academic communities of educational research have gradually recognised the importance of bullying research (e.g., Solberg & Olweus, 2003; Espelage & Swearer, 2003; Smith et al., 2004). Interestingly, the sharp rise in publications happened in 2011 (n = 46) when research on school bullying grew by 170% compared to the year before (n = 17). Overall, an accelerated growth rate was discovered in the second decade of the millennium, in which 528 papers, or 82.97% of all publications, were accounted for.

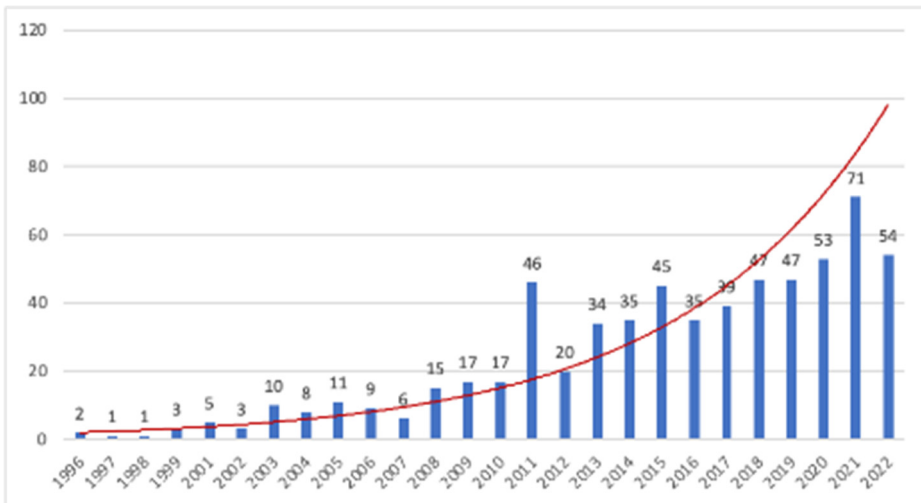


Figure 2: Trend in the publication of school bullying research (1996 - 2022).

This study also sought to determine where school bullying documents were published by analysing document types and language data. Table 1 shows the different types of documents where publications on school bullying have been published. As can be seen, the majority of the publications are journal articles, with 505 articles (79.65% of the total documents). Following the articles, it is a review paper (n = 53, 8.36%), a book chapter (n = 36, 5.68%), and a book (n = 13, 2.05%). For other publications (editorial, letter, note, short survey, and erratum), each has made up under 1% of all documents. As demonstrated in Table 2, 88.96% (n = 580) of the school bullying publications have been written in English, making it the language of preference for most academic research.

Table 1: Document Type

Document Type	Total Publications (TP)	Percentage (%)
Article	505	79.65
Review	53	8.36
Book Chapter	36	5.68
Book	13	2.05
Conference Paper	13	2.05
Editorial	6	0.95
Letter	3	0.47
Note	2	0.32
Short Survey	2	0.32
Erratum	1	0.16
<b>Total</b>	<b>634</b>	<b>100.00</b>

Table 2: Languages

Language	Total Publications (TP)*	Percentage (%)
English	580	88.96%
Spanish	22	3.37%
French	17	2.61%
Portuguese	12	1.84%
Russian	5	0.77%
Greek	3	0.46%
Turkish	3	0.46%
Chinese	2	0.31%
Italian	2	0.31%
Croatian	1	0.15%
Czech	1	0.15%
Hungarian	1	0.15%
Korean	1	0.15%
Lithuanian	1	0.15%
Macedonian	1	0.15%
<b>Total</b>	<b>634</b>	<b>100.00</b>

#### 4.2 Publications by Countries

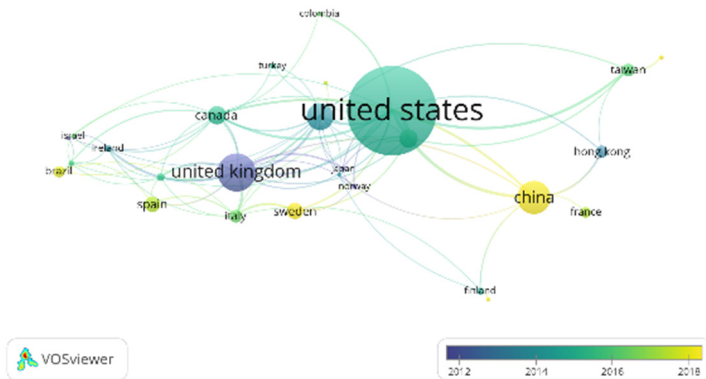
Table 3 indicates the top 20 countries where most school bullying publications originated. The United States (26.06%) had the leading position, followed by the United Kingdom (11.67%) and China (10.09%). The top three contributors were diversified to three continents - North America, Europe and Asia. The remaining distribution of author national affiliations represented less than 10% and spread worldwide, indicating that school bullying is a global issue.

**Table 3:** The top 20 Countries contributed to the publications

Country	Continent	TP	%
United States	North America	169	26.66%
United Kingdom	Europe	74	11.67%
China	Asia	64	10.09%
Australia	Oceania	50	7.89%
South Korea	Asia	34	5.36%
Canada	North America	33	5.21%
Spain	Europe	30	4.73%
Sweden	Europe	30	4.73%
Italy	Europe	24	3.79%
Taiwan	Asia	24	3.79%
Hong Kong	Asia	23	3.63%
Brazil	South America	21	3.31%
France	Europe	20	3.15%
Finland	Europe	15	2.37%
Germany	Europe	15	2.37%
Ireland	Europe	13	2.05%
Portugal	Europe	11	1.74%
Turkey	Europe	11	1.74%
Japan	Asia	10	1.58%
Israel	North America	9	1.42%

Notes: TP=total number of publications

Apart from that, the co-authorship analysis examines the formal collaborations between the affiliated countries (Donthu et al., 2021), which resulted in the relationship among countries contributing to the greater clarity and insights of the research area. At the same time, it can be used to justify and spark new research among scholars in the underrepresented region. The overlay visualisation generated via VOSviewer in Figure 3 maps the collaboration across the two-year interval scale, starting from 2012. The United Kingdom (purple node) is the most active country contributing to school bullying publications during the early stages and is linked to Japan and Norway. During the green phase (2014 to 2016), the United States emerged as the most collaborative country. Recently, authors have reached out their collaboration to China, Sweden and Brazil, as indicated in the yellow node. As can be seen, the collaborations among authors in specific affiliated countries are diversified across various continents.



**Figure 3:** Overlay visualisation of the co-authorship by countries

4.3 Publications by Authors

The most productive scholars involved in publications on school bullying are listed in Table 4. Note that only those who have published at least 10 documents are included in the list. The most productive author is Peter K. Smith (17 publications), affiliated with the University of London, United Kingdom. Meanwhile, Dorothy Lynn Espelage from The University of North Carolina in the United States and David P. Farrington from the University of Cambridge in the United Kingdom are tied for second place on the list of authors who have contributed the most, with 16 works each.

Table 4: Top authors contributing to school bullying research

Author's Name	Affiliation	Country	TP	NCP	TC	C/P
Smith, P.K.	University of London	United Kingdom	17	16	1120	65.88
Espelage, D.L.	The University of North Carolina	United States	16	13	1738	108.63
Farrington, D.P.	University of Cambridge	United Kingdom	16	16	1269	79.31
Thornberg, R.	Linköpings Universitet	Sweden	14	14	459	32.79
Ttofi, M.M.	Institute of Criminology	United Kingdom	12	12	1058	88.17
Horton, P.	Linköpings Universitet	Sweden	11	10	121	11.00
Chen, L.M.	National Sun Yat-Sen University	Taiwan	10	9	201	20.10
Kubiszewski, V.	Université Bourgogne Franche-Comté,	France	10	8	136	13.60
Yen, C.F.	National Pingtung University of Science and Technology	Taiwan	10	10	203	20.30

Notes: The authors of the top contributing authors with more than five published articles on school bullying. TP=total number of publications; NCP=number of cited publications; TC=total citations; C/P=average citations per publication.

Figure 4 depicts the authorship relationship in school bullying documents, with three distinct groups denoted by different colours. These clusters indicate connections among authors who work on similar topics, although cross-cluster relationships exist. The nodes represent the number of citations and the link, the co-citation relation. Furthermore, this analysis shows that the red cluster is the largest, with 77 authors at the top of the figure, centred on Salmivali C., Espelage D.L., Farrington D.P., Gini G., Ttofi, M.M., and Swearer, S.M. It is also important to note that Salmivalli, C., Smith, P.K., Farrington, D.P., Ttofi, M.M. are among the most productive authors in the school bullying research (refer to Table 4), highlighting the quality of the publications in school bullying. The green cluster contains 59 authors, and the most influential authors are Wolke, D. and Nansel, T.R. Other authors include Simons-Morton, B.G., Guerra, N.G., and Losel, F. Other than that, the blue group contains 49 authors and is dominated by the most influential authors in school bullying. The blue cluster is led by Dan Olweus, the author with the highest total link strength of 77767, followed by Peter K. Smith with a total link strength of 113948. Notably, Smith P.K. is also the most prolific author in the field of school bullying. This cluster also includes other influential authors, which are Rigby, K., Cowie, Hslee, P.T., and Craig, W.M.



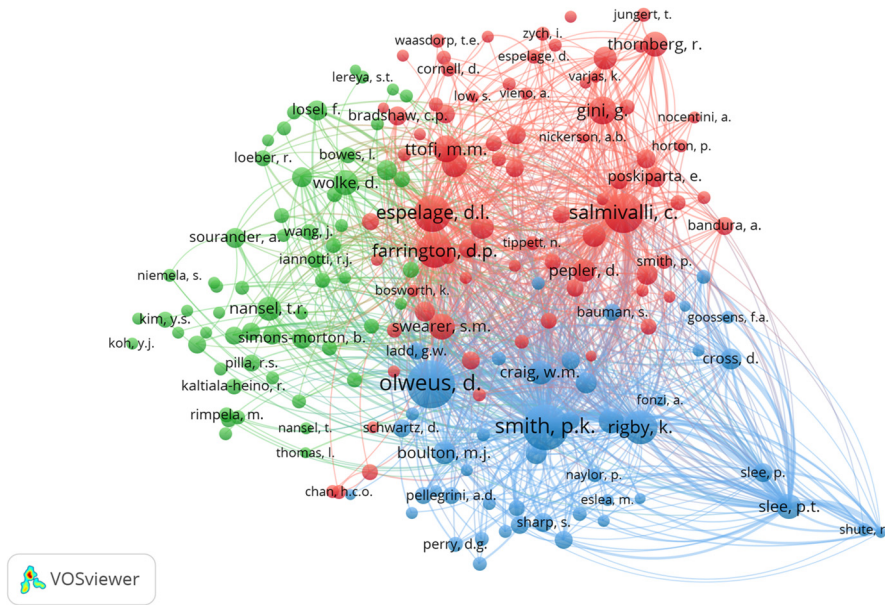


Figure 4: Network visualisation map of the author's co-citation analysis

4.4 Publications by Source Titles and Documents

Table 5 lists 12 journals that published at least seven papers in the field of school bullying once we restricted our analysis to document types classified as articles (n = 505). Note that the most productive source journal is The Journal of School Violence (n = 16,488 citations). Subsequently, the titles of the most active sources, each with 14 articles published, were the International Journal of Bullying Prevention (138 citations), the International Journal of Environmental Research and Public Health (171 citations), and the Journal of Interpersonal Violence (187 citations). These four sources of publications, which collectively publish 9.15% of all articles, can be regarded as the most active journals for research on bullying in schools. However, further investigation of the most active source titles indicated that the Journal of Adolescent Health received the highest number of citations (n = 7,1947), followed by Aggressive Behavior (n = 10,1624) and School Psychology Review (n = 7,1176). This finding illustrates these three journals' major contributions to the research area of bullying in schools.

Table 5: Most active source titles

Source Title	TP	TC	Publisher	Cite Score 2021	SJR 2021	SNIP 2021
Journal of School Violence	16	488	Routledge	4.0	0.94	1.864
International Journal of Bullying Prevention	14	138	Springer Nature	3.9	0.823	1.550
International Journal of Environmental Research And Public Health	14	171	MDPI AG	4.5	0.814	1.440
Journal of Interpersonal Violence	14	187	SAGE Publications Inc.	4.5	0.908	2.529
Children and Youth Services Review	13	134	Elsevier Ltd	3.3	0.803	1.229
Aggressive Behavior	10	1624	John Wiley and Sons Inc.	4.5	0.931	1.423



Source Title	TP	TC	Publisher	Cite Score 2021	SJR 2021	SNIP 2021
School Psychology International	10	430	SAGE Publications Ltd	3.4	0.771	1.439
Aggression and Violent Behavior	8	964	Elsevier Ltd	6.8	1.243	2.157
Journal of Adolescence	7	735	Academic Press	5.5	1.235	1.655
Journal of Adolescent Health	7	1947	Elsevier Inc.	7.1	1.888	2.124
Research Papers in Education	7	133	Routledge	4.8	0.802	1.850
School Psychology Review	7	1176	Routledge	3.7	0.731	1.272

Notes: TP=total number of publications; TC=total citations; CiteScore = average citations received per document published in the source title; SJR = SClmago Journal Rank measures weighted citations received by the source title; SNIP = source normalised impact per paper measures actual citations received relative to citations expected for the source title's subject field.

To determine the most influential documents in the school bullying research area, we list the top 10 most cited publications in Table 6. Note that a research-based article conducted via a national survey by Wang et al. (2009) pertaining to school bullying behaviours among US adolescents is the most cited article with 1179 citations. In addition, the article by Wang et al. (2009) and Ybarra et al. (2007) were published in the Journal of Adolescent Health as the most cited source in school bullying research. The second highest citation, with 1109 citations, is an article focusing on the psychometric evaluation of the school bullying questionnaire by Solberg and Olweus (2003).

Table 6: Top 10 highly cited articles

No.	Authors	Title	Total Citations	Cites per Year
1	Wang, Iannotti, and Nansel (2009)	School Bullying Among Adolescents in the United States: Physical, Verbal, Relational, and Cyber	1179	90.69
2	Solberg and Olweus (2003)	Prevalence Estimation of School Bullying with the Olweus Bully/Victim Questionnaire	1109	58.37
3	Espelage and Swearer (2003)	Research on School Bullying and Victimization: What Have We Learned and Where Do We Go From Here?	697	36.68
4	Olweus (2013)	School bullying: Development and some important challenges	575	63.89
5	Schneider, O'donnell, Stueve, and Coulter (2012)	Cyberbullying, school bullying, and psychological distress: A regional census of high school students	530	53.00
6	Merrell, Gueldner, Ross, and Isava (2008)	How Effective Are School Bullying Intervention Programs? A Meta-Analysis of Intervention Research	474	33.86
7	Ybarra, Diener-West, and Leaf (2007)	Examining the Overlap in Internet Harassment and School Bullying: Implications for School Intervention	470	31.33
8	Swearer, Espelage, Vaillancourt and Hymel (2010)	What can be done about school bullying? linking research to educational practice	389	32.42
9	Salmivalli (1999)	Participant role approach to school bullying: Implications for interventions	352	15.30
10	Polanin, Espelage, and Pigott (2012)	A meta-analysis of the effects of school-based bullying prevention programs on bystander intervention behaviour	339	33.90

#### 4.5 Top Keywords

To identify the main keywords of scientific research, we present the co-occurrence analysis of the author's keywords. "adolescents" (84 occurrences, 146 total link strength), "bystanders" (33 citations, 66 total link strength), "cyberbullying" (33 occurrences, 64 total link strength), and "victims" (31 occurrences, 70 total link strength) frequently appeared in all the author keywords, which are considered to be the central issues in school bullying research. Table 7 lists the top 20 author keywords.

Table 7: Top author's keywords

Author Keywords	Total link strength	Occurrences
bullying	417	277
school bullying	188	167
adolescents	146	84
victimisation	122	61
schools	113	50
bystanders	66	33
cyberbullying	64	33
victims	70	31
violence	37	24
intervention	50	22
school violence	38	20
children	34	17
moral disengagement	33	17
empathy	31	15
prevention	40	15
depression	33	13
school climate	22	12
aggression	25	11
mental health	22	11
peer victimisation	27	11

Figure 5's overlay visualisation indicates which author's school bullying keyword is most popular and can describe research hot areas. Due to the non-unity of single and plural keywords and synonyms in some publications, we changed some of the author keywords in the CSV format file, such as unifying "adolescence" as "adolescents", "bully" as "bullying", "bystander" as "bystanders", and "cyber bullying" as "cyberbullying" so these terms would be accurately represented in the data analysis. Moreover, in the purple phase, "victims," "violence," "aggressive," and "self-esteem" were utilised more. In the green phase (2016–2017), "cyberbullying" and "bystanders" occurred more often, and "suicidal thoughts," "empathy," and "prevention" in the light green phase (2017–2018). Meanwhile, in recent years (yellow phase), terms like "mental health," "adolescent health," "moral involvement," "peer aggression," "stigma," "bullying perpetration," and "self-control" (which are covered by the node of bullying victimisation) have been used more often, showing that research on school bullying has shifted its focus.

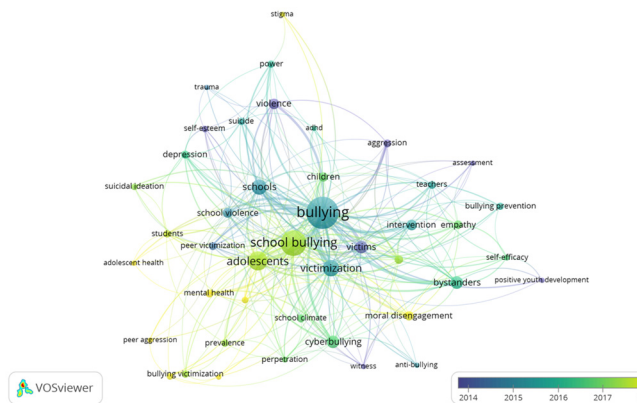


Figure 5: Overlay visualisation of the author's keywords

## 5. Discussion

School bullying is defined as violence against other individuals. It occurs in schools when the power of an individual student or a group of students is used to harm others or other groups. Bullying in schools is a global issue featuring detrimental effects on students' physical and mental health and subjective well-being. In addition, school bullying will cause a significant psychosocial issue due to its long-term negative impacts on adolescents' school functioning and adjustment.

This study focuses on 634 publications extracted from the Scopus database on school bullying. Note that the first Scopus study on school bullying was published in 1996 and gradually increased until 2002, which resulted in academic communities noticing the surge in bullying awareness and research since 2003. The most intriguing finding was a 170% increase in publications in 2011 over the previous year. A recent bibliometric study on bullying and cyberbullying in education from the WOS database showed a similar trend (Cretu & Morandau, 2022). However, the number of publications fell in 2022 since this research was conducted in August.

The United States (26.06%) led the top 20, followed by the United Kingdom (11.67%) and China (10.09%). The VOSviewer overlay visualises collaboration starting in 2012, with the United Kingdom being the most active in the early phase (2012-2014), linking to Japan and Norway. Note that the US was the most collaborative country during the second phase (2014-2016). Recently, (2018 onward), authors have collaborated with China, Sweden, and Brazil. As seen, author collaborations across continents are diverse. However, research from underrepresented countries is required to better comprehend the phenomenon and inform educational policy and practice, as school bullying is a global issue.

Concerning the third research question, which aimed to identify the most prolific authors on school bullying, a co-citation analysis was performed. Peter K. Smith and Dorothy Lynn Espelage are the most prolific authors in the field of school bullying, followed by David P. Farrington. Co-citation analysis shows three clusters of school bullying authors, with the first cluster, including Salmivalli C., Espelage D.L., Farrington D.P., Gini G., Ttofi, M.M., and Swearer, S.M.. It is interesting to note that Salmivalli, C., Smith, P.K., Farrington, D.P., Ttofi, M.M are some of the most prolific researchers on school bullying, highlighting the quality of school bullying publications. Meanwhile, Wolke and Nansel are notable second-cluster authors. Finally, the third cluster is led by Dan Olweus, the author with the highest total link strength, followed by Peter K. S. Smith, the most productive author on school bullying.

We also identify the most productive sources and the most highly cited document with the most productive source journals for school bullying research, which are the Journal of School Violence, the International Journal of Bullying Prevention, the International Journal of Environmental Research and Public Health, and the Journal of Interpersonal Violence. Other than that, the most cited article in school bullying research is a study conducted by Wang, Iannotti, and Nansel (2009) among adolescents in the United States.

Finally, school bullying's top keywords are "Adolescents," "bystanders," "cyberbullying", and "victims". "Cyberbullying" showed how technology affects students, and "victims" and "bystanders" showed that the research focused on the person involved. In addition, "prevention" and "intervention" focused on school bullying efforts. Co-occurrence analysis via overlay visualisation drawn in proportion to years shows that "victims", "violence", "aggression", and "self-esteem" were early publication keywords (2014-2015). "Cyberbullying" and "bystanders" were popular in the second phase (2016-2017), and "suicidal ideation", "empathy", and "prevention" in the third phase (2017-2018). Terms such as "mental health," "adolescent health," "moral engagement," "peer aggression," and "stigma," as well as "bullying perpetration" and "self-control," have become more commonly used in recent years, indicating a shift in research focus in school bullying.

The findings of this paper map the trend and contribute to the academic discourse on the collective knowledge of school bullying by examining the most productive authors, sources, and documents. In addition, the results show how knowledge is evolving over time based on the use of

keywords that can serve as a foundation for future research. However, this study has several limitations. Limiting the search to "school bullying" and "school-based bullying" within titles, the search result may not include all Scopus-indexed studies on school bullying. Therefore, the results should be contextualised within this category. Furthermore, the objective was not to analyse the quality of the content of the documents, which could be the subject of future research, but rather to perform a descriptive quantitative analysis of the occurrence of the concept of school bullying in selected databases. As a means of expanding the research, it would be intriguing to add additional bases to the comparative study and conduct an analysis of citations similar to those conducted in other fields.

## 6. Conclusion

Based on 634 publications in the Scopus database, this study gave an overview of the trends in research on bullying in schools. Publication growth has been expanding for the last 20 years and is expected to continue to increase. We discovered that countries (e.g., the United States, the United Kingdom, and China) and authors (e.g., Smith and Espelage) have many publications and strong international collaborations. Hence, these entities can be an opportunity for researchers from other countries to broaden their research collaborations. The Journal of School Violence and the International Journal of Bullying Prevention are the most active journals, and the Journal of Adolescent Health and Aggressive Behavior are the most cited journals. Meanwhile, the most cited article was written by Wang et al. in 2009 and published in one of the most cited journals. We have discovered some new areas of research, such as mental health, peer aggression, bullying, and self-control, which could be studied further in the future.

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