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Cyberbullying Research in Transition: An Updated Tertiary Synthesis (2021–2025)

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Abstract

Cyberbullying (CB) remains a significant and evolving social and psychological concern in the digital age. Although research in this area is expanding rapidly, the fast-paced nature of technological change and online interaction demands continuous and updated synthesis of evidence. Several tertiary studies have examined the phenomenon; however, ongoing developments in technology, social media use, and prevention strategies require renewed consolidation of findings. Our previous tertiary review synthesized secondary research published up to November 2020. The present study extends that work by incorporating systematic reviews published between 2021 and 2025, thereby offering a timely and comprehensive update of the field. Using the same methodological framework as the earlier review, 35 secondary studies were analyzed to ensure consistency and comparability. This updated synthesis integrates evidence across key domains, including prevalence, psychological and behavioral effects, risk and protective factors, intervention approaches, automated detection techniques, and contextual variations. Findings indicate notable progress in school- and family-based interventions, advancements in technology-driven detection systems, and a growing emphasis on cross-national and culturally diverse perspectives. Nevertheless, persistent challenges remain, particularly the lack of definitional consensus and the continued absence of standardized and reliable measurement instruments. By identifying emerging trends and unresolved gaps, this updated tertiary review aims to inform future research agendas, strengthen evidence-based practice, and support policy development in addressing cyberbullying more effectively.

Keywords: Cyberbullying Tertiary study, Systematic literature review, Cyberbullying prevalence and effects, Cyberbullying interventions, Cyberbullying concepts, Cyber Harassment

1. Introduction

Cyber harassment, often used interchangeably with "cyberbullying," is defined in the literature as the intentional and repeated infliction of harm via digital means comprising social media platforms and online communication apps (Alipan et al. 2020b). This comes as a pervasive and evolving form of interpersonal aggression, humiliation, threat, or social exclusion that affects individual's life in all stages (Çakar-Mengü and Mengü 2023). Cyberbullying encompasses a range of behaviors including harassment, exclusion, impersonation, and digital hate (AKAHEMA 2025). Its reach spans social media platforms, learning management systems, workplace networks, and mobile messaging apps, often blurring boundaries between online and offline harm (Ghosh et al. 2025).

Although a large body of primary research is already recorded on the psychological, social, and behavioral outcomes of cyberbullying, the results of various studies are incomplete and heterogeneous in terms of concepts (Rejeb et al. 2025). In the last ten years, this evidence base has been synthesized in a large number of systematic reviews and meta-analyses, but the results have differed in their conclusions because of differences in definitions, methodologies, and settings of the populations (Shaikh et al. 2020) (Kowalski et al. 2014) (Li et al. 2024). This situation highlights the need for a tertiary synthesis, a systematic review of reviews, to consolidate existing knowledge, identify gaps, and enhance conceptual clarity (Trapé et al. 2025).

This study extends the foundation of our previous tertiary investigation (Saleem et al. 2022a) by synthesizing evidence from 35 published review articles (2021–2025) that satisfy

stringent inclusion criteria, with a clear focus on cyberbullying, the application of a systematic methodology, and adherence to a structured coding framework.

Terminological inconsistencies remain a challenge across literature (Vismara et al. 2022) . While "cyberbullying" is often used interchangeably with terms like "online harassment," "digital hate," or "cyber aggression," these constructs vary in intent, frequency, and context (Ray et al. 2024). For instance, digital hate may include ideologically motivated abuse, while cyber incivility in workplaces reflects subtler forms of interpersonal harm (Jiménez-Díaz et al. 2025). This synthesis adopts an inclusive definition of cyberbullying that spans both overt and covert behaviors, while distinguishing studies that explicitly focus on adjacent phenomena such as online sexual harassment or bystander intervention in hate speech contexts.

In addition to inconsistencies in terminologies, the definition constructs are also debatable. Some studies demand all three criteria (harm, repetition, power), while others accept single, severe episodes as cyber harassment (Alipan et al. 2020a). Traditional definition derived from school bullying include intention, repetition and power imbalance which are less clear in online phenomena(Menin et al. 2021). In traditional bullying repetition requires multiple acts while in case of online the single instance can be shared multiple times providing more views causing persistent victimization. Similarly, the power imbalance moves beyond physical strength to social dominance including network reach and control over digital content (Jiménez-Díaz et al. 2025)(González-Cabrera and Machimbarrena 2022). Harm is also linked with emotional and reputational loss leading to lifetime psychological distress (Jackson et al. 2026). These definitional confusions lead to varied prevalence rates of cyberbullying, varying measurement tools, effects and leading to ineffective intervention. These ambiguities rise the need for periodic

and methodologically rigorous synthesis of literature to reconcile conceptual inconsistencies, standardize measurement approaches, and systematically consolidate emerging evidence across all key dimensions of the phenomenon (Nagendrababu et al. 2020).

2. Method

This tertiary study follows the methodology proposed by Kitchenham and Charters (Kitchenham, B., & Charters, S. 2007) replicating the approach of Saleem et al (Saleem et al. 2022a) to ensure comparability. Adhering to these guidelines for systematic reviews, a systematic review was undertaken to serve as the foundation of this tertiary study. Given that a tertiary study performs a meta-synthesis of existing secondary studies, this study aims to attain a comprehensive, meta-level understanding of a given topic. Therefore, the review process for this study comprised the formulation of research questions, the specification of inclusion and exclusion criteria, the development and validation of search strings, and the selection of pertinent bibliographic databases as done in previous study (Saleem et al. 2022b). The detail of each step is presented in sub-sections 2.1 and onwards.

2.1 Research Questions

To collect evidence from the research on CB, research questions have been formulated that are presented in Table 1.

Table 1: Research Questions

Main research question	**Sub research question**
RQ1. What are the trends with respect to demographics, data sources, and temporal trends in published SLRs?	RQ 1.1 How many primary studies are included by SLRs? RQ 1.2 How many numbers of years have been covered for the synthesis of primary studies by the SLRs? RQ 1.3 What is the citation count of each SLR? RQ 1.4 What are the top countries active in secondary CB research? RQ 1.5 What is the journal-wise distribution of SLRs?

	RQ 1.6 Which online databases are included as sources?
RQ2. Which topics in CB phenomenon are addressed by SLRs?	RQ2.1 Which dimensions of CB phenomenon has been addressed by the SLRs? RQ2.2 What is the yearly trend of SLRs with respect to CB dimensions? RQ2.3 What is the yearly trend with respect to publication of SLRs? RQ2.4 What is the type of synthesis (meta-analysis, narrative analysis, content analysis, scoping review and thematic analysis) trend with respect to CB dimensions? RQ2.5 What theories are being used in explaining the cyberbullying phenomenon?
RQ3. What are the trends related to the quality of published SLRs in CB investigations?	RQ3.1 What is the quality of published SLRs over the period of time? RQ3.2 What is the quality of SLRs with respect to different publication venues? RQ3.3 What is the distribution of quality with respect to CB dimensions? RQ3.4 What are the strengths and weaknesses of SLRs in terms of quality? RQ 3.5 What type of synthesis has been carried out in these SLRS?

2.2 Search Strategy Development

Given that this study updates the previous tertiary review (Saleem et al. 2022b) , the original search string was deliberately retained to maintain methodological consistency and enable direct comparison of findings across review periods

((cyberbullying) OR (cyber harassment) AND (review of studies) OR (Structured review) OR (systematic review) OR (literature review) OR (literature analysis) OR (in depth survey) OR (literature survey) OR (meta-analysis) OR (past studies))

2.3 Search String Validation

The finalized search string was retained without modification, as its validity had been previously established through a quasi–gold standard validation procedure. In this approach, a predefined

reference set of known relevant studies was used as a benchmark to assess the search strategy's sensitivity and coverage. The quasi–gold standard represents a curated body of pertinent studies that an optimal search strategy is expected to retrieve (Nazuli et al. 2024).

2.4 Databases used for search

For this systematic literature review, we queried the same four bibliographic databases—**PubMed, Scopus, ScienceDirect, and PsycINFO**—mirroring the selection of the prior tertiary study. A publication date filter was applied to capture articles released between January 2021 and August 2025. The initial search was conducted in mid-July 2025, followed by a secondary iteration in the first week of August 2025. All retrieved records were exported, catalogued, and prepared for further processing. Zotero and Microsoft Excel were utilized to import, organize, and screen the identified studies.

2.5 Inclusion/ Exclusion Criteria

Studies were included if they met the following criteria:

1. The study directly addressed cyberbullying CB as a primary focus.
2. The study was an SLR or meta-analysis published in English in a peer-reviewed journal.

Studies were excluded based on the following criteria:

1. Master's theses or doctoral dissertations not published in peer-reviewed journals.
2. Publications written in languages other than English.
3. Review articles available only as abstracts, short papers, conference summaries, or work-in-progress reports.
4. Review studies that did not follow a systematic literature review methodology.

2.6 Quality assessment checklists and procedures

In accordance with Kitchenham et al, we appraised SLR using the Centre for Reviews and Dissemination's Database of Abstracts of Reviews of Effects (DARE) criteria by York University (University of York Centre for Reviews and Dissemination 2022). The DARE framework consists of four evaluative criteria (Table 2) used to assess the methodological quality of the included reviews. Each criterion was scored as 1 (Yes), 0.5 (Partially Met), or 0 (No), based on the extent to which the review demonstrated methodological rigor. The individual scores were then summed to produce an overall quality score ranging from 0 to 4, with higher scores reflecting greater methodological robustness and reliability.

To ensure a minimum standard of methodological rigor, systematic reviews scoring below 2 (i.e., less than 50% of the maximum possible score) were excluded from further analysis. This threshold was determined by the research team to retain only those reviews that met at least half of the established quality criteria. While the cutoff was judgment-based, it was applied consistently to balance inclusivity with methodological robustness.

Table 2: The DARE Criteria

	QUALITY RANKING CRITERIA			
	Questions	**Yes (1.0)**	**Partial (0.5)**	**No (0)**
1	Are the reviews inclusion and exclusion criteria described and appropriate?	Inclusion criteria defined explicitly	Inclusion criteria are implicit	Inclusion criteria not defined
2	Is the literature search likely to have covered all relevant studies?	Four or more academic and reputable online databases searched	Less than four online databases searched	Two or fewer online databases searched
3	Did the reviewers assess the quality/validity of the included studies?	Quality criteria defined explicitly	Quality criteria assessed but not defined	No quality assessment has been performed

4	Were the basic data/studies adequately described?	Information is presented clearly and can be traced back to individual studies	Information is categorized in groups but not linked to individual studies	Information presented is not referenced

2.7 Selection Process

The study selection followed a three-steps process aligned with predefined inclusion and exclusion criteria. Abstract were screened to identify studies meeting the selection criteria, and those retained advanced to the second phase. In phase two, the full texts of these articles were examined for relevance. During the third phase, each study underwent a quality assessment, and only those satisfying the required rigor were retained for the final synthesis.

For identification, our finalized search string was executed across PubMed, Scopus, ScienceDirect, and PsycINFO in 2025, retrieving 100 records in total. The PRISMA flow diagram (Fig. 1) depicts the progression of studies through each phase. PubMed and ScienceDirect yielded 01 and 19 records, respectively, while Scopus and PsycINFO contributed 74 and 06 records. After duplicate removal, 93 studies were examined for the selection criteria. Abstract screening excluded 47 records, leaving 46 full-text articles for the second phase. Of these, 02 did not meet the inclusion criteria, and 44 proceeded to step three. Quality appraisal using the DARE criteria resulted in the exclusion of one more study (score < 2), yielding N = 35 secondary studies for final analysis. A detailed database-wise breakdown is presented in Table 3.

Table 3: Coding for the selected secondary Studies

Databases (no. of studies retrieved)	**Secondary studies retrieved, n=35**
PubMed (01)	PM16 [1]

ScienceDirect (19)	SD24 [2], SD25 [3], SD26 [4], SD27 [5], SD28 [6], SD29 [7], SD30 [8], SD31 [9], SD32 [10], SD33 [11], SD34 [12], SD35 [13], SD36 [14], SD37 [15], SD38 [16], SD39 [17], SD40 [18], SD41 [19] and SD42 [20]
Scopus (14)	SC18 [56], SC19 [59], SC20 [60], SC21 [61], SC22 [69], SC23 [70], SC24 [72], SC25 [74], SC26 [80], SC27 [81], SC28 [84], SC29 [85], SC30 [86] and SC31 [93]
PsycINFO (01)	PSY18 [100]
Coding:	*In continuity with the original tertiary study [], the coding scheme was resumed from the previously assigned identifiers to maintain consistency and traceability. Accordingly, the numbering continued as follows: PubMed from PM16, ScienceDirect from SD24, Scopus from SC18, and PsycINFO from PSY18.*

2.8 Data Extraction Strategy

Data was systematically extracted using a standardized form and recorded in Microsoft Excel. The extracted data were independently reviewed by the authors, and any discrepancies were resolved through discussion until consensus was reached.

Table 4: Extracted Data Elements

Research Question	**Data Collected**
RQ 1	Bibliographic information (title, author, year of publication, country, publication type: journal/conference), citation count, type of study (meta-analysis, narrative review, content analysis, scoping review and thematic analysis), number of primary studies, databases searched, time period for conducting SLR
RQ 2	CB area investigated in each SLR, findings of each SLR
RQ 3	Quality related data as per DARE questions

To address the RQ 1-3, descriptive analysis was applied to the quantitative data. RQ2 was investigated via thematic analysis of the extracted content. Finally, qualitative data underwent a structured quality evaluation

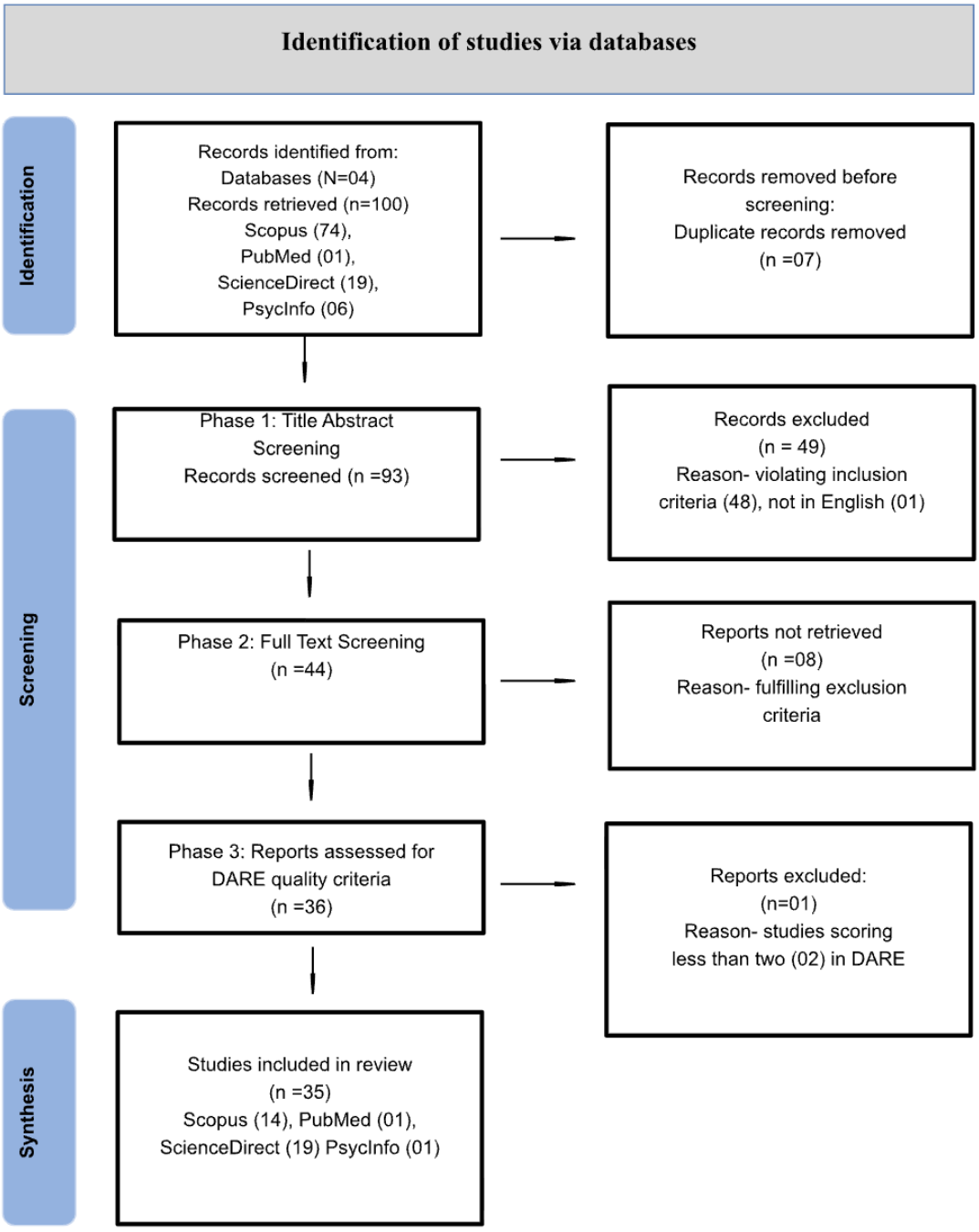


Figure 1: Prisma Diagram

3. Results

Extracted data was filtered to address the study's research questions through both quantitative and thematic analyses. Frequency analyses were conducted for RQ1 and RQ3, with results illustrated via graphical representations. RQ2 entailed an in-depth qualitative examination, yielding multiple dimensions of the cyberbullying phenomenon; each theme was then explored qualitatively to characterize its nature and quantitatively to assess the extent of research devoted to it. Findings against RQ1, RQ2 and RQ3 along with their sub questions are presented in sections 3.1, 3.2 and 3.3 respectively.

3.1 RQ1 - Demographics, data sources and temporal trends of CB SLRs

The included reviews collectively synthesize evidence from over 2,000 primary studies across 16 countries or regions, with the highest representation from China, followed by the United States, Spain, and the United Kingdom (Figure 2).

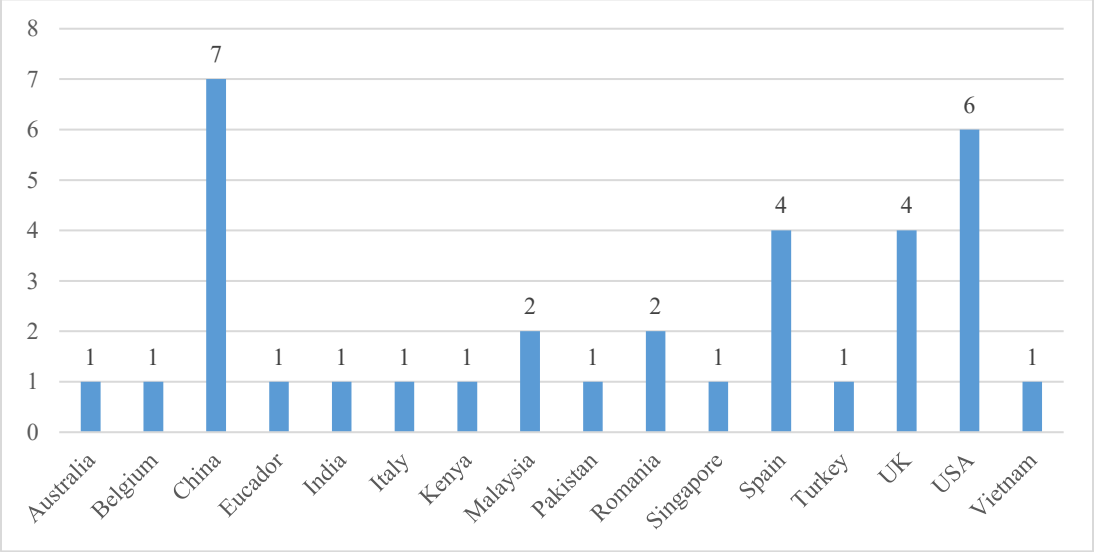


Figure 2: Country wise distribution of the Included Studies

Out of 35 included studies, 51% were systematic reviews, 29% were classified as meta-analyses, followed by 17% as systematic + meta reviews. Bibliometric reviews made up 3% as depicted in Figure 3.

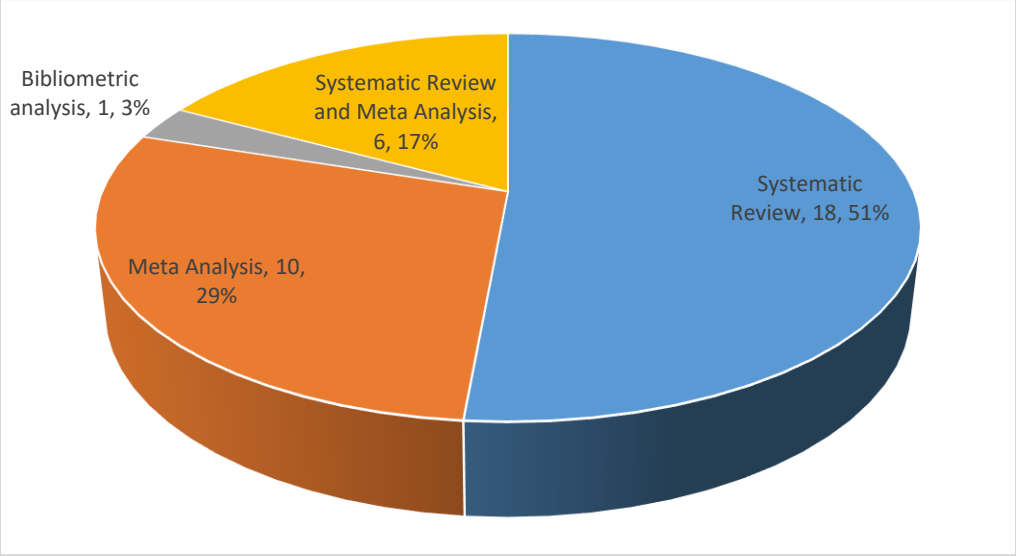


Figure 3: Distribution of Studies according to Review Type

Regarding database usage, among the 35 included reviews, seven relied on two or fewer databases, while the remainder searched for two or more databases. Six studies did not report the names of the databases they used. Across all reviews, the most utilized databases included PsycINFO, PubMed, ERIC, ScienceDirect, Google Scholar, Scopus, CINAHL, Web of Science, Cochrane Library, Wiley, and Embase. Among these, PsycINFO, PubMed, Scopus, and Web of Science were the most frequently used, each appearing in more than 14 studies

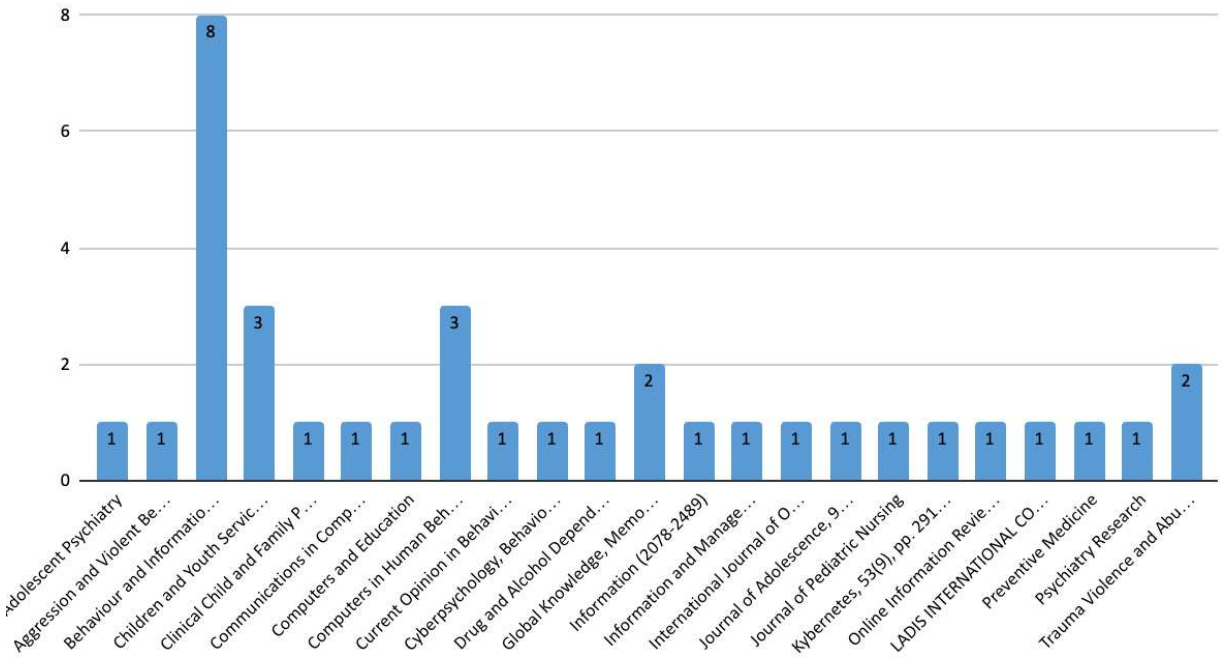


Figure 4: Distribution of Included studies by Journals

As shown in Figure 3, eight studies were published in *Aggression and Violent Behavior*, followed by three each in *Children and Youth Services Review* and *Computers in Human Behavior*. Two systematic reviews appeared in *Trauma, Violence, & Abuse*, while all remaining journals accounted for a single study each. This distribution highlights that a substantial portion of research is concentrated in a few key journals, reflecting the primary disciplinary outlets for cyberbullying research and indicating the journals that most actively shape the evidence base in this field.

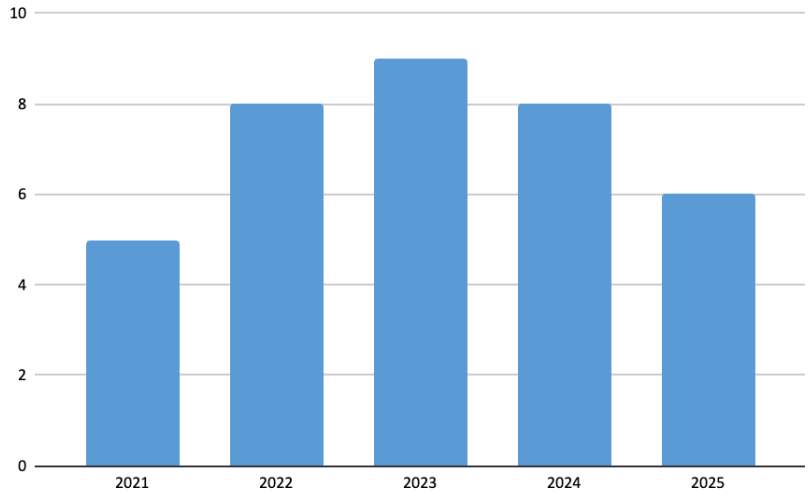


Figure 5: Distribution of Included Studies by Year of Publication

Of the 35 included studies, 26% were published in 2022, followed by eight reviews each in 2023 and 2024 (23% each). Five reviews each were published in 2021 and 2025 (14% each). This distribution (Figure 4) indicates a notable surge in research activity cyberbullying during 2022–2024, suggesting growing scholarly interest and an expanding evidence base in recent years.

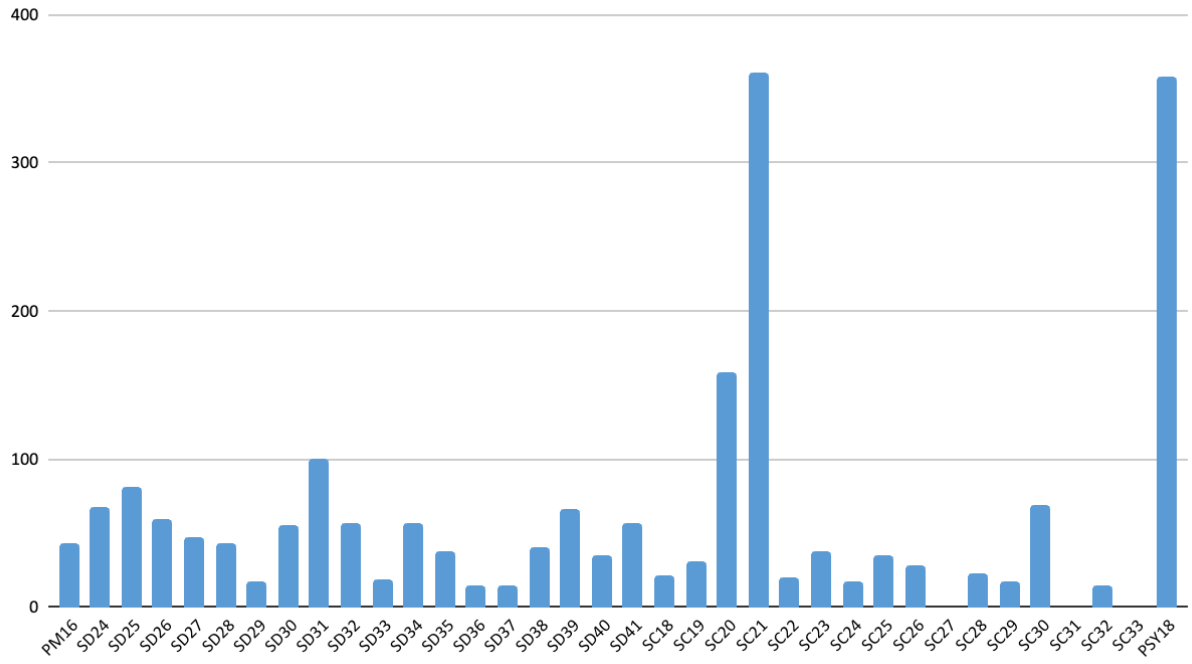


Figure 6: Count of primary studies included in each review

Figure 5 illustrates the number of primary studies included in each systematic review. Most reviews incorporated fewer than 100 primary studies, with several clustering between 15 and 70 studies. Notably, SC20 and PSY18 stand out with exceptionally large evidence bases, including 361 and 359 primary studies, respectively. Other reviews with relatively extensive coverage include SC18 (158 studies) and SD31 (100 studies). This distribution indicates that while most systematic reviews synthesize a moderate number of primary studies, a few comprehensive reviews draw on substantially larger datasets, providing broader and potentially more robust syntheses. Such variation reflects differences in review scope, inclusion criteria, and the maturity of the research topic at the time of each review. Figure 7 highlights the data of citations of each SLR. The top five cited studies include SD30, followed by PM16, SD28, SD40 and SD32 with a score of 246, 223, 191, 161 and 92 respectively.

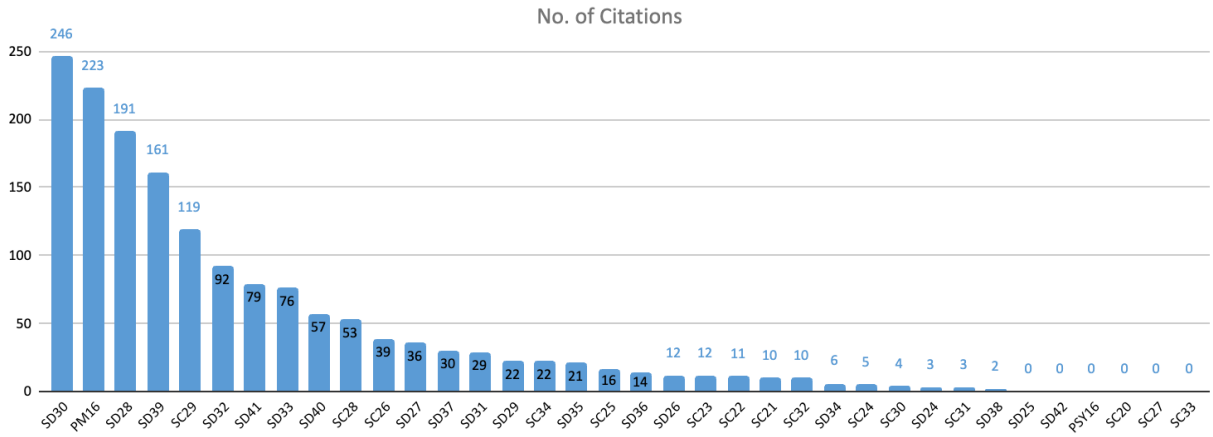


Figure 7: Citation Count across each included study

3.2 RQ2 - CB Dimensions

For the CB themes, we followed the same eight dimensions as opted in the baseline study. These include: *1) CB Definition/Concept Analysis, 2) Prevalence, 3) Effect, 4) CB Measurement, 5) Interventions to Curb CB, 6) Factors related to CB, 7) Automated CB and 8) General Reviews*.

Table 5: Categorization of Studies across CB Dimensions

Dimension	**No. of SLRs**	**SLR No.**
Definition / Concept Analysis	01	[8]
Prevalence	04	[9], [16], [20], [60]
Effects	11	[1]. [6], [10], [19], [56], [59], [61], [70], [72], [80], [86]
Measurement Strategies	01	[14]
Interventions	05	[7], [11], [12], [81], [93]
Automated CB Detection	02	[84], [85]
General Reviews	02	[5], [100]
Factors Related to CB	09	[2], [3], [4], [13], [15], [17], [18], [69], [74]
Total, n=	35	---

As indicated in Figure 7, majority of the SLRs collated evidence on the *Effects* (with a total of 11 studies) followed by studies on *Factors related to CB* (09 studies) and *Interventions* (05 studies). A total of 04 studies contributed towards collection of evidence on *Prevalence*. There were 2 SLRs each that discussed the *Automated CB detection* and *General Reviews* while only one SLRs each synthesized the *Measurement Strategies* and *Definition/ Conceptualization*.

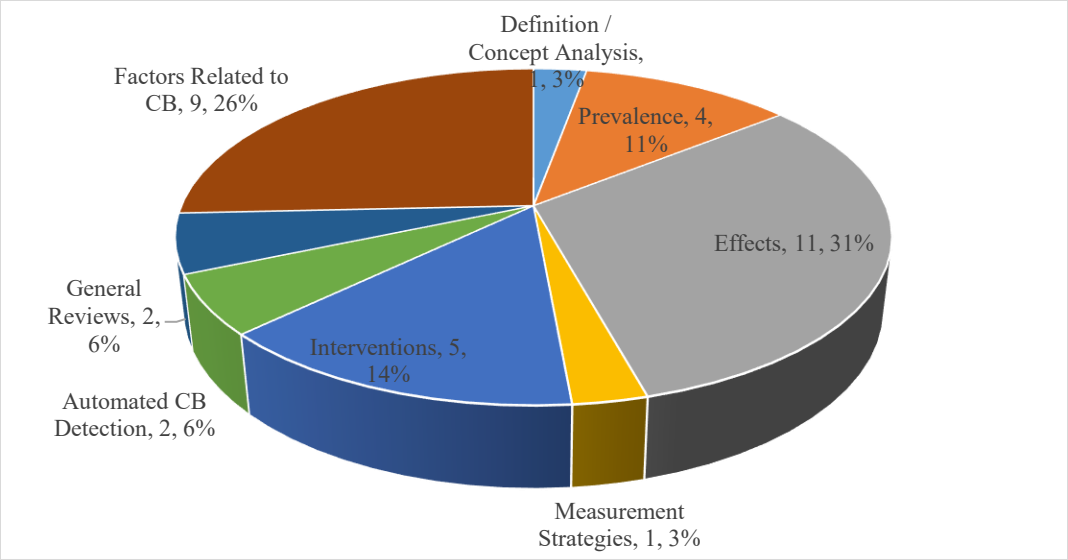


Figure 8: Distribution of Studies across CB Dimensions

It is important to note that each paper was mapped to a single dimension, based on the primary focus of the study. While some papers could have been associated with multiple dimensions, for instance, studies that simultaneously examine prevalence and effects, they were assigned to the dimension most prominently addressed. This overlap highlights the inherently complex and multifaceted nature of cyberbullying, illustrating that the phenomenon is rarely confined to a single perspective and that the boundaries between dimensions are often fluid. Consequently, cyberbullying cannot be fully understood in isolation but rather requires consideration across multiple interrelated aspects. The following sections provide a detailed discussion of each dimension.

3.6.1 Definition/ Concept Analysis

This category included studies that are related to defining or conceptualization of the CB phenomenon. Out of the 35 studies, only one study (SD30) was primarily categorized in this theme. However, a few others (PM16, SD36 and SD42) discussed the theme at a secondary level.

SD30 reviews CB on SNS and explores how platform affordances such as anonymity and visibility, to name a few, shape definitions of cyberbullying. The review conceptualizes SNS bullying as a socio-technical phenomenon that is distinct from traditional face-to-face bullying and other forms of cyberbullying. It highlights that relationships between perpetrators, victims, and bystanders, are shaped by the technological affordances of SNS platforms.
According to SD36 the conceptualization of cyberbullying within the broader bullying literature is debated and is simply another form of bullying for many contexts. Others argue that it is different due to its reliance on internet. It criticizes that there needs to be clarity in order to distinguish cyber bullying from traditional bullying. PM16 emphasizes the need for definitional consistency in cyber stalking and harassment research. This review distinguishes stalking, harassment, and bullying online. It argues that blurred boundaries weaken prevalence estimates and hinder effective intervention design. SD42 emphasizes the urgent need for consensus on the conceptualization and definition of cyberbullying. It argues that inconsistent terminology and varied manifestations hinder progress and calls for expert agreement to standardize the field.

Compared to the baseline study, which emphasized classical definition of three elements (repetition, intention to harm, and power imbalance), the updated synthesis shows broader definitional expansion. It now includes anonymity, online hate and trolling, reflecting the growing complexity of online environments. Studies in this category show that there is ambiguity in a clear definition of CB. This serves as a barrier to progress in cyberbullying research. Authors highlight overlaps with cyber aggression, online hate etc., while others stress the role of technology and social context.

3.6.2 Prevalence

This dimension includes studies that discuss the prevalence of CB in any region or country. Across these studies (SD31, SD38, SD42 and SC20) prevalence rates of cyberbullying vary widely due to differences in definitions, instruments, and populations. There were regional studies from Canada, Türkiye, Pakistan, and Kenya that highlight disparities. And mainly due to inconsistencies in methodologies of each, it is rather difficult to compile a global synthesis. Together, these findings stress the need for standardized measurement to capture reliable prevalence data.

SD31 synthesizes 100 empirical studies to map prevalence trends across Canadian regions. It highlights methodological diversity that complicates cross-study comparisons and calls for standardized tools. Prevalence rates varied widely depending on measurement methods, with single-item surveys reporting much lower rates than multi-item scales. Victimization was consistently higher than perpetration, with rates increasing from ages 10 to 16 before declining, though most data were cross-sectional. Prevalence rates varied for cyber perpetration (6–26%) and for cyber victimization (10–48%).

SD38 reports prevalence rates among academically gifted populations. The review notes that prevalence rates of bullying and cyberbullying among gifted students are often higher than those found in the general population. However, results are mixed: some studies suggest greater victimization risk, others lower risk, and some find similar rates compared to non-gifted peers. It also recommends preventive elements and specific interventions for gifted students.

SD42 concludes that CB prevalence varies but have likely increased over the last few years. The highest prevalence of CB victimization reported in Spain (57.5%), followed by Malaysia

(52.2%), Israel (45%), and China (44.5%); the lowest victim rate was noticed in Canada (13.9%) and South Korea (14.6%).

SC20 looked at 361 studies on cyberbullying in universities and colleges, using bibliometric mapping to see where the research is now and where it's heading. It found themes like how CB affects student wellbeing, how social media plays a role, and what factors make students more vulnerable. The authors argue that universities need strong prevention and management strategies. The study doesn't give numerical prevalence rates (like percentages of students affected). Instead, it uses bibliometric mapping to show that prevalence is a major theme in literature. The conclusion stresses that CB is widespread in Higher Education institutions and is enough to disrupt academic progress and mental health, leading to serious risks (blackmailing, suicide ideation, criminal offenses).

Compared to the baseline study, which reported prevalence ranging from 4.8% to 73.7% without much cultural detail, the updated synthesis adds regional, gendered, and longitudinal perspectives, making prevalence research more context-sensitive.

3.6.3 Effects

From the studies in this category (PM16, SD28, SD32, SD41, SC18, SC19, SC21, SC23, SC24, SC26 and SC30), cyberbullying is consistently linked to severe psychological and behavioral consequences. Depression, anxiety, insomnia, self-harm, substance use, and social exclusion emerge as recurring outcomes, with young females particularly vulnerable to disrupted lifestyles and diminished trust in relationships.

PM16 narrates that victims of stalking/harassment experience a lot of harmful consequences affecting their mental health. The negative emotions and physical symptoms experienced include: anxiety, depression, sadness, anger, fear, shame, embarrassment, isolation, low self-

esteem, paranoia, stomach aches, panic attacks, post-traumatic stress disorder (PTSD), self-harming behavior, and heart palpitations etc.

SD28 claims that elementary and middle school students at these ages begin to socialize with their equals and to have access to technology and, consequently, are at risk of CB. These students experiencing cyber bullying at an early school age report negative feeling, such as depression or anxiety. They are often linked to bullying scenarios and even to the same role (cyberbully, cyber victim or cyber witness).

SD32 confirms a strong link between cyberbullying victimization and depression among adolescents. It underscores cyberbullying's role as a significant mental health risk, highlighting the need for targeted prevention. It highlights how repeated exposure increases risk for long term psychological distress, creating a cyclical pattern.

SD41 also demonstrates bidirectional links between cyberbullying (perpetration and victimization) and depression across age groups. It emphasizes the cyclical nature of cause and consequence, where poor mental health both results from and contributes to bullying. It also identifies age as a moderating factor.

SC18 demonstrates that both traditional bullying and cyberbullying perpetration significantly increase the likelihood of marijuana use among young people. It highlights that cyberbullying perpetration shows a stronger correlation with substance misuse.

SC19 outlines the effects (parental risk/protective factors linked to bullying victimization outcomes). It shows that parental warmth, aversiveness, and withdrawal are significantly related to cyberbullying victimization. It highlights that negative parenting styles increase vulnerability, while positive relationships foster resilience. SC21 highlights both positive and negative impacts of social media use on social well-being. It notes that most studies emphasize harm, with limited

exploration of positive outcomes. It is worth mentioning that cyberbullying is explicitly noted as one of the negative outcomes of social media use.

SC23 confirms a strong association between cyber-victimization and depression in adolescents. It emphasizes the severity of mental health consequences. It highlights the need to investigate additional factors that may moderate or explain variability across studies. While SC24 examines associations between bullying victimization (traditional and cyber) and self-injurious thoughts and behaviors (SITBs), including suicidal ideation, self-harm, suicide attempts, and NSSI. It highlights that these effects vary in strength but consistently demonstrate the serious psychological consequences of bullying across development. Sex/gender is an important moderating factor.

SC26 relates to Social Media influence and highlights the effects of cyberbullying prevalence on adolescent well-being. It shows how social media environments amplify risks, making effects more pervasive. It concludes that effects are universal across cultural contexts. Strong associations between social media use and adolescent depression (82.6%) and anxiety (78.3%). Likewise, depression and anxiety are linked to cyber bullying.

SC30 highlights that cyber aggression is an extension of traditional aggressive behavior, often targeted to peers and intimate partners. Alcohol is stimulus for increasing likelihood of CB perpetration.

Compared to the baseline study, which emphasized depression and anxiety, the updated synthesis expands to highlight many broader societal consequences including insomnia, self-harm, substance use, and social exclusion.

3.6.4 Measurement Strategies

The SLRs which analyzed the measurement instruments used for assessing CB fall into this dimension. Only one SLR (SD36) pointed to discussion on measurement scales. SD36 points out that even though solid scales exist, the mix of instruments across studies can skew the data. Measuring cyberbullying isn't as straightforward as it looks. SD36 points out that researchers use lots of different tools, and that makes results harder to compare. Some of the most common ones include Doane's *Cyberbullying Questionnaire*, Jönsson's *Cyberbullying Scale*, and the *Olweus Bullying Questionnaire* (adapted to cover CB). There are also newer, specialized tools like the *Cyberaggression and Cybervictimization Scale (CAVS)* from British Columbia, the *Cyberbullying Inventory (CBI)*, and the *European Cyberbullying Intervention Project Questionnaire (ECIPQ)*, which are carefully tested and used across different countries. Together, these scales don't just measure CB — they also shape how we define it. The takeaway is clear: future research needs to look closely at how the choice of tool affects the data, because measurement itself is still a critical gap in CB studies.

A few SLRS (such as PM16) pointed that measurement instruments vary widely in what they capture, with many lacking reliability and validity testing. The reviews also emphasized that measurement tools must be culturally adaptable, since instruments developed in one region may not translate effectively to another. Collectively, this dimension highlights that there is a need for uniform scales to measure emotional impacts like depression and anxiety. Compared to the baseline study, which found weak psychometric properties, past research tends to trust CB measurement tools. This updated synthesis shows that gap still exists.

3.6.5 Interventions

Across the studies included in this category (SD29, SD33, SD34, SC27 and SC31); interventions focus on education, family involvement and bystander engagement. While short-term programs show promise, long-term effectiveness and ethical considerations remain underexplored, especially in diverse cultural and organizational contexts.

SD29 reviews school-based interventions. The study emphasizes that scientifically guided interventions tailored to specific research questions and content domains show strong efficacy. Cooperative activities within schools foster self-control, emotional intelligence, and group cohesion, while family and school involvement act as protective factors. It stresses that restrictions on technology use alone are insufficient, advocating instead for safe-use education, open discussions, and supportive environments.

The systematic review SD33 synthesizes socio-ecological approaches to anti-cyberbullying programs. It emphasizes multi-level strategies for prevention, spanning individuals, schools, families, and communities. It directly evaluates anti-cyberbullying educational programs, their pedagogical design, and effectiveness.

SD34 confirms that social status, age and gender etc. are linked to cyber bullying. Therefore, it discusses prevention strategies, social support as recovery, and the need for diversified approaches.

SC27 highlights that interventions delivered by school staff versus experts may differ in effectiveness, urging future research to clarify the roles of educators, counselors, and non-teaching staff. It advocates stricter rules and stronger advocacy from school policymakers and administrators.

SC31 identifies different mitigation strategies, emphasizing the importance of tailored prevention approaches for adults. It suggests that interventions should address barriers directly, incorporate

awareness programs, and involve multiple stakeholders such as educators, IT experts, and policymakers. The study also highlights barriers such as institutional challenges, lack of awareness, and socio-cultural factors that obstruct effective prevention. It underscores the need to understand connections between barriers and CB behaviors.

Compared to the baseline study, which found interventions mostly descriptive, the updated synthesis advocates for stronger advocacy, multi-level support systems and educational programs.

3.6.6 Automated CB Detection

The papers included in this category focus on detecting cyberbullying (SC28 and SC29). They show that detection research is rare but promising, especially with machine learning approaches. These studies explore the technological frontier of cyberbullying detection, applying machine learning and deep learning models to identify harmful content. While promising, current approaches remain limited by small datasets, lack of diversity, and challenges in integrating detection tools into broader prevention frameworks.

SC28 reviews computational approaches to detection. It discussed machine learning algorithms to classify cyberbullying language patterns. Results show potential accuracy gains but highlight the need for larger, more representative datasets.

SC29 analyzes ML methods for cyberbullying detection. It shows challenges in nuanced aggression detection. It applies deep learning techniques to detect cyberbullying in social media text. The study demonstrates strong performance but notes limitations in scalability and cultural adaptability. **Compared to the baseline study,** which found detection sparse, the updated synthesis shows progress with deep learning, but definitional ambiguity and dataset limitations remain.

3.6.7 General Reviews

Across this category (SD27, PSY18), these reviews synthesize findings across multiple contexts, identifying recurring gaps in definitions, measurement, and interventions. Meta-analyses highlight risk and protective factors, mental health outcomes, and methodological limitations, offering meta-level insights that guide both research agendas and policy development.

SD27 reveals that cyberbullying comprehends social, psychological, and invasion of privacy aspects for young females in developing countries. It also confronts that social bullying, includes trolling, defaming and victimization on social platforms etc.

As a meta-analysis, PSY18 synthesizes available Kenyan research and compares it to global trends. It concludes that the quantity, quality, visibility, and collaboration in cyberbullying research in Kenya are insufficient, calling for systemic improvements in scholarly production.

The baseline study focused on coping strategies and relational aggression. Compared to the baseline study, the updated synthesis discusses CB across multiple dimensions simultaneously, including prevalence, effects, interventions, and definitional debates, thereby offering more comprehensive perspectives.

3.6.8 Factors related to CB

This category includes studies (SD24, SD25, SD26, SD35, SD37, SD39, SD40, SC22 and SC25) that highlight the co-relation of CB phenomenon across different factors.

SD24 present a meta-analysis, synthesizing 12 years of research, using GAM and GST models to explain how personality mechanisms drive cyberbullying. It identifies Dark Triad traits (Machiavellianism, Psychopathy, Narcissism) as strong predictors of perpetration, while also noting moderating influences such as gender, age, and cultural background.

SD25 focuses on self-related cognitions (self-efficacy, self-esteem, self-concept, self-blame) as predictors/moderators of cyber victimization. It also links these psychological outcomes with cyber victimization.

SD26 documents risk factors of perpetration and victimization among children and youth in Türkiye, showing a cultural variation in rates and experiences. It emphasizes the need for localized approaches to measurement and prevention.

SD35 links childhood maltreatment to later cyberbullying involvement. It demonstrates that childhood maltreatment is significantly and positively associated with both cyberbullying perpetration and victimization, with stronger links observed for perpetration. Emotional abuse was found to be more strongly related to cyberbullying involvement than neglect.

SD37 identifies online disinhibition and its specific characteristics as critical factors influencing cyberbullying behaviors. The paper conceptualizes online disinhibition as a key driver of adolescent cyberbullying. It also notes that technological and legal awareness among adolescents can serve as protective elements, while platform design changes could reduce the impact of disinhibition.

SD39 identifies school climate as a critical contextual factor influencing cyberbullying victimization. It underscores that gender and culture do not alter these associations, suggesting that environmental conditions outweigh demographic variables in shaping risk. It shows how supportive environments can reduce victimization and foster resilience among students.

SD40 identifies risk factors (mental health problems, substance abuse, loneliness, stress, gender/sexual identity issues, violent behaviors, ASD, IDD, obesity, asthma, severity of CB) and protective factors (school connectedness, parental support, family dinners, healthy diet, personal skills). Protective factors include school connectedness, personal skills, family involvement, and

healthy lifestyle practices. The protective factors can mitigate the negative impact of cyberbullying on suicidal behaviors.

SC22 frames juvenile cyber-deviance as a fast-evolving phenomenon requiring criminology to adapt to technological and cultural shifts. The study identifies risk factors linked to juvenile cyber-deviance, noting methodological quality but limited breadth of existing work. It underscores the need for expanded longitudinal research to capture diverse forms of cyber-deviance.

SC25 identifies contextual factors such as empathy, prior victimization, social norms, severity, and relationships. It stresses the moral obligation of researchers to determine adaptive, ethical intervention strategies.

In contrast to the baseline study, this updated synthesis also highlights several positive and negative variables relating to the CB phenomena. Across these studies, personality traits, self-related cognition, and contextual moderators emerge as key predictors of cyberbullying. Risk and protective factors such as parenting, school climate, and socio-technical risks (social bullying, privacy invasion) shape both perpetration and victimization, with gender and cultural differences influencing outcomes.

3.2.9 Mapping Prevalence Studies with Concept/Definition Issues

Reviews at both the secondary and tertiary levels consistently show that how strictly cyberbullying is defined has a major impact on the results. Studies that apply all three core criteria—repetition, harm, and power imbalance—tend to report lower rates of cyberbullying. However, these studies also show stronger and more reliable links to serious health issues like anxiety, depression, and suicidal thoughts. In other words, using a more precise definition may

reduce inflated prevalence numbers, but it helps researchers better understand the real emotional and psychological consequences for those affected.

3.2.10 CB dimensions, yearly trends and review type trends

Early secondary research from 2010 to 2016 mostly focused on the effects and prevalence of cyberbullying. From 2017 to 2025, studies began exploring more diverse areas like concepts, interventions, and detection methods. Meta-analyses and thematic reviews were often used to study prevalence and impact, while content and narrative reviews were more common for examining definitions and how cyberbullying is measured.

3.3 Quality analysis

This section addresses research question RQ3 by presenting a quality analysis of the included systematic literature reviews. It covers overall quality assessment, yearly trends, dimension-specific patterns, and other relevant insights, as outlined in sub-sections 3.3.1 to 3.3.3.

3.3.1 Quality Assessment Score

The quality assessment of all 35 included studies is detailed in Appendix A (Table A.1), based on the evaluation criteria outlined in Table 2. Studies scoring below 2 were excluded from the final analysis. In our tertiary review, quality scores ranged from 2 to 4, with an overall mean of 3.5 out of 4.0—indicating a generally high standard across the secondary studies. We categorized scores as low (1–2), medium (2.5), and high (3–4). Only 1 study (1%) fell into the low-quality category, and 8 studies (21%) were rated as medium. The vast majority, 28 studies, or 76%—achieved high-quality scores.

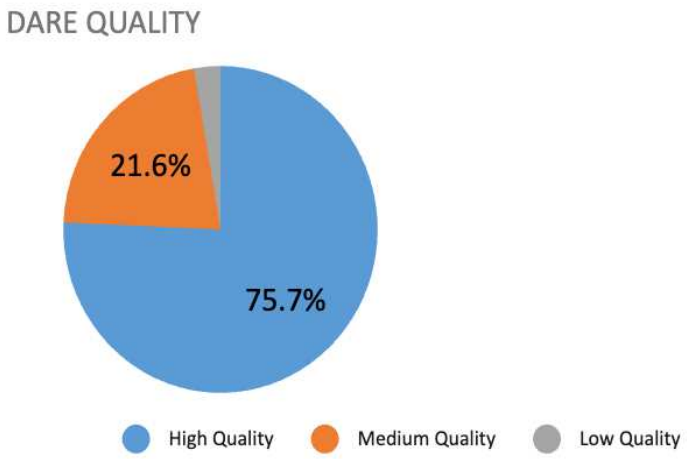


Figure 9: DARE Quality Review

3.3.2. Quality of SLRs in terms of criteria

Most of the SLRs have completed the DARE quality assessment in a good way. Only a few lacked to discuss the quality criteria assessment in terms of inclusion/ exclusion, relevancy, quality and adequate description.

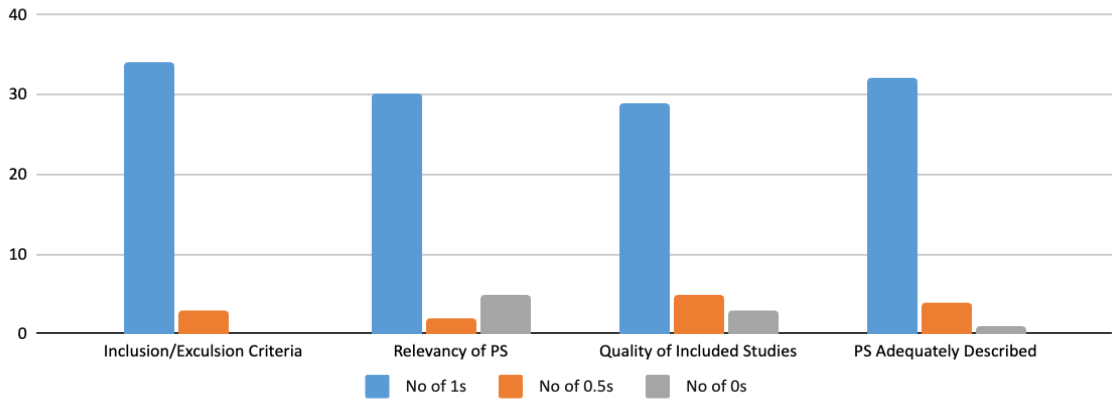


Figure 10: DARE Quality score breakdown

4. Discussion

This review shows clear evidence that CB causes serious psychological harm. Depression, anxiety, and suicidal thoughts are common outcomes (SD27, SD26, SD29). The relationship is not one-way: CB can make mental health worse, but poor mental health can also make people more vulnerable to CB, creating a cycle that is hard to break (SD34). Protective factors stand out clearly. Supportive schools, empathy-based programs, and parental involvement help reduce risks (PM16). Whole-school approaches and socio-emotional learning programs look promising, but most have not been tested enough to know if they work long-term.

Theories are used unevenly. Some studies apply ideas like moral disengagement or ecological models, but many reviews remain descriptive. Adults are often overlooked, even though cyberstalking (SD30) and workplace bullying are real problems. Research also tends to focus on wealthier countries, leaving low- and middle-income regions underrepresented. This makes it harder to know how CB looks in different cultural settings.

Methodological quality is generally sound, but there are gaps. Some reviews don't search widely enough or explain their appraisal processes clearly. Another big issue is terminology. Words like "digital hate" and "online harassment" are often used interchangeably, which makes it difficult to measure CB consistently or design effective interventions. Reviews such as SD35 stress the need for clearer, harmonized definitions.

Finally, there is a divide between behavioral and technical approaches. Educational programs focus on empathy, regulation, and school climate, while technical studies use machine learning and natural language processing to detect harmful content (SD31; SD32; SD33; SD37). These two areas rarely connect, but combining them could be the most effective way forward.

Interdisciplinary collaboration and platform-level solutions may offer scalable strategies that work across different contexts.

4.1 Evolution of Research Trends: Comparison with Previous Studies

We have conducted a detailed comparative analysis of differences in research trends in both studies. Table 7 shows a comparison of both studies. Table 7 has 4 columns. First column is about the research dimensions and areas of focus; second column represents the trends found in previous tertiary study that was conducted till 2020. Third column shows the research trends identified in the extended tertiary study conducted till 2025. Fourth column shows a difference in trends in both studies; some interesting trends are inferred in the fourth column.

Table 7: Comparison of research trends with previous study

Dimension /Focus Area	**Previous study (till 2020)**	**This study (till 2025)**	**Observed trends/ inferences**
No. of studies included	50 SLRs	36 SLRs	Decline in number of SLRs but quality is increased
Top regions of studies	USA being the topmost region for CB, followed by Spain and UK	China being the topmost region for CB followed by USA and Spain	Stronger Asian representation for cyberbullying
Main themes identified	Prevalence, Effects, Interventions, Measurement, Factors, Automation, Concept, General While Prevalence & Effects staying dominant	Effects, Factors, Prevalence, Measurement, Interventions, Automation, General While Effects, Factors staying dominant	Focus is shifting from counting cases to finding underlying causes and understanding the problem
Prevalence	6–35%, with 23% of 12-18 years of age. High in America	10-40% youth. Mostly found in Instagram and snap chat. A recent rise in Tiktok and what Sapp is also noted	Range is becoming broader. New platforms are rising for CB prevalence
Effect	Depression, anxiety, self-harm consistently linked; studies mainly on youth	Psychological, behavioral & physical effects (across ages.) Cyberbullying and depression are correlated/	Impact is not only on youth for spanning for lifetime

Interventions	Mixed results; school-based programs, teachers training, games	Integrating educational policy, anti-bullying teams.	Shift toward practical approaches. integrating policies
Measurement	60 tools identified: many lacked validity	40+ tools; still reliability issues;	Problem persists need for standardized, cross-cultural scales.
Automated detection	Automation on text-based English models	Use of ML deep learning and LLMs	Trend is changing from basic text to multi-modal & AI-driven detection.
Quality of SLRs	3.1/4	3.5/4	Maturity in field is seen, methodological rigor improves
Emerging issues	Psychological frameworks (TPB, GAM	Digital hate, AI ethics, bystander roles	Shift to cross-domain approaches linking cyber psychology & AI ethics.
Overall Conclusion	Focused on describing what is known (prevalence & effects).	Focuses on understanding why/how CB occurs & how AI and policy can mitigate it.	Field has evolved from quantifying to technologically intervening.

From table 7, between 2020 and 2025, research on cyberbullying has evolved from descriptive understanding to analytical intervention perspectives. The focus and geographical existence, that previously was on prevalence and effects, with the USA, Spain, and the UK leading the research, is now shifted to concept analysis, understanding problems with Asian regions, led by China. An improvement in quality of research is also observed. The effects extend beyond youth to encompass long-term psychological and physical impacts. Interventions efforts are on integrated policy and digital approaches, while automation is done through AI-driven, multimodal detection using ML and LLMs. However, validity of measurements constructs is still questionable. Overall, the field reflects linking between cyber psychology, education, and AI ethics, and a shift from quantifying prevalence to policy-driven solutions.

4.1.1 Major Trend differences

From Table 7, we can infer the trend shift in Cyberbullying research during 2020 till 2025. The major trends and the observed shifts are:

- *Geographic diversity:* Representation from Asia is increasing (with China leading and India participation is also noticeable)
- *Platforms*: From Face book the shift to towards Whatsapp and Tiktok
- *Focus on research:* research focus is shifted from prevalence to understanding underlying concepts and using AI for detection
- *Theoretical Coverage:* Stronger integration of psychological and technological theories
- *Quality:* Quality of research and methodology is improved
- *Measurement evolution:* Still inconsistent and needs improvement

Some inferences that we can derive from this comparison are shown in Figure 11.

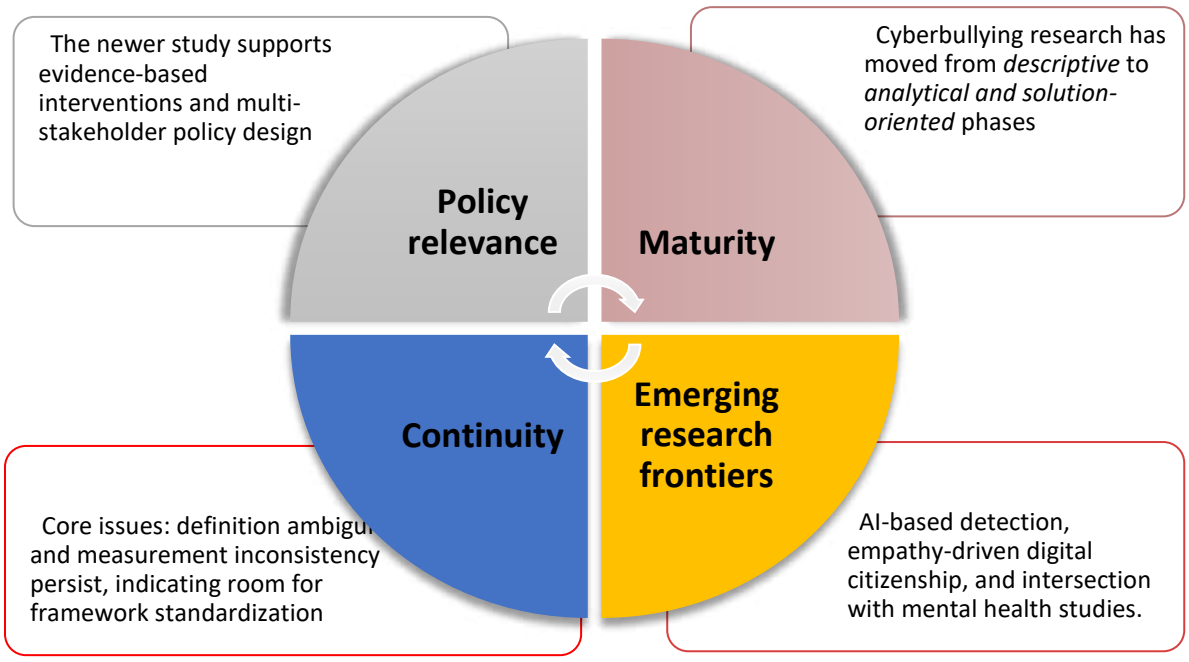


Figure 11: Inferences derived from comparison of both studies

4.1.2 Follow-up Analysis of Research Calls in the 2022 Study

This section presents the mapping of research directions proposed in 2020 and the progress covered till 2025. Table 8 presents a mapping of research call and the progress covered in this paper.

Table 8: Mapping of research gaps highlighted in the 2022 tertiary study and their coverage in the 2025 updated synthesis.

Research Call from Main study (2022)	Covered in 2025 Study?	Status / Comments
Need for standardized definitions of cyberbullying	Partially covered	SLRs are working on concept identification however lack of consensus persists
Development of measurement tools	Still Weak	Highlighted cultural validity issues. No standard instrument yet.
Regional Research Expansion	Improved	More studies are from china and Spain
Evaluation of intervention effectiveness	Still missing	Interventions are still small scale and short term
Link between cyberbullying and mental health	Improved	Correlated mental health and cyberbullying. Focus on life time mental heath
Quality of SLR	Improved	Improved from 3.1 to 3.5

It has been observed that main area identified in the 2020 study has been improved, however a serious effort on development of measurement tools and evaluation of intervention effectiveness is still to be made.

4.2 Future Directions and Gaps

Secondary reviews and expert recommendations point to key areas for future cyberbullying research. First, researchers need to agree on clear definitions so that CB can be separated from things like cyber aggression or online hate. Better tools are needed, and they must work across

different cultures. Long-term studies should track how CB and mental health affect each other over time. Interventions should be tested for lasting impact, not just short-term success. Detection technology needs bigger and more diverse datasets, and it should be linked into broader prevention systems. Reviews should include more regions, especially those that are underrepresented. Factor studies should look at protective elements as well as risks, so we can learn how to build resilience.

4.3 Novelty and Contribution

Recent systematic and tertiary reviews (2020–2025) show clear progress in cyberbullying research. Studies now take a more holistic approach, combining data on prevalence, impact, measurement, and interventions. The updated synthesis covers all eight dimensions together instead of looking at them separately. It adds broader harms like substance use and social exclusion, shows progress in detection technology, and balances risks with protective factors. This gives a fuller, more practical picture of CB, useful for both researchers and practitioners. It shows how CB is not just about harm, but also about resilience, and how solutions need to be multi-layered. Use of computer based and AI based solutions offer a new and promising direction.

4.4 Implications for Researchers and Practitioners

Researchers are encouraged to use clear, consistent definitions and scoring system. For scholars, this means using careful methods and solid theories, and making sure studies work across cultures. For teachers, parents, and policymakers, it means focusing on prevention instead of punishment. Practitioners—including educators, clinicians, and tech moderators—should apply evidence-based interventions. Mental health support should be built into interventions, and strategies should fit local contexts. Everyone has a role to play — schools, families,

communities, and even tech platforms. Working together is the only way to tackle CB effectively.

4.5 Threats to Validity

CB studies still struggle with validity. Definitions are unclear, so results don't always match across studies. Tools for measuring CB are mixed and often not adapted for different cultures. Most research looks at Western school children, leaving adults and marginalized groups out. Many studies only take a snapshot in time, which makes it hard to see cause and effect. Language and publication bias also narrows the global picture, even though reporting has gotten better in recent years.

5. Conclusion

Cyber harassment, in its many forms, constitutes a complex phenomenon of harm in the digital era, affecting individuals across lifespan, settings, and cultures. This updated tertiary study builds upon the earlier synthesis of Saleem et al. (Saleem et al. 2022b), incorporating 35 systematic reviews published after November 2020 up to 2025. Our aim was to bring together what has already been studied, spot the main trends, and show what they mean for both researchers and practitioners. We organized the literature into clear dimensions of CB and also noted how many primary studies were included, which reviews were most cited, when the studies were done, where they were published, and in what kinds of journals or venues. One of our biggest contributions was mapping the literature onto these dimensions and checking the quality of the reviews themselves — pointing out both their strengths and their weaknesses.

This review shows that old problems like unclear definitions and inconsistent tools are still there, but new progress is happening in areas such as school and family interventions, technology-based detection, and global perspectives that look beyond single countries. The

evidence makes it clear that CB is a complex problem with serious psychological and social consequences, especially for adolescents. Depression, anxiety, self-harm, and exclusion are common outcomes, and they make CB a major public health concern. At the same time, there are still big gaps. Research often ignores adult populations, struggles to connect theories together, and rarely follows people over time to see long-term effects. Future work needs stronger methods, more diverse samples, and closer links between CB research, intervention science, and digital policy. This review brings together the evidence in one place, making it easier for scholars, teachers, and policymakers to design strategies that are scalable and sensitive to context. It also calls for collaboration across disciplines and sustained investment in digital safety, treating CB as a public health priority that requires collective action.

6. Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

7. Declaration of generative AI and AI-assisted technologies in the manuscript preparation process.

During the preparation of this manuscript, the author(s) used *ChatGPT (OpenAI)* for language editing and refinement of English sentence structure. The tool was used solely to enhance clarity and readability. The author(s) critically reviewed, revised, and validated the final content and assumed full responsibility for the integrity and accuracy of the published article.

10-APPENDIX A:

Table A.1 DARE Quality Criteria for each SLR

S#	CODE	Title	Q1	Q2	Q3	Q4	Total
1	PM16	Cyber Stalking, Cyber Harassment, and Adult Mental Health: A Systematic Review.	1	1	1	1	4
2	SD24	A meta-analysis of the relationship between personality traits and cyberbullying	1	1	1	1	4
3	SD25	Association between self-related cognition and cyberbullying victimization in children and adolescents: A systematic review and meta-analysis	1	1	1	1	4
4	SD26	Cyberbullying among children and youth in Türkiye: A systematic review and meta-analysis	1	1	1	1	4
5	SD27	Cyberbullying among youth in developing countries: A qualitative systematic review with bibliometric analysis	1	0	0.5	1	2.5
6	SD28	Cyberbullying in elementary and middle school students: A systematic review	1	1	1	1	4
7	SD29	Cyberbullying intervention and prevention programmes in Primary Education (6 to 12 years): A systematic review	1	1	0.5	1	3.5
8	SD30	Cyberbullying on social networking sites: A literature review and future research directions	1	1	1	1	4
9	SD31	Cyberbullying research in Canada: A systematic review of the first 100 empirical studies	1	1	0.5	1	3.5
10	SD32	Cyberbullying victimization and depression among adolescents: A meta-analysis	1	1	1	1	4
11	SD33	Effectiveness of anti-cyberbullying educational programs: A socio-ecologically grounded systematic review and meta-analysis	1	1	1	1	4
12	SD34	Implications and Preventions of Cyberbullying and Social Exclusion in Social Media: Systematic Review	1	0.5	1	0.5	3
13	SD35	Linking childhood maltreatment to cyberbullying perpetration and victimization: A systematic review and multilevel meta-analysis	1	1	1	1	4
14	SD36	Meta-analyses of the predictors and outcomes of cyberbullying perpetration and victimization while controlling for traditional bullying perpetration and victimization	1	1	1	1	4
15	SD37	Online disinhibition and adolescent cyberbullying: A systematic review	1	1	1	1	4

16	SD38	School bullying and cyberbullying in academically gifted students: A systematic review	1	0.5	1	1	3.5
17	SD39	School climate and cyberbullying victimization: A meta-analysis	1	1	1	1	4
18	SD40	Systematic review of risk and protective factors for suicidal and self-harm behaviors among children and adolescents involved with cyberbullying	1	1	0.5	1	3.5
19	SD41	The bidirectional relationships between cyberbullying and depression: A systematic review and meta-analysis of longitudinal studies	1	1	1	1	4
20	SD42	The current status of Cyberbullying research: a short review of the literature	1	1	1	1	4
21	SC18	Comparing association between traditional-/cyber-bullying perpetration and marijuana use among young people: A systematic review and meta-analysis	1	1	1	1	4
22	SC19	Parental Risk and Protective Factors Associated with Bullying Victimization in Children and Adolescents: A Systematic Review and Meta-analysis	1	1	1	1	4
23	SC20	Cyberbullying in higher education: a review of the literature based on bibliometric analysis	1	1	0	0	2
24	SC21	Social media use and social well-being: a systematic review and future research agenda	1	1	1	1	4
25	SC22	A systematic literature review of the longitudinal risk factors associated with juvenile cyber-deviance	1	1	1	1	4
26	SC23	Cyber-Victimization and Its Effect on Depression in Adolescents: A Systematic Review and Meta-Analysis	1	0	1	1	3
27	SC24	The longitudinal course of childhood bullying victimization and associations with self-injurious thoughts and behaviors in children and young people: A systematic review of the literature	1	1	1	1	4
28	SC25	Systematic review of determinants and consequences of bystander interventions in online hate and cyberbullying among adults	1	1	1	0.5	3.5
29	---	EVALUATION OF LINGUISTIC AGGRESSION IN CYBERBULLYING AGAINST WOMEN ON SOCIAL MEDIA IN PUBLIC SECTOR UNIVERSITIES OF PAKISTAN	0.5	0.5	0	0.5	1.5
30	SC26	Trending: A Systematic Review of Social Media Use's Influence on Adolescent Anxiety and Depression	1	0	1	1	3

31	SC27	The Effectiveness of Educational Interventions on Traditional Bullying and Cyberbullying Among Adolescents: A Systematic Review and Meta-Analysis	1	1	1	1	4
32	SC28	Cyberbullying Through the Lens of Data Science	1	1	1	1	4
33	SC29	Analyzing Machine Learning Techniques for Cyberbullying Detection: A Review Study	0.5	1	0.5	0.5	2.5
34	SC30	A meta-analytic review of the relationship between cyber aggression and substance use	1	1	1	1	4
35	SC31	Behind the Screens: A Systematic Literature Review on Barriers and Mitigating Strategies for Combating Cyberbullying	1	0	1	1	3
36	PSY18	Cyber-bullying research in Kenya: a meta-analysis	1	0	1	1	3

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