

Digital Media, Violence, and Educational Contexts: Mapping the Intellectual and Thematic Evolution of Research Through Bibliometric Analysis (1992– May 2026)¹

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ABSTRACT

This study explores the intellectual development and thematic transformation of research focusing on digital media, violence, and educational environments through a bibliometric approach. As digital communication technologies increasingly shape the daily experiences of children and adolescents, concerns regarding cyberbullying, online aggression, harmful media exposure, and digitally mediated victimization have become more visible within educational discourse. The dataset consisted of SSCI-indexed articles retrieved from the Web of Science Core Collection covering the period between 1992 and May 2026. Bibliometric analyses were conducted using the Bibliometrix R package and the Biblioshiny interface. The findings revealed a substantial increase in publication activity, particularly after the mid-2010s. Frequently occurring concepts included violence, aggression, media exposure, adolescents, and behavioral outcomes, while recent studies increasingly emphasized cyberbullying, discrimination, victimization, and social media environments. The results further revealed that educational dimensions of the field remain comparatively less central than communication- and violence-oriented themes. By identifying conceptual shifts and intellectual patterns within the literature, the study contributes to a broader understanding of how digital culture and media-related violence are discussed in educational research. The findings also highlight the growing importance of critical media literacy, digital citizenship, and preventive educational approaches addressing online aggression and digital harm.

Keywords: Digital media, digital culture, violence, education, cyberbullying, bibliometric analysis



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Dijital Medya, Şiddet ve Eğitsel Bağlamlar: Araştırmaların Entelektüel ve Tematik Dönüşümünün Bibliyometrik Analiz Yoluyla Haritalandırılması (1992–Mayıs, 2026)

ÖZ

Bu çalışma, dijital medya, şiddet ve eğitim bağlamındaki araştırmaların entelektüel gelişimini ve tematik dönüşümünü bibliyometrik bir yaklaşımla incelemektedir. Dijital iletişim teknolojilerinin çocuklar ve ergenlerin günlük yaşam deneyimlerini giderek daha fazla şekillendirmesiyle birlikte, siber zorbalık, çevrimiçi saldırganlık, zararlı medya içeriklerine maruz kalma ve dijital ortamlar aracılığıyla gerçekleşen mağduriyet gibi konular eğitim alanındaki tartışmalarda daha görünür hâle gelmiştir. Araştırmanın veri seti, Web of Science Core Collection veritabanından elde edilen ve 1992–Mayıs 2026 arasında yayımlanan SSCI indeksli makalelerden oluşmaktadır. Bibliyometrik analizler Bibliometrix R paketi ve Biblioshiny arayüzü kullanılarak gerçekleştirilmiştir. Bulgular, özellikle 2010'lu yılların ortalarından sonra yayın sayısında belirgin bir artış yaşandığını göstermektedir. En sık tekrarlanan kavramlar arasında şiddet, saldırganlık, medya maruziyeti, ergenler ve davranışsal çıktılar yer alırken, son dönem çalışmalarda siber zorbalık, ayrımcılık, mağduriyet ve sosyal medya ortamlarının giderek daha fazla öne çıktığı belirlenmiştir. Bulgular ayrıca alanın eğitsel boyutlarının iletişim ve şiddet odaklı temalara kıyasla daha sınırlı bir merkezî konuma sahip olduğunu ortaya koymuştur. Literatürdeki kavramsal dönüşümleri ve entelektüel örüntüleri ortaya koyan bu çalışma, dijital kültür ve medya ilişkili şiddetin eğitim araştırmalarında nasıl ele alındığına ilişkin daha kapsamlı bir anlayış sunmaktadır. Eleştirel medya okuryazarlığı, dijital vatandaşlık ve çevrimiçi saldırganlık ile dijital zararların önlenmesine yönelik eğitsel yaklaşımların giderek artan önemi de bulgular arasında yer almaktadır.

Anahtar Kelimeler: Dijital medya, dijital kültür, şiddet, eğitim, siber zorbalık, bibliyometrik analiz

1. INTRODUCTION

Media and communication environments have long been linked with concerns surrounding violence, aggression, and behavioral influence, particularly in relation to children and adolescents. Earlier research examined the effects of television violence and media exposure on aggressive attitudes and behavior (Bandura, 1977; Gerbner et al., 1980). Over time, these discussions expanded beyond traditional mass media and increasingly included digital environments such as social media platforms, online communication spaces, and interactive media. As digital technologies became more integrated into everyday life, concerns related to cyberbullying, online victimization, discrimination, and mediated forms of aggression also appeared more frequently within educational and social contexts.

Educational contexts have become increasingly visible in discussions related to media violence, cyberbullying, and digital aggression, particularly as schools are expected to play a central role in addressing online victimization, digital safety, and responsible media use among children and adolescents (Li, 2007; Ringrose et al., 2012). As these young people spend more time in online communication environments, schools and educational institutions are more frequently included in debates surrounding harmful media content, online peer aggression, discrimination, and victimization. Consequently, media-related violence is no longer confined to communication or psychology research; it has also become relevant to educational research and school-based preventive approaches.

The growing attention to cyberbullying and online safety has also increased interest in educational responses to digital aggression. Studies examining cyberbullying in school settings have emphasized the role of educators and schools in addressing online aggression among students (Li, 2007). In addition, discussions surrounding digital literacy and critical media literacy have drawn attention to the need for students to evaluate media content more critically and participate more responsibly in digital environments.

Despite the growing volume of research on media violence, digital aggression, cyberbullying, and online victimization, the literature has evolved across multiple disciplinary areas, including communication studies, psychology, media studies, and education. As a result, the field has expanded through diverse theoretical perspectives, research topics, and publication sources. Although previous studies have examined specific aspects of the aforementioned themes (Li, 2007; Ringrose et al., 2012), comprehensive efforts to map the intellectual and thematic structure of research at the intersection of digital media, violence, and educational contexts remain limited. Bibliometric approaches have been widely used to examine the development of research fields (Aria & Cuccurullo, 2017; Zupic & Čater, 2015). To the best of the author's knowledge, no study has been identified that systematically maps this specific interdisciplinary domain.

In recent years, bibliometric methods have been increasingly used to examine the development of research fields, identify influential publications, and trace thematic changes within the literature (Aria & Cuccurullo, 2017; Zupic & Čater, 2015). In the context of media, digital culture, violence, and education, a bibliometric perspective may help reveal how the field

has evolved, which concepts have gained attention, and how educational themes are positioned within the broader research landscape.

The present study aimed to examine the intellectual and conceptual structure of research on media, digital culture, violence, and educational contexts through bibliometric analysis. Using English-language SSCI-indexed journal articles retrieved from the Web of Science Core Collection and categorized under Education & Educational Research, Communication, and Psychology Educational, the study aimed to identify publication trends, influential sources and authors, conceptual patterns, thematic developments, and country-level scientific production within the field. In line with this purpose, the study addressed the following research questions:

1. How has scientific production related to media, digital culture, violence, and educational contexts developed over time?
2. Which sources, authors, and publications have been most influential within the literature?
3. What are the main conceptual and thematic structures of the field?
4. How have research topics changed over time?
5. How is scientific production distributed across countries?

Given the interdisciplinary and expanding nature of the literature, bibliometric analysis offers a systematic way to examine the intellectual structure, conceptual patterns, and thematic development of the field.

2. METHOD

Bibliometric research is a quantitative approach used to examine the intellectual, conceptual, and social structure of scientific literature through the analysis of bibliographic metadata, citation relationships, and publication patterns (Aria & Cuccurullo, 2017; Zupic & Čater, 2015). Unlike traditional literature reviews, bibliometric analysis enables researchers to identify influential publications, leading authors, prominent journals, collaborative networks, and emerging thematic trends within a research field.

Bibliometric methods are particularly useful when a field has developed across multiple disciplines and generated a large body of literature that is difficult to examine through conventional review techniques. By applying science mapping and performance analysis techniques, researchers can systematically explore the evolution, structure, and dynamics of a knowledge domain (Aria & Cuccurullo, 2017).

Following the recommendations of Aria and Cuccurullo (2017, 2026), the present study employed a bibliometric research design consisting of four main stages: (a) data retrieval and dataset construction, (b) data cleaning and standardization, (c) bibliometric performance analysis, and (d) science mapping analyses, including conceptual and citation-based structure analyses. This approach enabled a comprehensive examination of research on digital media, violence, and educational contexts.

2.1. Data Source and Search Strategy

The data used in this study were retrieved from the Web of Science (WoS) Core Collection database. Web of Science was selected because it provides widely used citation indexing and bibliographic data for bibliometric research across social science disciplines. The data collection and retrieval process was conducted on May 12, 2026.

The search strategy focused on studies related to media, digital culture, violence, and educational contexts. The following search query was used in the Topic field (TS):

```
TS= (("media" OR "digital media" OR "social media" OR "digital culture")
AND
("violence" OR "aggression" OR "violent behavior" OR "violence representation" OR "crime
representation")
AND
("education" OR "school" OR "teaching" OR "curriculum" OR "students"))
```

After the initial search, several filtering criteria were applied in order to increase the relevance of the dataset to the scope of the study. The dataset was limited to publications indexed in the Social Sciences Citation Index (SSCI), document type “Article,” and publications written in English. In addition, the following Web of Science categories were selected: *Education & Educational Research*, *Communication*, and *Psychology Educational*.

Following the filtering process, the final dataset consisted of 340 publications published between 1992 and May 2026. The bibliographic records were exported from Web of Science in plain text format with “Full Record and Cited References” selected for analysis.

Prior to analysis, keyword variants, spelling differences, and singular/plural forms (e.g., “student” and “students”) were reviewed and standardized where necessary to improve the consistency of keyword-based analyses.

2.2 Inclusion Criteria and Scope of the Study

Several inclusion criteria were applied in order to define the scope of the dataset more clearly. First, only journal articles indexed in the Social Sciences Citation Index (SSCI) were included in the analysis. Other publication types such as conference papers, book chapters, editorial materials, and reviews were excluded in order to maintain consistency within the dataset.

Second, the study included only publications written in English. This preference was made to ensure consistency in keyword analysis, citation mapping, and bibliometric visualization processes. Third, the analysis was limited to publications indexed under the categories *Education & Educational Research*, *Communication*, and *Psychology Educational* in Web of Science. These categories were selected because the study focused specifically on the intersection of media, violence, digital culture, and educational contexts.

The publication period covered studies published between 1992 and May 2026. The earliest publication identified in the dataset was published in 1992. Rather than applying a predefined

starting date, the study included all publications retrieved through the search query and filtering process within the available timespan of the database.

2.3 Data Analysis

The bibliometric analysis was conducted using the Bibliometrix R package and the Biblioshiny interface developed for science mapping and bibliometric research (Aria & Cuccurullo, 2017, 2026). The analysis process included descriptive bibliometric indicators as well as conceptual and citation-based mapping techniques.

First, descriptive analyses were used to examine the general characteristics of the dataset, including annual scientific production, publication sources, authors, citation patterns, and country-level scientific production. These analyses provided an overview of the growth and distribution of the literature.

Second, conceptual structure analyses were conducted using author keywords. Keyword frequency analysis, word cloud visualization, co-occurrence network mapping, and trend topic analysis were used to identify recurring concepts and thematic changes within the field over time.

Third, citation-based analyses were performed to examine the intellectual structure of the literature. These analyses included the identification of highly cited publications and the use of a Three-Field Plot linking cited references, authors, and author keywords. The visualizations generated through Biblioshiny were interpreted to examine relationships among concepts, influential studies, and publication patterns within the dataset.

The study followed a bibliometric approach aimed at identifying patterns and structures within the indexed literature rather than evaluating the methodological quality of individual studies. In the co-occurrence network analyses, association strength normalization was applied to identify and visualize relationships among keywords. The clustering structure was generated using the network analysis procedures available in Biblioshiny, which group conceptually related terms into thematic clusters based on their co-occurrence patterns. Threshold values for keyword inclusion were determined based on the frequency distribution and overall characteristics of the dataset to enhance the interpretability of the visualizations. These procedures supported the identification of conceptual structures, thematic relationships, and emerging research trends within the literature.

3. FINDINGS

3.1. Overview of the Dataset

The dataset consisted of 340 articles indexed in the Web of Science Core Collection between 1992 and May 2026. These publications were distributed across 143 different sources and involved 832 authors. The annual growth rate of the literature was calculated as 8.87%, indicating a consistent increase in publication activity over time. The dataset also reflected a moderate level of collaboration, with an average of 2.6 co-authors per document and an international co-authorship rate of 13.53%.

In total, 987 author keywords and 16,754 cited references were identified. The average number of citations per document was 20.88, while the average age of the documents was 8.82 years. These descriptive indicators suggest a research area characterized by a diverse publication structure and a relatively broad citation network.

The main descriptive characteristics of the dataset are presented in Figure 1.



Figure 1. Main Descriptive Characteristics of the Dataset

Note. The dataset consisted of 340 SSCI-indexed articles retrieved from the Web of Science Core Collection between 1992 and 2026.

Table 1 presents the main bibliometric characteristics of the dataset. The final dataset consisted of 340 SSCI-indexed articles published between 1992 and May 2026 and distributed across 143 sources. A total of 832 authors contributed to the literature, generating 987 author keywords and 16,754 cited references.

Table 1. Main bibliometric indicators of the dataset

Indicator	Value
Timespan	1992–May 2026
Sources	143
Documents	340
Authors	832
Authors of single-authored documents	103
Author keywords	987
References	16,754
Annual growth rate (%)	8.87
International co-authorship (%)	13.53
Co-authors per document	2.60
Document average age	8.82
Average citations per document	20.88

3.2 Findings Related to Research Question 1: Scientific Production Trends

Figure 2 presents the annual scientific production of studies published between 1992 and 2026. The findings indicate that publication activity was relatively limited during the 1990s and early 2000s. After 2006, the number of publications increased more noticeably, although yearly fluctuations continued throughout the period.

A clearer increase in publication output appeared after 2015. The highest publication counts were observed in the early 2020s, particularly in 2022 and 2024. Compared with earlier years, the

later period reflects a broader and more sustained research interest in media, violence, and educational contexts.

The overall pattern suggests that the field has expanded considerably over time, especially during the past decade.

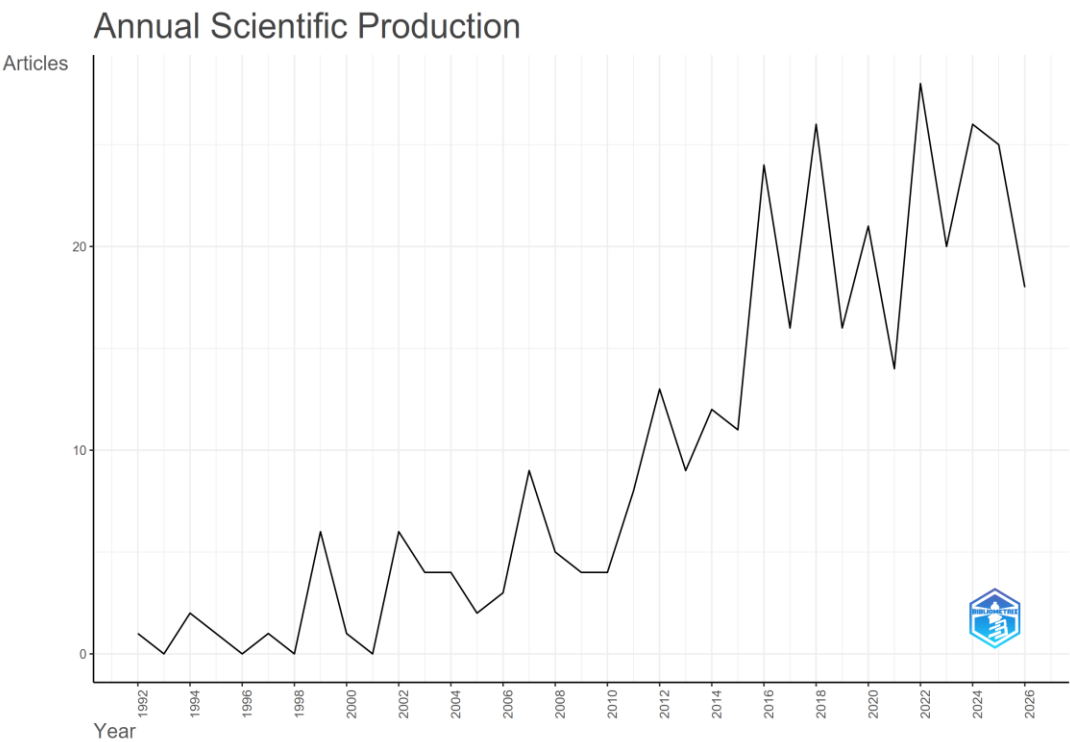


Figure 2. Annual Scientific Production in Research on Media, Digital Culture, Violence, and Educational Contexts (1992–2026)

Note. The figure presents the annual distribution of SSCI-indexed publications retrieved from the Web of Science Core Collection between 1992 and 2026.

3.3 Findings Related to Research Question 2: Influential Sources and Authors

Table 2 presents the most productive sources within the dataset. The findings indicate that the literature is dispersed across communication, psychology, education, and media studies journals rather than being concentrated in a single publication outlet.

Table 2. Most productive sources

Rank	Source	Publications
1	Media Psychology	16
2	Communication Research	10
3	Health Communication	9
4	International Journal of Communication	8
5	Gender and Education	7
6	Mass Communication and Society	7
7	Psychology in the Schools	7
8	Sex Education: Sexuality, Society and Learning	7
9	Feminist Media Studies	6
10	Journal of Adolescent & Adult Literacy	6

Figure 3 shows the most productive sources in the dataset. *Media Psychology* ranked first with 16 publications, followed by *Communication Research* with 10 publications and *Health Communication* with 9 publications. Other visible sources included *International Journal of Communication*, *Gender and Education*, *Mass Communication and Society*, *Psychology in the Schools*, and *Sex Education: Sexuality, Society and Learning*.

This distribution indicates that the literature is not concentrated in a single journal or publication venue. Instead, the most productive sources are located mainly at the intersection of communication studies, media psychology, health communication, gender studies, and educational research. The presence of both communication-oriented and education-oriented journals suggests that the topic has been approached through multiple disciplinary entry points.

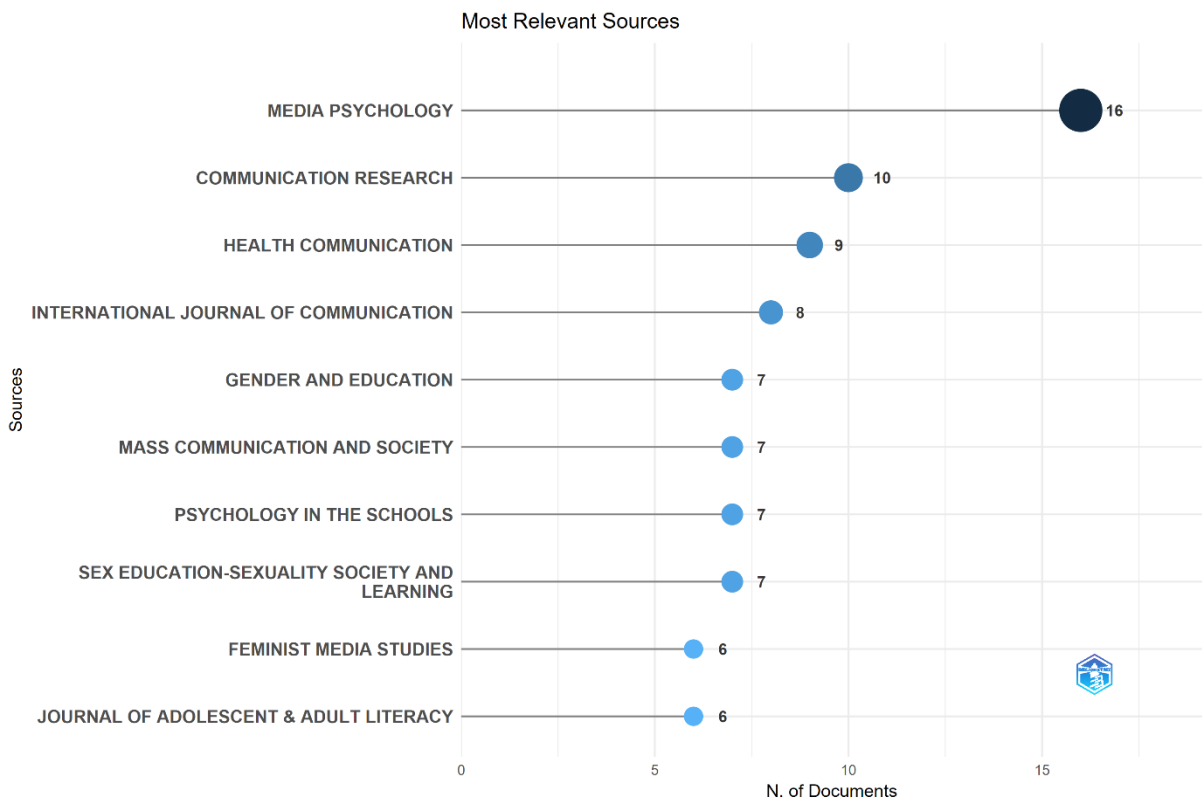


Figure 3. *Most Relevant Sources in Research on Media, Digital Culture, Violence, and Educational Contexts*

Note. The figure presents the most productive journals and publication sources identified in the dataset based on the number of published articles.

Table 3 presents the most productive authors in the dataset. Although the field includes a large number of contributors, publication output is distributed across many researchers rather than being dominated by a small group of authors. This pattern suggests a diverse and internationally dispersed authorship structure.

Table 3. Most productive authors

Rank	Author	Publications
1	Scharrer E.	6
2	Olson C.	4
3	Riddle K.	4
4	Bushman B.J.	3
5	De Wet C.	3
6	Herbenick D.	3
7	Martins N.	3
8	Potter W.J.	3
9	Sekarasih L.	3
10	Slater M.D.	3

Figure 4 presents the most productive authors in the field. Scharrer E. ranked first with six publications, followed by Olson C. and Riddle K. with four publications each. Several other authors, including Bushman B.J., De Wet C., Herbenick D., Martins N., Potter W.J., Sekarasih L.,

and Slater M.D., contributed three publications each. The relatively low publication counts among the most productive authors suggest that research on media, violence, digital culture, and educational contexts is characterized by a dispersed authorship structure rather than a samll dominant group of scholars.

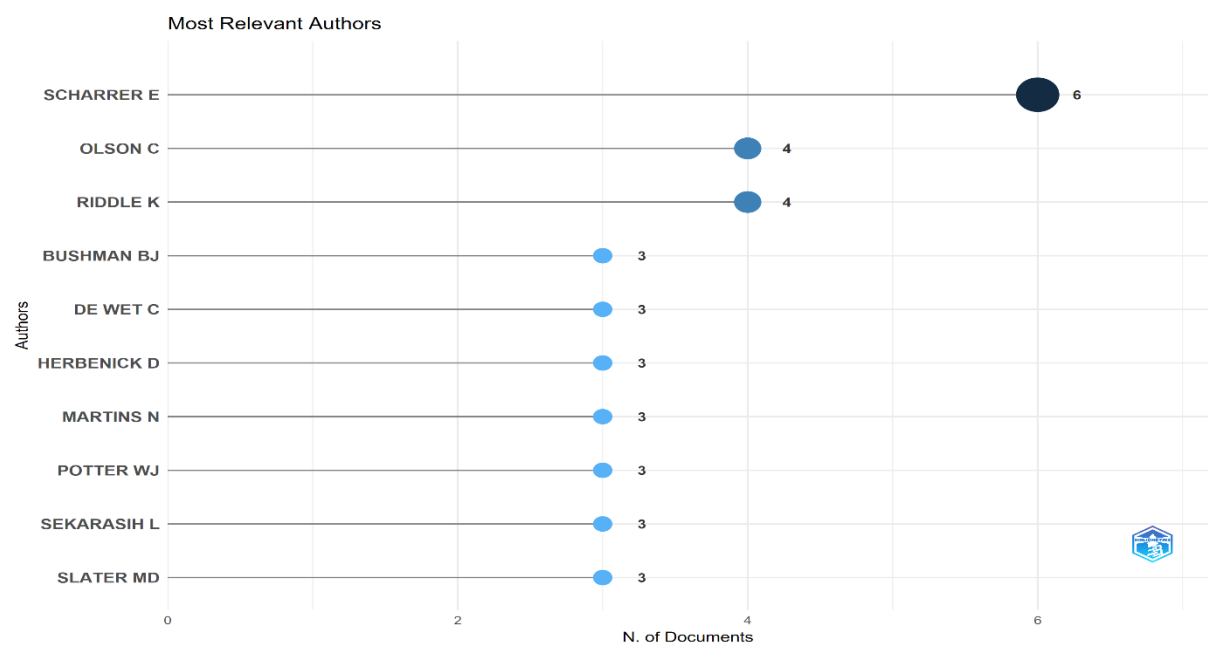


Figure 4. Most Relevant Authors in the Dataset

Note. The figure shows the authors with the highest number of publications within the dataset retrieved from the Web of Science Core Collection.

3.4 Findings Related to Research Question 3: Conceptual and Thematic Structure

To examine the conceptual and thematic structure of the field, keyword frequency analysis, word cloud visualization, and co-occurrence network mapping were conducted. Table 4 summarizes the most frequently used author keywords, while Figures 5–7 provide complementary visual representations of the conceptual structure of the literature.

Table 4. Most frequent author keywords

Rank	Keyword	Frequency
1	violence	87
2	aggression	57
3	media	57
4	behavior	39
5	education	33
6	adolescents	31
7	attitudes	30
8	gender	29
9	women	29
10	exposure	28

Table 4 shows that violence, aggression, and media constitute the most frequently recurring concepts in the literature. The presence of keywords such as education, adolescents, gender, and exposure suggests that the field extends beyond communication-focused discussions and incorporates educational, developmental, and social dimensions.

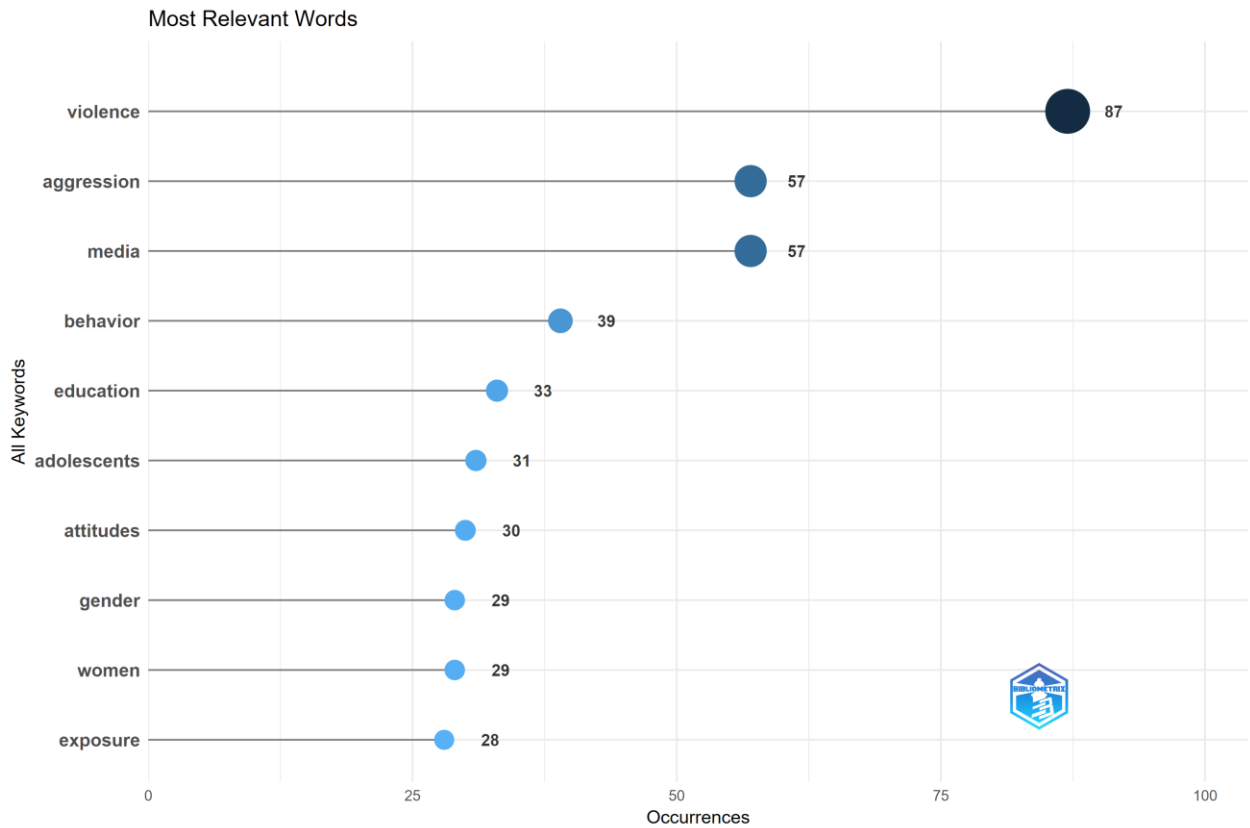


Figure 5. Most Frequent Author Keywords in the Dataset

Note. The figure presents the most frequently occurring author keywords identified in the dataset retrieved from the Web of Science Core Collection.

Figure 5 presents the most frequently used author keywords in the dataset. Among the 987 author keywords identified, “violence” was the most frequently occurring term ($f = 87$), followed by “aggression” ($f = 57$) and “media” ($f = 57$). Other frequently used keywords included “behavior” ($f = 39$), “education” ($f = 33$), “adolescents” ($f = 31$), “attitudes” ($f = 30$), “gender” ($f = 29$), “women” ($f = 29$), and “exposure” ($f = 28$). The keyword distribution reflects the strong visibility of violence-related, media-related, and youth-related concepts within the dataset. Educational themes are also represented, although they appear less frequently than terms associated with violence, aggression, and media. In addition, keywords such as “women,” “gender,” and “sexual violence” indicate the presence of gender-related themes in the literature.



Figure 6. Word Cloud of Author Keywords

Note. The word cloud visualization was generated from author keywords and reflects the relative prominence of recurring concepts within the dataset.

Figure 6 presents the word cloud generated from author keywords. Terms such as “violence,” “aggression,” “media,” “education,” “television,” “social media,” “behavior,” “students,” “children,” and “adolescents” are visually prominent. The prominence of the term “education” suggests that educational concerns constitute a significant dimension of the literature, although they appear less dominant than violence- and media-oriented themes. The coexistence of “television” and “social media” in the same visualization further indicates that the literature encompasses studies of both traditional and digital media environments. This pattern suggests that scholarly attention has gradually expanded from traditional media effects toward broader discussions involving digital communication, educational settings, and the social consequences of media-related violence.

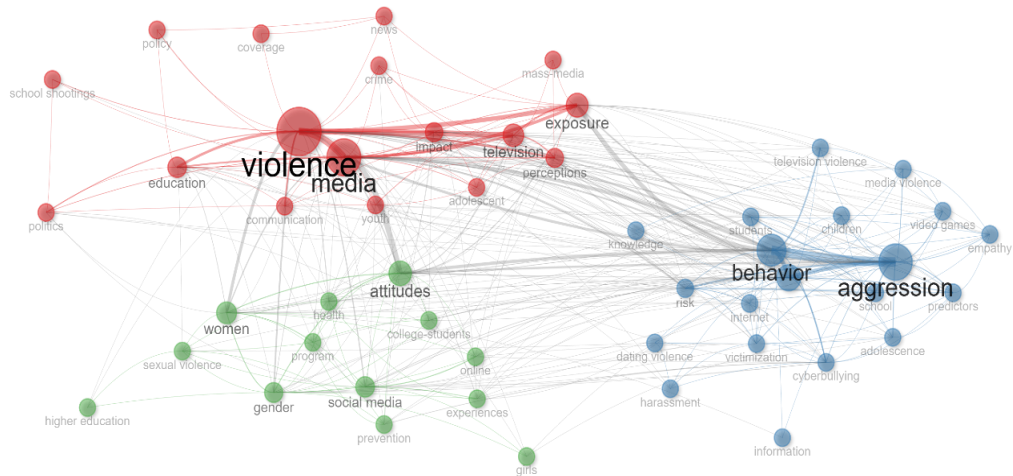


Figure 7. Co-occurrence Network of Author Keywords

Note. The figure illustrates the conceptual relationships among frequently co-occurring author keywords within the dataset. Node size reflects keyword frequency, while link strength indicates co-occurrence relationships.

The co-occurrence network presented in Figure 7 reveals three interconnected conceptual clusters. The red cluster is centered around violence, media, television, perceptions, education, and related forms of media exposure, reflecting a communication- and media-effects perspective. The blue cluster includes concepts such as aggression, behavior, victimization, school, and children, representing behavioral and school-related dimensions of the literature. The green cluster contains terms such as attitudes, gender, communication, adolescents, and social media, highlighting social, demographic, and interaction-oriented aspects of media-related violence research. The strong links among these clusters indicate that the field integrates communication, behavioral, social, and educational perspectives within a shared conceptual framework. Together, these patterns suggest that research on media-related violence has evolved beyond a single disciplinary focus and increasingly incorporates educational concerns alongside communication and behavioral approaches.

3.5 Findings Related to Research Question 2: Influential Publications and Intellectual Structure

The intellectual structure of the field was examined through citation analysis and Three-Field Plot visualization. As shown in Figure 8, several highly cited publications in the dataset focused on media violence, school violence, youth behavior, media exposure, cyberbullying, and gender-related digital interactions. These influential studies were published in journals associated with communication research, educational technology, psychology, school violence, and gender studies.

The distribution of highly cited documents suggests that the intellectual foundations of the field extend across multiple disciplines rather than being confined to a single research tradition. While communication and media-effects studies constitute a substantial part of the knowledge base, educational, psychological, and gender-related perspectives also contribute significantly to the development of the literature.

Figure 9 presents the Three-Field Plot linking cited references, authors, and author keywords. Foundational references associated with Bandura, Anderson, Bushman, Gerbner, and Huesmann appeared alongside frequently occurring keywords such as “violence,” “aggression,” “behavior,” “media,” and “adolescents.” Keywords including “social media” and “cyberbullying” were also visible within the network structure.

The relationships illustrated in the Three-Field Plot indicate that contemporary themes such as social media and cyberbullying are closely connected to earlier theoretical traditions related to media exposure, aggression, and social learning. This continuity suggests that emerging digital forms of violence are being interpreted through conceptual frameworks originally developed to explain traditional media effects and aggressive behavior.

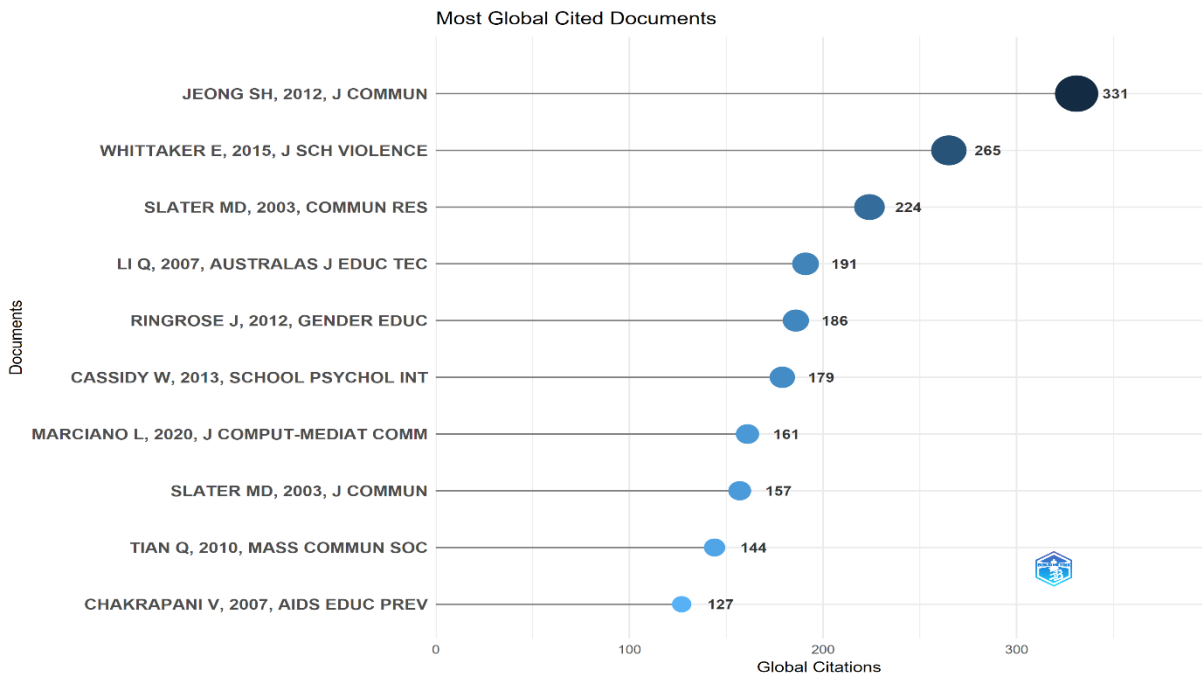


Figure 8. Most Globally Cited Documents in Research on Media, Digital Culture, Violence, and Educational Contexts

Note. The figure presents the publications with the highest global citation counts identified in the dataset retrieved from the Web of Science Core Collection.

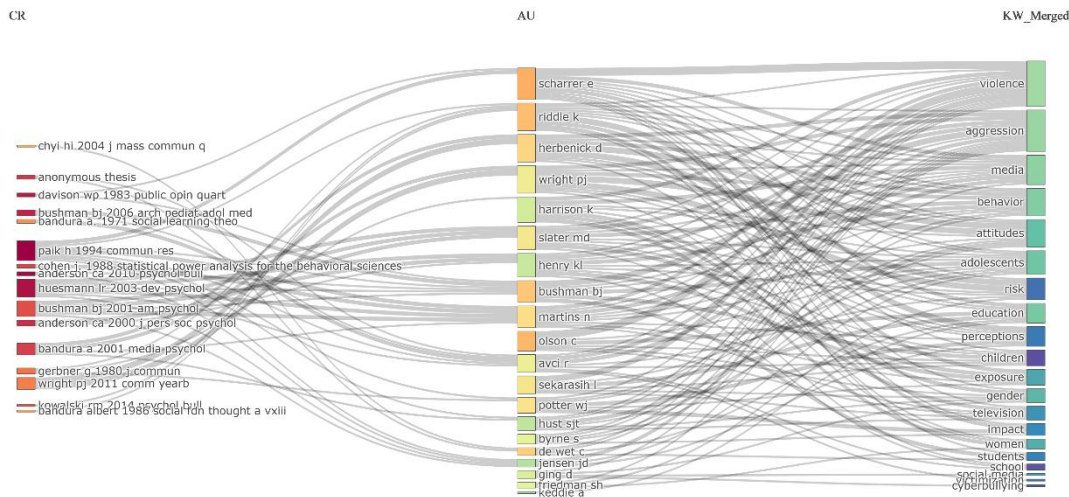


Figure 9. Three-Field Plot of Cited References, Authors, and Author Keywords

Note. The figure illustrates the relationships among cited references, productive authors, and frequently occurring author keywords within the dataset. The width of the links reflects the relative strength of the associations.

3.6 Findings Related to Research Question 4: Thematic Evolution and Trend Topics

Figure 10 illustrates the temporal evolution of recurring keywords across the publication period. Earlier studies in the dataset were mainly associated with terms such as “mass media,” “media effects,” “television violence,” “exposure,” and “violent video games.” These terms reflect the dominance of traditional media violence and exposure-oriented research during the earlier phase of the literature.

From the mid-2010s onward, the keyword structure became more varied. While “violence” remained a central and highly recurrent topic throughout the period, more recent years

witnessed the growing prominence of terms such as “education,” “social media,” “victimization,” “students,” “discrimination,” and “explicit internet material.” The emergence of these topics suggests that the literature has increasingly expanded beyond traditional media-effects research to include educational, social, and digital dimensions of media-related violence. The appearance of “critical pedagogy” further indicates that some recent studies have approached the topic from educational and critical perspectives. This trend is also compatible with critical pedagogical perspectives emphasizing the role of education in questioning power relations, media representations, and social inequalities within contemporary digital cultures (Giroux, 1994).

This pattern suggests a gradual widening of the field. Earlier work was more closely aligned with media effects and television violence, whereas more recent studies have increasingly addressed digital media environments, online risks, victimization, discrimination, educational issues, and critical pedagogical perspectives. This shift reflects the growing recognition of media-related violence as not only a communication issue but also an educational and social concern that requires critical media literacy, digital citizenship, and preventive educational interventions.

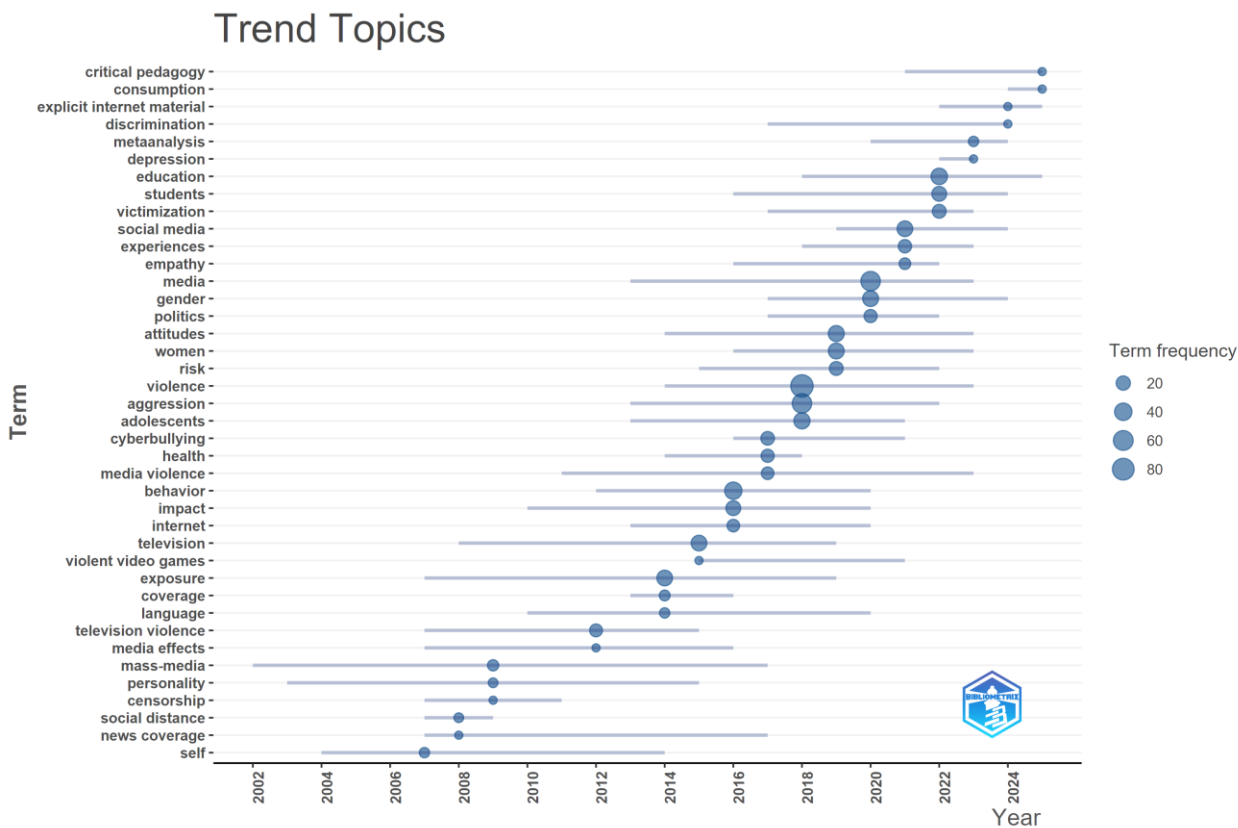


Figure 10. Trend Topics in Research on Media, Digital Culture, Violence, and Educational Contexts

Note. The figure presents the temporal distribution of frequently occurring author keywords in the dataset retrieved from the Web of Science Core Collection.

3.7 Findings Related to Research Question 5: Country-Level Scientific Production

Country-level scientific production was examined to identify the geographical distribution of publications within the dataset. As shown in Table 5 and Figure 11, the United States emerged as the leading contributor to the literature (n = 360), followed by Canada (n = 41), Australia (n = 35), the United Kingdom (n = 31), and Germany (n = 21). Other productive

countries included Spain (n = 14), China (n = 13), Belgium (n = 12), South Korea (n = 11), and Türkiye (n = 11).

The geographical distribution indicates that the literature has developed across multiple regions rather than within a single national context. However, scientific production remained concentrated in North America and parts of Europe. Although countries such as Türkiye, South Korea, Indonesia, the Netherlands, and South Africa also contributed to the literature, their publication output remained comparatively lower than that of the leading contributors.

These findings suggest that research on media, violence, digital environments, and educational contexts has attracted growing international scholarly attention over time. At the same time, the uneven geographical distribution of publications indicates that research capacity and scholarly visibility continue to vary across countries and regions.

Table 5. Most productive countries

Rank	Country	Publications
1	USA	360
2	Canada	41
3	Australia	35
4	United Kingdom	31
5	Germany	21
6	Spain	14
7	China	13
8	Belgium	12
9	South Korea	11
10	Türkiye	11

Country Scientific Production

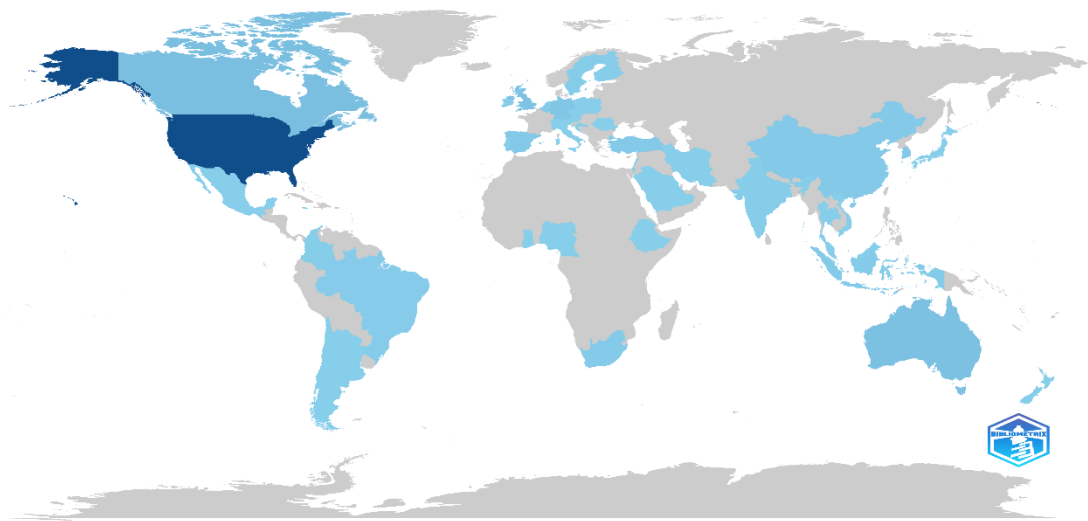


Figure 11. Country-Level Scientific Production in the Dataset

Note. The figure presents the geographical distribution of publications retrieved from the Web of Science Core Collection between 1992 and 2026. Darker colors indicate higher levels of publication activity.

3.8 Summary of the Findings

The findings revealed a substantial growth in publication activity between 1992 and May 2026, with a particularly notable increase after 2015. The literature was distributed across multiple disciplinary areas, including communication studies, media psychology, educational

research, and related social science fields, reflecting the interdisciplinary nature of research on media, violence, and educational contexts.

Keyword frequency analysis, word cloud visualization, and co-occurrence network mapping demonstrated that the field is primarily structured around concepts such as violence, aggression, media, behavior, exposure, adolescents, and education. The analyses further highlighted the increasing visibility of themes related to gender, victimization, social media, and cyberbullying, indicating the growing influence of digital environments on scholarly discussions of violence.

Citation-based analyses identified several influential publications and foundational scholars that have shaped the intellectual development of the field. References associated with Bandura, Anderson, Bushman, Gerbner, and Huesmann remained central within the citation network, illustrating the continuing influence of media-effects and social learning perspectives. Trend topic analysis further revealed a thematic shift from traditional media violence research toward issues involving social media, discrimination, victimization, digital risks, and educational concerns.

Country-level analysis demonstrated that the United States was the leading contributor to the literature, although meaningful contributions were also observed from Europe, Asia, and other regions. Overall, the findings suggest that research on media-related violence has become increasingly international, interdisciplinary, and responsive to emerging challenges associated with digital communication environments.

4. DISCUSSION AND CONCLUSION

This study examined the development of research on media, digital culture, violence, and educational contexts through a bibliometric analysis of SSCI-indexed publications published between 1992 and May 2026. The findings revealed substantial growth in publication activity over time and highlighted the interdisciplinary nature of the field, which draws upon communication studies, psychology, education, and related social science disciplines.

The findings indicate that research on media, violence, and educational contexts remains closely connected to media effects and social learning perspectives. Concepts such as violence, aggression, exposure, and behavior were consistently visible across the conceptual and citation analyses, suggesting the continued influence of studies examining the relationship between media content and behavioral responses. This pattern was particularly noticeable in the visibility of foundational authors, including Bandura, Gerbner, Anderson, Bushman, and Huesmann, within the dataset's intellectual structure.

The trend topic and citation analyses suggest that earlier phases of the literature were strongly influenced by research traditions focusing on television violence, media exposure, and observational learning. These themes are consistent with foundational theoretical perspectives developed by scholars such as Bandura (1977) and Gerbner et al. (1980), whose work has significantly shaped research on media effects. Similarly, studies examining aggression, violent media content, and youth behavior have continued to draw upon influential frameworks

associated with Anderson and Bushman (2001). The bibliometric findings therefore, indicate continuity between the intellectual foundations of the field and its more recent thematic developments. Earlier research within the field frequently focused on media violence, media exposure, and aggressive behavior among children and adolescents. In addition to observational learning perspectives (Bandura, 1977), studies also examined the reciprocal relationship between media consumption and aggression, suggesting that exposure to violent media content and aggressive tendencies may reinforce one another over time (Slater et al., 2003). These themes remained highly visible within the intellectual structure of the field and continue to influence contemporary discussions of media-related violence.

The present findings suggest that these earlier frameworks continue to appear in more recent studies related to social media and cyberbullying.

A second point emerging from the findings concerns the transformation of violence-related themes within the literature. While earlier studies primarily focused on television violence, media exposure, and aggressive behavior, more recent research has increasingly examined digitally mediated forms of harm, including victimization, discrimination, cyberbullying, and exposure to harmful online content. This shift does not suggest that concerns regarding media effects have disappeared. Rather, it indicates that the forms and contexts of violence being investigated have evolved alongside changes in communication technologies and young people's digital experiences. This shift is consistent with the presence of studies in the dataset that address cyberbullying, online peer aggression, and gendered digital interactions. Li's (2007) work on cyberbullying and Ringrose et al.'s (2012) study on teenage girls, sexualization, and digital culture point to different but related extensions of the field: one through school-based online aggression, the other through gendered and mediated forms of youth vulnerability. In this sense, the more recent literature appears to move beyond exposure to violent content alone and toward the social conditions under which harm, monitoring, humiliation, and exclusion may occur online.

A third point emerging from the findings concerns the position of educational themes within the literature. Although concepts such as education, students, and critical pedagogy were visible in the analyses, they did not occupy the same level of prominence as violence, aggression, media, exposure, and behavior. This finding is consistent with previous scholarship suggesting that research on media-related violence has traditionally been dominated by communication and media-effects perspectives, while educational responses have received comparatively less attention (Buckingham, 2003; Hobbs, 2010). At the same time, the trend topic analysis revealed that educational themes have become increasingly visible in more recent years. The growing appearance of terms such as education, students, and critical pedagogy suggests an emerging shift toward educational interpretations of media-related violence and digital harm.

This pattern is particularly important for curriculum and instruction. If children and adolescents encounter violence, discrimination, victimization, and harmful representations through digital media environments, educational programs should address not only technical digital skills but also critical media literacy, ethical judgment, digital citizenship, and reflective

engagement with media content. The findings therefore indicate that educational perspectives are becoming more visible within the field, although they have not yet reached the same level of conceptual centrality as communication- and violence-oriented themes. Based on these findings, greater attention may be given to critical media literacy, digital literacy, and ethical awareness within curriculum and instructional practices. This recommendation is consistent with previous research demonstrating that media literacy interventions can positively influence media knowledge, critical evaluation skills, attitudes, self-efficacy, and behavioral outcomes among learners (Jeong et al., 2012). School-based programs addressing cyberbullying, online discrimination, and digital aggression may therefore contribute not only to prevention efforts but also to the development of critical and responsible digital citizenship. Future studies may further examine how different educational systems respond to media-related violence and online aggression across diverse cultural and social contexts. This finding is consistent with previous studies highlighting the growing educational relevance of cyberbullying, online victimization, and digital media environments. Research has increasingly emphasized the need for educational responses to digital aggression, particularly in school settings where cyberbullying affects students' well-being, social relationships, and learning experiences (Li, 2007; Cassidy et al., 2013; Whittaker & Kowalski, 2015). The growing visibility of educational and gender-related themes in recent years is consistent with studies showing that digital media environments create new forms of gendered harassment, stigmatization, and victimization among young people (Ringrose & Renold, 2012). Such findings support the increasing presence of concepts related to gender, women, discrimination, and victimization within the contemporary literature. The growing visibility of educational keywords in recent years therefore, reflects a broader shift toward understanding media-related violence as both a communication issue and an educational concern.

The country-level findings showed that publication activity was concentrated primarily in the United States, while contributions from many other regions remained comparatively limited. At the same time, the presence of publications from different regions suggests that questions related to digital aggression, online victimization, and media-related violence are no longer discussed within a single geographical context. Some limitations of the study should be considered when interpreting the findings. The analysis included only SSCI-indexed journal articles retrieved from the Web of Science Core Collection and was limited to publications in English. Studies indexed in other databases or published in other languages were not included. In addition, bibliometric analyses rely on publication metadata, citation patterns, and author keywords. For this reason, the findings reflect patterns within the indexed literature rather than the full range of experiences and practices related to violence, media, and education.

Future research could examine how media violence, cyberbullying, and digital aggression are addressed in different educational systems and cultural settings. Comparative studies involving other databases or mixed-method approaches may also provide a broader understanding of how digital media environments shape experiences of violence, discrimination, and victimization among children and adolescents.

Beyond its practical implications, this study contributes to the literature by providing a comprehensive bibliometric mapping of research on media, digital culture, violence, and educational contexts over a period spanning more than three decades. The findings reveal how the field has evolved from a primary focus on television violence and media effects toward broader concerns involving social media, cyberbullying, victimization, discrimination, and educational responses. By integrating performance analysis, conceptual structure analysis, intellectual structure analysis, and thematic evolution analysis, the study offers a systematic overview of the field's development and identifies emerging directions for future research.

Based on these findings, greater attention may be given to critical media literacy, digital literacy, and ethical awareness within curriculum and instructional practices. School-based programs addressing cyberbullying, online discrimination, and digital aggression may also contribute to preventive educational efforts. In addition, future studies may examine how different educational systems respond to media-related violence and online aggression across cultural and social contexts.

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