Exploring Thematic Trends of Online Child Safety: A Bibliometric Study on Social Media and Paedophilia in Indonesia

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Keywords	ABSTRACT
Bibliometric studies; Social media; Paedophilia; Trends	This study aims to map the development, thematic structure, and research trends of scholarly publications on social media and paedophilia in Indonesia. Using a bibliometric approach, the research quantitatively examines how academic attention to online child sexual exploitation has evolved and identifies dominant themes and emerging directions within the field. Data were collected from Google Scholar using the keywords media, social, paedophilia, and Indonesia, covering journal articles published between 2020 and mid-2025. An initial dataset of 840 articles was retrieved through the Publish or Perish application, followed by a rigorous data cleaning and relevance selection process that resulted in 438 articles for analysis. Bibliometric analysis was conducted using the Bibliometrix package and Biblioshiny interface to generate publication trends, citation patterns, keyword co-occurrence networks, and thematic mappings. The results show a sharp increase in publications from 2020 to 2023, followed by slower growth in 2023–2024 and a decline in 2024–2025. In contrast, citation rates rose significantly in 2024–2025, indicating increasing scholarly impact despite reduced output. Dominant themes center on children, sexual violence, media, and protection, while recent trends highlight a shift toward policy, counseling, and intervention-oriented research. These findings demonstrate an evolving, solution-focused research landscape on online child safety in Indonesia.

1. Introduction

Internet users are increasing. Thus, the usage of social media is also increasing. Social media is a media based on technological sophistication that is classified into various forms, such as magazines internet forums, weblogs, social blogs, microblogging, wikis, podcasts, photos or images, videos, rankings and social bookmarks (Harahap & Adeni, 2020). By applying a set of theories in the field of media research (social presence, media richness) and social processes (self-presentation, self-disclosure), Kaplan and Haenlein created a scheme or classification for various types of social media. According to Kaplan and Haenlein there are six types of social media, namely Collaborative Projects, Blogs and Microblogs, Content, Social Networking Sites, Virtual Game Worlds, and Virtual Social Worlds (Kaplan & Haenlein, 2012).

The Collaborative Project referred to by Kaplan and Haenlein is a website that allows its users to change, add, or delete content on this website, for example Wikipedia (Kaplan & Haenlein, 2012). Blogs and Microblogs are sites that allow users to be more free to express something on this blog, such as telling events experienced or even

expressing criticism of government policies. For example Twitter, Facebook. Content is the content of a post on a social media platform, but the type of social media categorized as Content by Kaplan and Haelein refers to social media that allows users of this website to share media content, such as videos, images, and e-books (electronic books), for example Instagram, TikTok, YouTube (Chowdhury, 2024; Purbohastuti, 2017; Sharma et al., 2024; Zhang et al., 2024).

Social Networking Sites are applications in which there is "permission" for users to be able to connect by creating personal information so they can connect with other people. Personal information can be in the form of photos or videos, for example Instagram, Facebook (Lareki et al., 2024; Liu et al., 2025; Lynn et al., 2024; Topdağı Yazıcı et al., 2025). Virtual Game World is a replication of a 3D (three-dimensional) "environment", users or users can appear in the form of desired avatars and can interact with other people as in the real world, for example online games. Virtual Social World is a type of social media in which a user feels like living in a virtual world by using a Virtual Reality device worn in the eye area, just like a virtual game world, interacting with other people. However, Virtual social world is freer and more towards real life/realistic, for example second life (Nusantara, 2017).

Around March 2017, the Indonesian public was shocked by the news of the disclosure of the Official Loly Candy's Groups 18+ on Facebook which allowed and even proposed various content containing child abuse and molestation. This group had 7,497 members. As reported by Antara, Head of the Cyber Crime Sub-Directorate of the Special Criminal Investigation Directorate of the Jakarta Metropolitan Police, Adjunct Commissioner Roberto Pasaribu, stated that the group was connected to eleven other groups involved in crimes against children in several countries (Hidayat, 2017).

Indonesia is indeed one of the countries prone to paedophilia cases. Many perpetrators also come from abroad. In fact, a report from the Indonesian Child Protection Commission (KPAI) on its website states that Indonesia is a target for foreigners seeking sexual gratification from children. KPAI Secretary, Erlinda, stated that tourists often cover up their paedophiliac operations very well. Erlinda pointed to several regions, such as Sumatra, Cianjur, Semarang, Solo, Palu, and Bali, as the most frequently targeted areas by pedophile tourists, targeting children aged 4-8 years and teenagers aged 9-15 years (Humas KPAI, 2014). In the case of this pedophile group on Facebook, four admins, all under 30 years old, have been successfully arrested by the police. According to a Kompas report, they were charged with multiple articles under Law Number 19 of 2016 concerning Electronic Information and Transactions, Law Number 44 of 2008 concerning Pornography, and Law Number 35 of 2014 concerning Child Protection (Nailufar, 2017).

Paedophilia is the obsession with children as sex objects (Alodia et al., 2019). Excessive acts, including taking sexually explicit photos, molesting children, and exposing one's genitals to children, are crimes (Ball et al., 2024; Garant & Proulx, 2024; Woodward et al., 2024). The problem with this crime is that paedophilia is also treated as a mental illness, and pedophiles are often released only to repeat the crime or escalate their activity to the level of murder. This leaves the victims, in this case children, and their families feeling unsafe because there is still a possibility that the perpetrator will still target them (Langvik et al., 2024).

Furthermore, there is the physical and mental trauma suffered by children as a result of these illegal acts. Therefore, paedophilia must be taken seriously because children's lives are at stake. Many regulations have been put in place to reduce this crime, but with the rapid growth of technology and the increase in pedophile communities found

on the internet, it seems it will be a long time before the crime can be completely eradicated (Ball et al., 2024; Garant & Proulx, 2024; Woodward et al., 2024). The government, along with several other authorities, will occasionally seek sanctions that will hopefully reduce the number of pedophiles. A total of 500 videos and 100 photos of child abuse were found in the Official Loly Candy's group. Not only facing legal action by the authorities, but social sanctions also apply to the group (Patresia, 2017). Most netizens expressed their anger and blasphemy when excerpts of comments in the Official Loly Candy's Group 18+ and the personal Facebook account of Wawan—one of the administrators who has been secured by the police—went viral in the digital world.

The Parent Herald website cites data from the National Society for the Prevention of Cruelty to Children (NSPCC) showing that there were 3,186 reports of sexual crimes against minors in England and Wales. The majority of victims were 13 years old, 272 were under 10, and the youngest victim was one year old. Furthermore, the NSPCC also found that in one day, eight sexual crimes were committed online by pedophiles. Forms of sexual crimes against children committed online by pedophiles include threatening children to meet them or displaying provocative sexual behavior using webcams (Laville, 2016; Probosiwi & Bahransyaf, 2015). This creates a maze for victims: once they comply with the threat's demand to send indecent images, they will continue to do so, even being asked to share even more graphic images.

Child sexual abuse can escalate further when both parties come into physical contact and are ultimately documented and shared online. The UK's children's commissioner, Anne Longfield, believes the data presented by the NSPCC may be just the tip of the iceberg. She assumes many victims don't report their cases because they don't fully understand the nature of the crime or fear the consequences (BBC, 2016). The virtual world holds dangers for children if their use is not supervised by parents. Children, who are inherently naive, may not yet understand the various crimes they could face online. The popular video streaming app, TikTok, has become a platform for pedophiles to prey on children. This was reported by the charity Barnardo's in the UK (Nugraha, 2019). Barnardo's stated that a group of perverts is targeting eight-year-olds through video streaming apps, including TikTok.

It's crucial for parents to understand the technology their children use. Without strict security measures, children can easily become targets of sexual abuse on live streaming platforms. Khan said this behavior has also been detected on dating apps like Tinder and Grindr. There are groups of perverts who target children on dating apps. Many perpetrators are known to have met their victims through dating apps (Dietzel, 2021; Pampanel et al., 2024; Porter et al., 2025).

However, the security teams behind these apps claim to be working tirelessly to prevent underage users from using them. TikTok is a popular app among children for its upbeat music and exciting dance routines. The energetic dance moves and challenges also make children addicted to the app. Many parents assume TikTok is purely for entertainment and harmless for children. However, this is not the case. Children are at high risk of becoming targets for pedophiles without their knowledge. The Malaysian Police (PDRM) has warned parents to monitor TikTok content and messages sent to their children's accounts. A large number of highly indecent "challenge" content has emerged, such as a video showing a young girl and a young man touching each other's bodies. PDRM stated that pedophiles could save the videos in their personal collections or share them with other pedophiles (ECPAT et al., 2022; Juaini et al., 2025; Nugraheni Mutia, 2020).

The increasing use of the internet and social media has opened up a vast space for interaction, but also presents serious risks of sexual crimes against children, including pedophilia. Various social media platforms—including Facebook, TikTok, and other video-based and virtual interaction apps—have been exploited by perpetrators to produce, distribute, and access child sexual abuse content. Cases in Indonesia and other countries demonstrate that pedophilia is not only a legal issue, but also a social, psychological, and technological issue with long-term impacts on victims. Therefore, parental supervision, state regulation, and a critical understanding of digital media are crucial in protecting children in the virtual space.

This study is based on two factors. First, bibliometric research is needed to systematically and objectively map trends in scientific publications related to media and pedophilia. With the rise in pedophilia cases involving digital media, academic studies in communication, media, psychology, law, and criminology have grown significantly but are scattered across disciplines. Bibliometric analysis allows researchers to identify publication growth patterns, dominant themes, key keywords, and the most influential journals and authors. Thus, bibliometrics serves as a strategic tool for understanding the direction of scientific development and identifying underexplored research gaps.

Second, a bibliometric approach is crucial for uncovering the dynamic relationship between the development of media technology and the escalation of pedophilia crimes from a global and longitudinal perspective. Through temporal and geographic mapping of publications, researchers can observe how the issue of pedophilia shifted from offline to online contexts, as well as how new media platforms—such as social media, live streaming, and virtual worlds—began to become the focus of scientific study. The results of bibliometric research are not only beneficial for academics but can also serve as an evidence-based basis for policymakers, educators, and child protection practitioners in designing more effective and relevant prevention strategies in response to the development of digital media.

2. Methods

This study uses a bibliometric study method to map the development of research on social media and paedophilia in Indonesia. The bibliometric approach was chosen because it can quantitatively and systematically describe scientific publication trends, citation patterns, dominant keywords, author networks, and the direction of the field's development. This study focuses on scientific publications available online through Google Scholar.

The research data sources were obtained through a Google Scholar search using the Boolean search formula: "media AND social AND paedophilia AND indonesia." We limited the data used to journal articles. These keywords were selected to ensure the search scope was relevant to the Indonesian geographic context and focused on the issue of paedophilia in relation to social media use. The search was conducted in the first week of September 2025 and yielded an initial 840 articles published between 2020 and mid-2025.

The bibliometric research process is carried out through four main stages: (1) Data Retrieval, (2) Data Cleaning, (3) Data Processing, and (4) Bibliometric Analysis. All Google Scholar search results (N = 840 articles) were extracted using the latest version of the Publish or Perish (PoP) extension. Data were exported in .bibtex and .xlsx formats for compatibility with RStudio software with the Bibliometrix package.

To ensure the accuracy of the analysis, a data cleaning process was carried out with the following steps: (1) Deletion of duplication from the initial 840 articles, 7 duplicate articles were found. After the deletion, 833 unique dummy articles remained; (2) Relevance selection of irrelevant articles was eliminated (e.g. related to paedophilia but without the context of social media; or discussing social media but not related to child exploitation). At this stage, 395 articles were eliminated from the initial 833 articles; (3) The final dataset was obtained after all stages of selection and cleaning, obtaining data of 438 articles for bibliometric analysis. The analysis was conducted using the Bibliometrix package and the Biblioshiny interface to generate topic modeling & keyword dynamics (identification of dominant themes and relationships between keywords) and bibliometric visualization (thematic map, trend topic graph, and co-occurrence clusters).

3. Results

Bibliometric mapping results indicate a clear dynamic in the development of publications related to social media and paedophilia in Indonesia during the 2020–2025 period. The number of publications increased sharply between 2020 and 2023, indicating growing academic attention to the issue of digital media-based child sexual exploitation. However, in the 2023–2024 period, the number of publications continued to increase, but not as rapidly as in previous years, indicating a slowdown in research growth in this field. Entering the 2024–2025 period, the publication trend decreased, which could indicate topic saturation or a shift in research focus to other issues in the realm of digital crime or child protection.
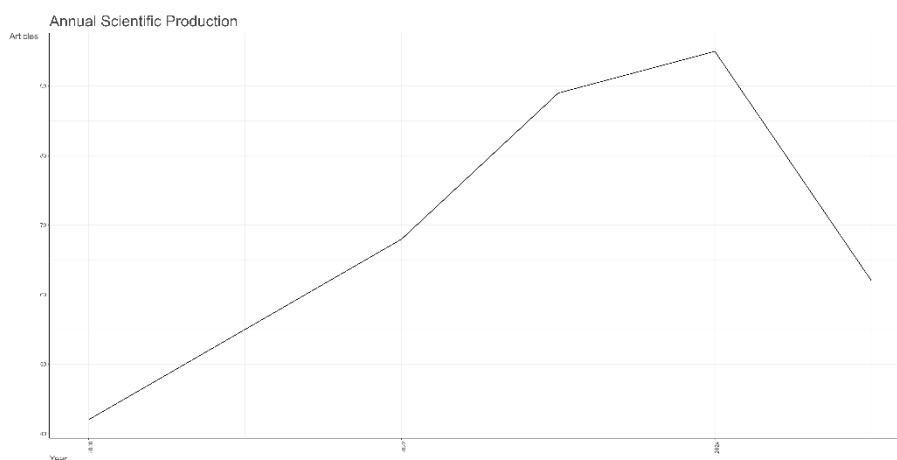

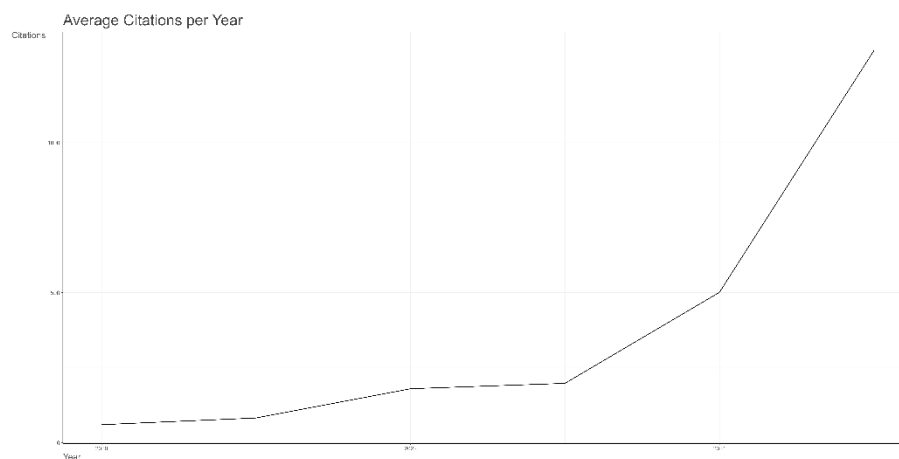Figure 1. Annual Scientific Production (2020-2025)

Figure 2. Average Citations per Year (2020-2025)

On the other hand, citation patterns show a different trend. Throughout 2020–2024, the number of citations to publications related to this issue did increase, but not significantly. A sharp increase in citations occurred in the 2024–2025 period. This surge in citations may reflect increased academic attention to previously published literature, possibly due to high-profile cases, regulatory changes, or the increased urgency of discussing the risks of paedophilia on social media platforms in Indonesia. Thus, although the number of publications decreased in 2024–2025, the scientific impact of published works actually experienced a stronger increase.
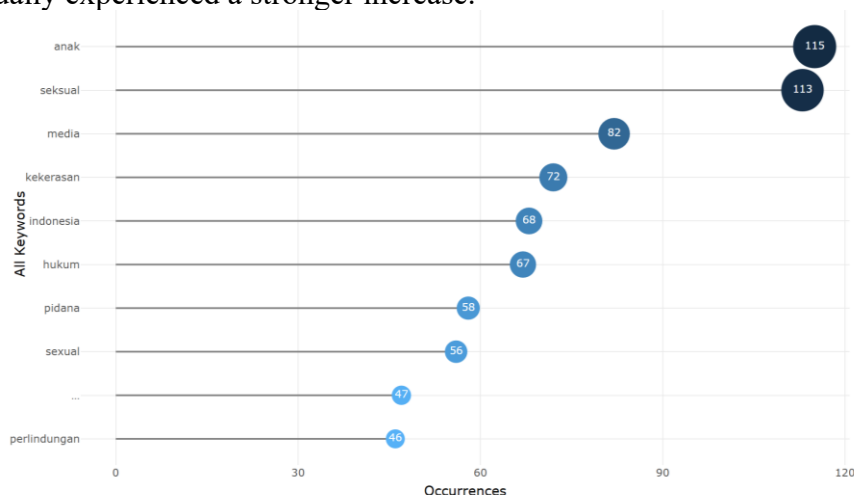

Figure 3. Word Occurrences

Bibliometric analysis of the publication corpus shows that the most dominant issues in academic discourse are related to children, sexuality, media, violence, and Indonesia, as seen in the Most Frequent Words list. This vocabulary dominance indicates that the studies that are the object of research tend to focus on child protection, sexual crimes, and how the media influences or mediates these issues.

The frequency of the words "anak" (115 occurrences) and "seksual" (113 occurrences) confirms that the literature in the dataset focuses heavily on the dimensions of child vulnerability in the context of sexual violence and media discourse. Meanwhile, the presence of the word "Indonesia" indicates that many publications examine the local

socio-political and cultural context, strongly suggesting that the phenomenon has received significant academic attention in recent years.
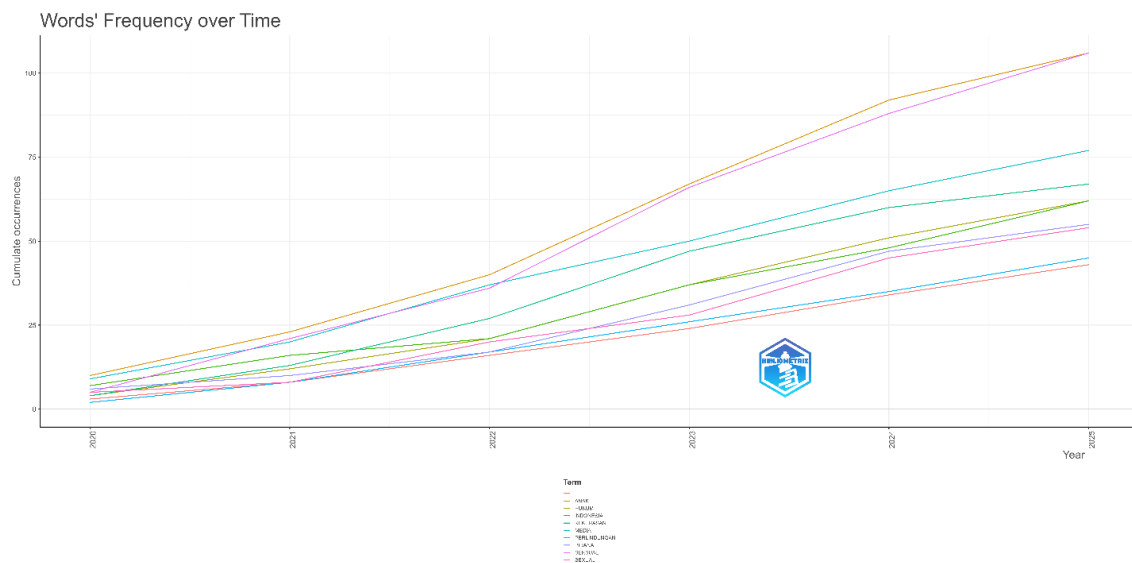

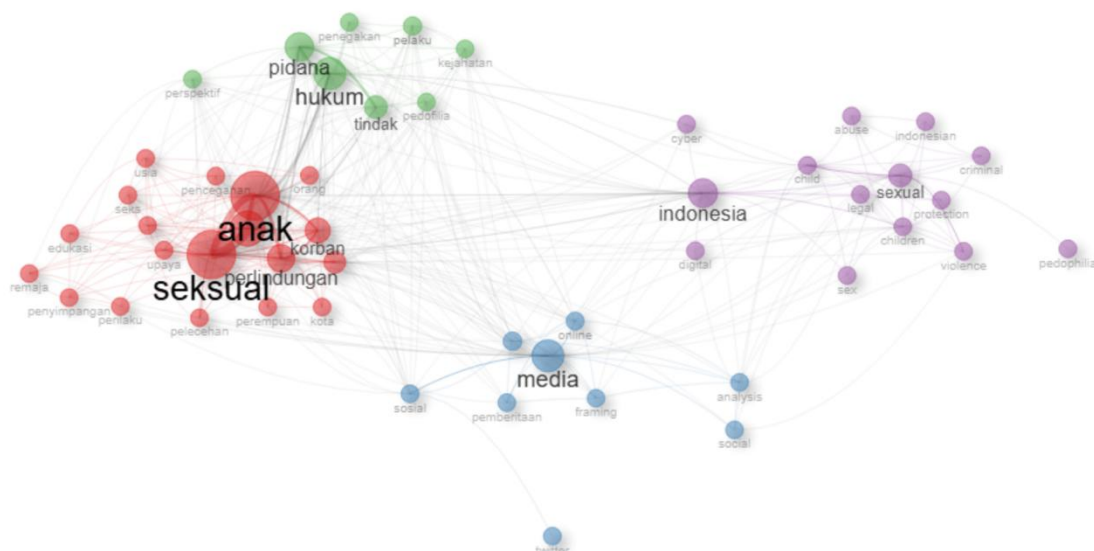
Figure 4. Words' Frequencey over Time

Figure 5. Co-occurrence Network

The Co-Word Network results revealed a strongly interconnected issue cluster structure. Words such as children, sexual, violence, and protection were all in the same cluster, supported by high betweenness and page rank values. This indicates that these concepts serve as points of intersection between topics, thus forming a thematically organized discourse ecosystem. In other words, sexual violence against children is a core theme that links various important subtopics, such as the role of the media, protection policies, and counseling. The findings from this network analysis confirm that the analyzed studies do not stand alone but rather reinforce each other in illustrating the urgency of this issue in the academic space.
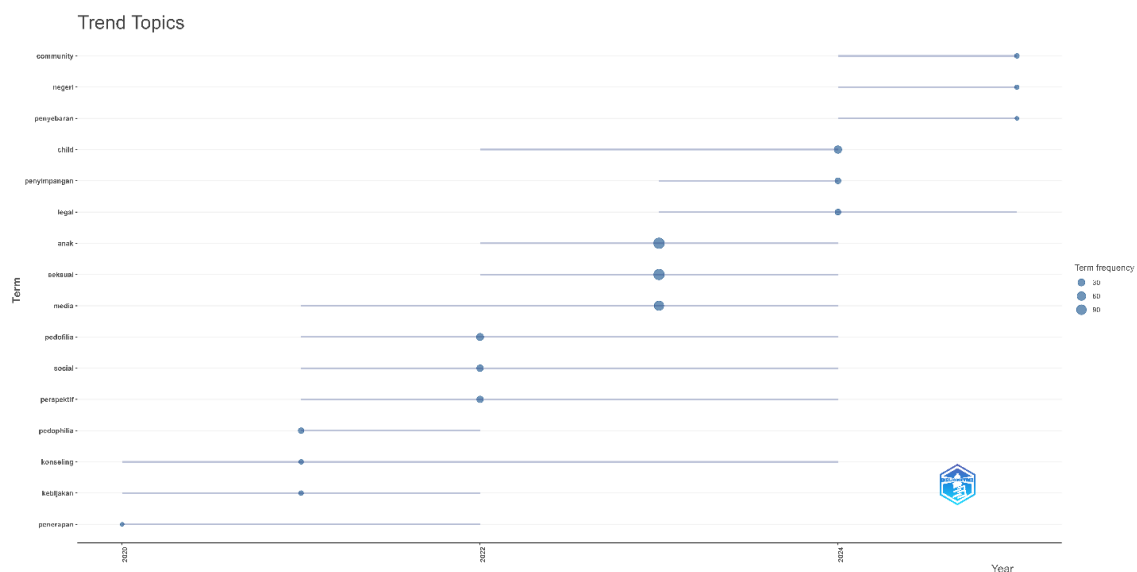
Figure 6. Trend Topics

Trend Topics provide temporal insight into the development of research focus. Terms such as paedophilia, policy, and counseling increased in relevance, particularly in the 2020–2024 period. For example, paedophilia had the highest frequency (32) and a median year of occurrence of 2022, reflecting a surge in academic attention to the issue in the near term. The emergence of terms like policy and counseling suggests that research is not solely focused on describing the phenomenon but is also beginning to move toward strengthening institutional responses and psychosocial interventions. This trend demonstrates an evolution from phenomenological to solution-based studies. Overall, the mapping of topic trends demonstrates that current scholarly discourse increasingly emphasizes structural, legal, and communication technology responses to the issue of sexual violence against children.
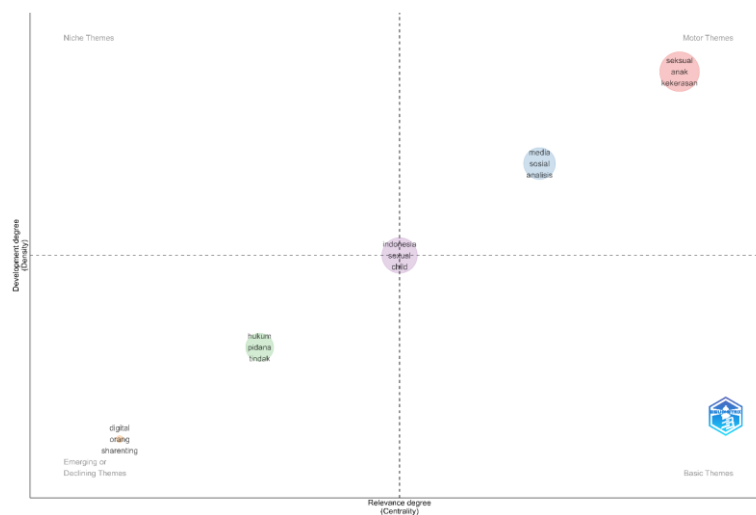

Figure 7. Thematic Map

Figure 8. Tree Map of 50 Most Frequent Words

Figure 9. Wordcloud of 100 Most Frequent Words

In the Thematic Map section, the data displays a thematic structure based on density and centrality. Although the sheet is more technical, this pattern indicates the presence of core themes (motor themes), emerging/declining themes, and important themes that still require analytical reinforcement. Core themes appear to be related to child protection and sexual violence, while issues related to media and counseling emerge as emerging themes. Meanwhile, the TreeMap and WordCloud visually confirm the consistent dominance of key words, in line with previous findings. This combination of thematic and visual results demonstrates continuity between discourse structure, scientific priorities, and trends in shifting research focus.

Overall, these bibliometric findings provide a comprehensive overview of the contemporary research landscape focused on child sexual violence, its media representation, and the accompanying policies and interventions. These findings demonstrate that the literature is not only growing quantitatively but also substantively expanding toward solution-oriented issues such as government policies and counseling approaches. Thus, this analysis provides a strong foundation for developing research arguments, identifying research gaps, and strengthening the urgency of your ongoing study.

4. Discussions

The bibliometric analysis shows that the research landscape in this corpus focuses on the issue of sexual violence against children, with a strong emphasis on the Indonesian social context. The dominance of keywords such as *anak*, *seksual*, and *kekrasan* confirms that researchers consistently identify this phenomenon as a pressing issue requiring scientific and policy attention. This pattern aligns with the increase in case reporting, media exposure, and public response to child protection issues in recent years. Thus, these findings confirm that knowledge production in this corpus is not random but rather shifts according to social dynamics and societal needs.

Co-Word Network analysis shows that issues related to child sexual violence form interconnected discourse clusters, reflecting a multidisciplinary approach involving communication, psychology, law, and media studies. The interconnectedness of keywords in the network illustrates that these studies not only describe the phenomenon but also explore the causal factors, psychological impacts, the role of the media, and institutional responses to child sexual violence. This network coherence indicates strong epistemic consolidation, indicating that the field of study is maturing and beginning to move towards a comprehensive approach to understanding and addressing the issue.

Another significant finding comes from the Trend Topics analysis, which indicates a shift in research focus from describing phenomena to solutions and interventions. Terms such as *pedofilia*, *kebijakan*, and *konseling* have become prominent in the more recent period, indicating that child protection issues have entered a more applied phase of study. This shift demonstrates a paradigm shift in research toward a policy- and social service-based approach, emphasizing prevention efforts, victim care, and strengthening support systems. This indicates increased academic attention to structural and institutional aspects, in line with the global push to improve child protection mechanisms.

Furthermore, the thematic structure of the research found in the thematic map shows that some topics have developed into core areas (motor themes), while others are still developing (emerging themes). Topics related to child protection policies, the role of the media, and public education are strongly positioned as driving themes. However, other aspects such as victim representation in digital media, cultural analysis of sexual violence, or community-based prevention communication strategies remain relatively underexplored. This opens up important space for future research to deepen the representational, narrative, and communication aspects in the context of child protection.

Overall, this Discussion confirms that the bibliometric results not only illustrate research patterns but also provide important insights into how knowledge is evolving and where future research can be directed. The findings highlight the need for interdisciplinary research that integrates communication science, policy studies, and community-based approaches to understanding and preventing child sexual violence. Furthermore, future research should expand its scope to address solution-oriented issues,

particularly in the areas of public education, improving media representation, and culturally based intervention approaches appropriate to the Indonesian context.

Bibliometric analysis shows that topics related to children, sexuality, media, and violence dominate the research corpus—a pattern consistent with the international literature on online grooming and digital-based sexual abuse. Instrument validation studies such as those by Gámez-Guadix et al. (2021) confirm that online grooming comprises multiphasic strategies that utilize communication features on digital platforms (trust-building, victim isolation, and sexual escalation), and measurement instruments have been developed to capture variations in these patterns. These findings reinforce the bibliometric interpretation that research is evolving from problem diagnosis to early detection and prevention efforts.

The close link between social media and paedophilia can be seen through two main mechanisms: (1) accessibility—platforms allow perpetrators to reach potential victims quickly and anonymously; and (2) communication tools—chat, DMs, voice features, and private groups—facilitate grooming practices. Research on detection and risk scales— such as the Online Grooming Risk Scale (Pasca et al., 2022)—emphasizes that psychosocial risk factors (e.g., low family support, low self-esteem) accelerate children's vulnerability online, so detection and prevention strategies must incorporate family factors and digital education. This argument is relevant in the Indonesian context, where social media penetration is high but parents'/educators' digital literacy remains variable.

Quantitative evidence and a synopsis of the literature suggest a shift in research focus from simply identifying prevalence to interventions and policies. For example, recent systematic reviews and longitudinal studies demonstrate long-term psychological consequences for victims of online grooming (depression, reduced self-esteem, and risk of re-victimization), suggesting that interventions should be not only legalistic but also clinical and socio-educational. This implication is also reflected in Indonesian literature, which emphasizes the need for integrated law, education, and psychosocial services—a recommendation that recurs in national law and public health studies (Schittenhelm et al., 2025; Wismayanti et al., 2019).

In the Indonesian context, legal studies, media reviews, and local scholarly articles have noted a specific phenomenon: grooming practices are often exposed through Facebook groups, chat apps, or online gaming platforms—and case handling is often hampered by regulatory limitations, fragile digital evidence, and low victim reporting. Local clinical and legal research also highlights that despite updates to the Child Protection Law and the Electronic Information and Transactions (UU ITE) regulations, gaps in law enforcement remain, particularly regarding newer methods such as sextortion or grooming in online games. Therefore, a combination of clear policies, digital forensic capacity, and digital literacy campaigns for parents and schools are crucial (Dilla & Ufran, 2022; Nurlia & Priyana, 2022).

Based on this evidence, bibliometric findings and empirical studies recommend a multi-layered approach for the Indonesian context: (a) strengthening local research that tests the validity of detection tools in Indonesian; (b) adapting automated detection models (NLP/ML) to local language corpora; (c) policy integration—digital education in schools, parent training, and forensic capacity; and (d) psychosocial intervention programs for victims. Furthermore, the research demonstrates the urgency of cross-sector collaboration (technology platforms, law enforcement, mental health services) to close the response gaps that perpetrators have exploited.

Preventing similar incidents is absolutely necessary. Therefore, social awareness is essential in social media life. Generally, social awareness is defined as self-awareness for all members of society who utilize social presence and involvement in the social environment. Social sensitivity relates to a person's appreciation of various events occurring in their surroundings, their role, and the opportunities and challenges to participate in addressing these events (Noer, 2020).

We must be wise in using social media, and in using it, we must maintain our personality, attitude, speech, and behavior with other social media users. As fellow social media users, we should avoid harsh comments, let alone offensive ones, which will only exacerbate the problem rather than help it. And that is a very bad thing as a social media user. Everyone is certainly allowed to comment on social media. However, we must be aware that there are legal sanctions for someone who defames another person or insults others on social media. These sanctions are regulated in the Law on Information and Electronic Transactions (UU ITE) .

Parents and adults can prevent sexual crimes online in several ways. In addition to installing filters and blockers when children begin accessing the internet, parents need to have basic knowledge about computers and the internet. Being sensitive to their children's circumstances is also crucial to preventing these crimes. If children exhibit unusual behavior after engaging in digital activities, parents can approach them and find out what is really happening. As children become familiar with the internet, parents should ideally teach them what information is appropriate and what is not to share online. The more private information they reveal, the greater the risk of harm to them in the future, including from online predators. To mitigate these problems, we need ethical social media use to prevent unwanted incidents and to prevent mutual insults or accusations. This is because such behavior can lead to legal entanglements due to a lack of caution in sharing information online. We are given the freedom to communicate with others. However, many people misunderstand that freedom means we must have ethics, not the other way around (Pampanel et al., 2024; Porter et al., 2025).

It's best to use polite and appropriate language when communicating on social media with others. Make it a habit to communicate with others using polite and kind words. When sharing information with other internet users, we should avoid sharing information containing elements of ethnicity, religion, race, and intergroup relations, or pornography, on social media. Make it a habit to share positive and beneficial information and upload appropriate photos to social media. When sharing information, whether in the form of articles, photos, or videos, that belongs to others, we should cite the source of the information as a sign of respect for their work. Avoid copying and pasting. Don't share too much personal information about your personal life, as it is private. This is especially true for information such as your phone number, home address, or other personal information. Therefore, from now on, start using social media wisely and practice greater self-awareness, which can help us maintain positive behaviors when using social media.

5. Conclusion

Based on the results of the bibliometric analysis, it can be concluded that the analyzed publication corpus shows a very strong concentration on the issue of sexual violence against children, media representation, and the Indonesian social context. The dominance of terms such as children, sexual, violence, and Indonesia confirms that these studies not only reflect the social urgency of the case but also reflect increasing academic attention to the complexity of this phenomenon from various interdisciplinary

perspectives. This indicates that the scientific discourse on child protection continues to evolve and has become a primary focus of research in recent years.

Network analysis (Co-Word Analysis) revealed that these key issues are structured into closely interconnected clusters, forming a coherent and mutually reinforcing discourse structure. The core clusters are directly related to sexual violence, child protection, and the media, indicating that research consistently positions child protection issues as central nodes in the knowledge network. These results demonstrate that the literature does not move in a fragmented manner, but rather has a strong uniformity of orientation and problem focus, thus forming a stable and systematic knowledge structure.

Furthermore, the Trend Topics analysis shows significant issue developments over time. Terms such as paedophilia, policy, and counseling have increased in relevance in recent years, reflecting a shift in publication orientation from simply describing the phenomenon to strengthening responsive aspects, such as policy development, counseling program development, and institutional interventions. This shift demonstrates that the academic community is beginning to focus on systemic improvements and long-term prevention and underscores the evolution of research direction toward solutions-based and sustainable approaches.

The limitations of this research's findings and methodological notes stem from the availability of many relevant Indonesian studies in university repositories or national journals without internationally standardized DOIs; this impacts the visibility and comparability of local studies in international syntheses. Furthermore, automated detection techniques face ethical and legal constraints—e.g., end-to-end encryption and privacy—that limit access to real-world conversational data for research. Therefore, scientific development must be accompanied by ethical policies and research collaboration models that involve platforms for controlled data access (e.g., anonymized datasets for research).

Overall, this study confirms that the research in the dataset forms a dense, relevant, and integrated knowledge landscape, with child protection as its centerpiece. The bibliometric findings provide a strong theoretical and empirical foundation for understanding the direction of research developments, while also opening up opportunities to identify gaps that still need to be addressed—such as a communication perspective, more critical policy analysis, or a community-based approach. Thus, the results of this study not only illustrate the current state of the literature but also provide a strategic foundation for further research to contribute more significantly to child protection efforts and the development of more effective public policies.

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