

Sexual Education in Indonesia: A Bibliometric Analysis from 1972 to 2022

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ABSTRACT

This study aims to analyze the scope of sexual education research in Indonesia using bibliometric review. VOSviewer software were used in this study to analyze the number of publications, well-known research topics, author keywords, preferred sources, and country of publication during 1972-2022 period of time. Topic areas with titles, keywords, and abstract criteria in sexual education studies were used as a reference for extracting search results from Scopus database. The search was carried out by the mentioned search terms: “sex” AND “education” AND “Indonesia”. A total of 471 articles were found in Scopus accessed on 24th of June 2022. Results found there was a significant increase in the number of publications from 2019 to 2020. The keyword adult, female, prevalence, middle aged, child, and sex factors turned to be the most widely discussed. This is the first bibliometric review on studies that assessed the significant growth of research on sexual education area, which identified that researchers can directly position research projects on current issues or examine currently relevant innovation opportunities to further develop in this field.

Keywords: bibliometrics, sexual education, Indonesia, scopus

INTRODUCTION

Indonesia is currently facing serious problems related to sexual violence against children. The Indonesian Ministry of Women Empowerment and Child Protection (PPPA) found that 45.1% of the 14,517 child abuse cases in 2021 were sexual violence cases. Based on data from the Child Protection Cluster (KPAI), the number of rape and child abuse cases in 2020 reached 419 cases, an increase from 2019, which was 190 cases [1]. Sexual violence could negatively impact children's lives, causing, among other things, deviant sexual behavior, behavioral problems and emotional regulation, as well as other mental health problems such as post-traumatic disorder (PTSD), anxiety and depression [2]–[4]. Sexual education is a preventive measure that can reduce the rate of incidence of sexual violence. Through sexual education, children learn to recognize their sexual identity and thus develop attitudes, beliefs, and values consistent with that knowledge [5]. The provision of developmentally appropriate sexual education requires the active involvement of the school. Schools should provide sexual education to all students by incorporating it into the curriculum [6]. Relevant and accurate sexual education can encourage self-control and responsibility in children as sexual subjects, so that they are able to protect themselves and make rational decisions about their sexuality [7], [8].

Sex education is notably needed at the elementary school level. Systematic literature reviews by several researchers noted the effectiveness of a multitude of sexual education programs for children in grades 3-12 (ages 8-17) [7]–[9]. In this age group, children are expected to be able to progressively recognize the key components of the adopted model of sexual education [10], [11] Unfortunately, there is currently no nationally implemented sexual education program in Indonesia as sexuality is still an issue that generates various controversies [12]. Existing sexual education is still dominated by independent community-based programs and is implemented in a limited way [13]–[15]. Therefore, there is still a need for sexual education programs that pay attention to the appropriate age of students, especially for elementary school students.

Research on sexual education has started since 1972. The overall picture of this research shows the direction of the sexual education research agenda in the past, present, and the future. However, the question remains is how to map sexual education research, examine its trends, and how to conduct this research in the future. Therefore, this article aims to analyze the scientific articles discussing sexual education published in the Scopus database to map research on sexual education and make predictions for research in this area.

RESEARCH METHODS

Research data was collected from the Scopus database on 24th of June 2022. The Scopus database was used because it is the largest single indexing and abstract database in the world and contains citations and abstract sources that can be searched for literature study. Access type, year, author name, subject field, document type, article title, keywords, author affiliation, author country, article type and article writing language are some of the findings obtained from the documents we collected. We concentrated on all documents related to sexual education in schools as search titles on the Scopus database. We collected a total of 471 documents based on the search results. Intrinsically, the subsequent query was performed: (TITLE-ABS-KEY (sex) AND TITLE-ABS-KEY (education) AND TITLE-ABS-KEY (indonesia)).

FINDING

Publication Year

The number of research on sexual education in Indonesia published in various countries is high, with an upward trend since the last decade. Figure 1 describes the number of publications on sexual education in Indonesia from 1972-2022

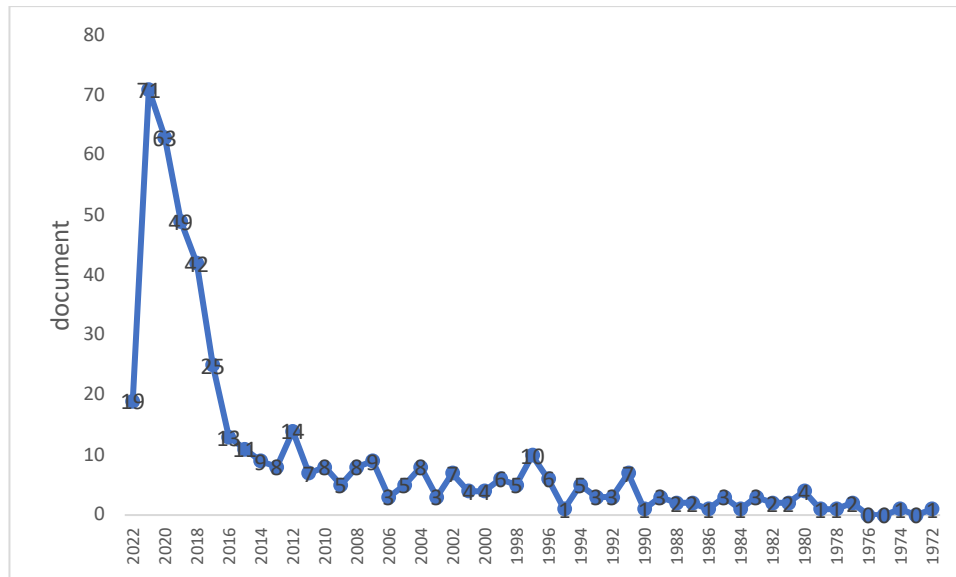


Figure 1. The number of published articles on sexual education in Indonesia between 1972-2022

The number of publications on sexual education in Indonesia indexed by Scopus has increased since 2015 (11 publications). Then, after that, publications on sexual education in Indonesia rose successively to 13 publications (in 2016), 25 publications (in 2017), 42 publications (in 2018), 49 publications (in 2019), 63 publications (in 2020), and 71 publications (in 2021). As of 24th of June 2022, 19 publications have been identified and this number has the potential to increase until the end of 2022.

Document Type

We found ten distinct types of documents related to sexual education in Indonesia, namely articles, review papers, conference papers, book chapters, data papers, editorials, erratum, letters, books, and notes. Table 1 shows that articles accounted for 89.57% of all documents, reviews contributed 4.04%, and other types of documents contributed 6.38% of the total documents. Books and notes are the forms of documents with the lowest contribution.

We used VOSviewer software for keyword analysis in this study. The software was useful for imagining bibliometric networks or mapping the publication keywords. Figure 3 shows a color-coded network visualization of the keyword "author". The keywords in red show similarities to the red group keywords, as well as the green and blue keywords. Therefore, the keywords "*human, female, middle aged, prevalence, educational status*" share similarities in this study. Likewise, the keywords "*adult, Indonesia, health education, ethnology, disease transmission*" also have similarities. In the green area, the keywords "*education, sexual education, age factors, demography, and population dynamics*" also have similarities.

Country of Publication Distribution

Scopus-indexed publication documents contain research from sixty countries. Table 2 lists the top ten countries contributing to sexual education publications. The country with the most documents (319 documents) is Indonesia, followed by the USA with seventy-six publication documents. Australia is third with sixty documents, the Netherlands fourth with thirty-eight documents and Thailand fifth with twenty-one documents. Other countries in the next sequence are India, Japan, Malaysia, Singapore, and other countries.

Table 2. Country of Publication Distribution

Country	Frequency
Indonesia	319
United States	76
Australia	60
Netherlands	38
United Kingdom	24
Thailand	21
India	17
Japan	12
Malaysia	12
Singapore	12
others	216

DISCUSSION

Research on sexual education shows significant growth. This growth corresponds to the development of technology and communication. Easy access to information is a challenge for the implementation of sexual education either in school or at home. Parents worry more because their children can easily access negative content that triggers pornography [16]. On the contrary, it is easier for children and adolescents to obtain information about adolescent reproductive health [17]. Knowing about sexual and reproductive health (SRH) in adolescents is very important for their well-being [18].

The fundamental goal of sexual education is to teach children sexual education, prevent them from getting into unhealthy relationships and help them avoid negative things that result from improper sexual behavior [19]. Research on sexual education since 1972 to the present demonstrates researchers' great enthusiasm for the urgency of sexual education. The increase in the number of studies from 2020 to 2022 (still in progress) also indicates the great interest of researchers in this topic.

Evaluating human sexual behavior is a complex phenomenon and a daunting task due to the sensitive nature of the matter. Through this analysis we attempt to locate the research area of sexual education. We analyzed 421 articles and a number of other types of sexual education publications in this study. Elsevier and Springer are the top publishers, and the Sex Education Journal is the top journal for publishing sexual education articles. Researchers from Indonesia, USA and Australia are mainly involved in this type of research activity as the topic of sexual behavior is evident from their research articles [20].

This is the first bibliometric analysis that discusses sexual education in Indonesia. Several peer-reviewed research papers have been published on this issue and the cumulative findings from published research papers indicate that there have been changes in patterns of sexual behavior during times of pandemics and disasters. Despite the strengths of the analysis, there are limitations. Most of the published publications used online data collection methods to retrieve information. This means that the authors had less control over data quality and data discrepancies. Even though we extracted data from the largest database (Scopus), there are many papers in other databases. Also, search terms may exclude some proportion of citations [20].

The results of the current study show that frequently cited documents come from critical reviews or research. There is a tendency that reviews or critical research can be a shortcut for other researchers to learn directly about current conditions in specific areas [21], [22]. Based on the results, researchers can directly position research projects on current issues or examine currently relevant innovation opportunities to further develop in this area. Research into sexual education will continue to grow, particularly in countries where culture and technology are rapidly developing [23]. Eventually, these countries will improve educational policies, aligned with technological advances, to pave the way for the incorporation of sexual education into the school curriculum.

CONCLUSION

This paper contains a bibliometric analysis that seeks to provide a deeper understanding of patterns, historical analysis, predictions, and contributions to sexual education in Indonesia. Researchers have studied sexual education since 1972, and the research has grown since then. Between 2019 and 2020, the number of publications on sexual education exploded. This research shows that “adult, female, prevalence, middle aged, child, and sex factors” are the most prevalent areas of research. The geographic distribution of the literature shows that Indonesia has the most publications. We suggest that other developing countries should conduct more research on sexual education across education units. The government should also encourage universities to innovate about sexual education for students from an early age.

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