

**BUKTI KORESPONDENSI
ARTIKEL JURNAL INTERNATIONAL BEREPUTASI**

Judul Artikel	: Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database
Jurnal	: International Journal of Cognitive Research in Science, Engineering and Education (IJCSEE)
Penulis	: 1. Hijrawatil Aswat 2. Edi Purwanta 3. Muhammad Nur Wangid 4. Abdul Manaf 5. Hayadin Hayadin

No	Perihal	Tanggal
1	Bukti konfirmasi submit artikel dan artikel yang disubmit	17 September 2024
2	Bukti konfirmasi review dan hasil review pertama	17 Januari 2025
3	Bukti submit revisi pertama	18 Januari 2025
4	Bukti Konfirmasi keputusan editor	10 Februari 2025
5	Bukti Konfirmasi penyelesaian tahap editing dan proses produksi	11 Februari 2025
6	Bukti konfirmasi lengkap dokumen pendukung publikasi	12 Februari 2025
7	Bukti pengiriman naskah versi awal untuk publikasi (final version) oleh Editor	17 Februari 2025
8	Bukti pengiriman naskah final yang telah direvisi oleh penulis	18 Februari 2025
9	Bukti Editor mengirimkan versi naskah untuk dicek kembali	28 Februari 2025
10	Bukti klarifikasi dan pembaharuan informasi naskah	1 Maret 2025
11	Permintaan penjelasan tambahan oleh editor terkait kutipan referensi	6 Maret 2025
12	Penulis memberikan klarifikasi kutipan dan konteks redaksional	7 Maret 2025
13	Editor mengirimkan versi final untuk pemeriksaan akhir	7 Maret 2025
14	Persetujuan akhir atas versi publikasi	8 Maret 2025

ACCOUNT JURNAL

The screenshot shows a web browser window for the journal's login page. The header is red with white text. The main content area is white, and the right sidebar is also white. The login form includes fields for Username and Password, a 'Keep me logged in' checkbox, and 'Register' and 'Login' buttons. The sidebar features a 'MAKE A SUBMISSION' button, language options (English, Русский, Српски), and a 'Journal Information' section with links to About the Journal, Aims and Scope, Journal policy, Journal metrics, and Digital Archive.

INTERNATIONAL JOURNAL OF COGNITIVE RESEARCH IN SCIENCE,
ENGINEERING AND EDUCATION (IJCREE)

Register Login

HOME ABOUT EDITORIAL TEAM CURRENT ARCHIVES ANNOUNCEMENTS

ABSTRACTING & INDEXING CONTACT

Q. SEARCH

HOME / Login

Login

Username *

171208_hijrawati_171208

Password *

[Forgot your password?](#)

Keep me logged in

[Register](#) [Login](#)

MAKE A SUBMISSION

LANGUAGE

English
Русский
Српски

Journal Information

» About the Journal
» Aims and Scope
» Journal policy
» Journal metrics
» Digital Archive

1.

**BUKTI KONFIRMASI SUBMIT
ARTIKEL DAN ARTIKEL
YANG DISUBMIT**

17 SEPTEMBER 2024

 International Journal of Cognitive Research in Science, Engin[← Back to Submissions](#)3060 / **Aswat et al.** / Global Research Trends of Cyberbullying and the Metaverse in t**Library**[Workflow](#)**Publication**[Submission](#)[Review](#)[Copyediting](#)[Production](#)**Submission Files**[Search](#)

▶  12967 [International Journal of Cognitive Research in Science \(Revisi 4\) .docx](#)

September

Article Text

17, 2024

[Download All Files](#)**Pre-Review Discussions**[Add discussion](#)

Name

From

Last Reply

Replies

Closed

No Items

Versi browser ini tidak lagi didukung. Harap upgrade ke versi browser yang didukung.



IJCRSEE

Tulis



Kotak Masuk

2.744

Berbintang



Lazar Stošić <editor@ijcrsee.com>

Ditunda

kepada saya

Terkirim

Terjemahkan ke Indonesia

Draf

12

Hijrawatil Aswat Irra:

Selengkapnya

Thank you for submitting the manuscript, "Global Research Trends in Bibliometric Analysis Using the Scopus Database" to International Journal of Cognitive Research in Science and Education (IJCRSEE). With the online journal management system, you can track the progress through the editorial process by logging in to the journal website.

Submission URL: <https://www.ijcrsee.com/index.php/ijcrsee/auth>
Username: 171208_hijrawatil_171208

If you have any questions, please contact me. Thank you for your interest.

Lazar Stošić

[International Journal of Cognitive Research in Science, Engineering and Education](#)

ISSN 2334-8496 (Online)



Original scientific paper

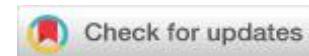
UDC:

Xxx

Received: xxx, xx.2023.

doi: 10.23947/2334-8496xxx

Revised: xxx, xx.2023.



Accepted: xxx, xx.2023.

1

2

3 Global Research Trends of Cyberbullying and the 4 Metaverse in the Virtual World: Bibliometric Analysis Using 5 the Scopus Database

6

7 Hijrawatil Aswat^{1*}, Edi Purwanta², Muhammad Nur Wangid³, Abdul Manaf⁴, Yoppy Wahyu Purnomo⁵,
8 Hayadin⁶

9 ¹Doctoral Programme in Elementary Education, Faculty of Education and Psychology, Graduate
10 School, Yogyakarta State University, Special Region of Yogyakarta 55281, Indonesia

11 Email: hijrawatilaswat.2023@student.uny.ac.id / hijrawatil171208@gmail.com, edi_plb@yahoo.co.id,
12 m_nurwangir@uny.ac.id, abdu103@brin.go.id, yoppy.wahyu@uny.ac.id

13 ^{2,3}Department of Elementary Education, Faculty of Education and Psychology, Yogyakarta State
14 University, Special Region of Yogyakarta 55281, Indonesia.

15 ⁴Center for Educational Research, Badan Riset dan Inovasi Nasional, Jakarta, Indonesia.

16 ⁵Department of Mathematics Education, Faculty of Mathematics and Natural Sciences, Yogyakarta
17 State University, Special Region of Yogyakarta 55281, Indonesia.

18 ⁶Center for Educational Research, Badan Riset dan Inovasi Nasional, Jakarta, Indonesia.

19

20

21 **Abstract:** Cyberbullying has evolved from a traditional form of bullying to a more complex digital form.
22 One of the latest aspects of this development is the emergence of the metaverse as a new arena for
23 cyberbullying behavior. This topic has received attention in research, signaling the need for in-depth
24 studies to understand the impact and new mechanisms of existing challenges. The research aims to
25 identify key trends and topics in the literature on cyberbullying and the metaverse, as well as to describe
26 the productivity of countries, institutions, authors, and publication sources. Using bibliometric analysis,
27 the study investigates the development of research in this field over the past few years. The PRISMA
28 method was used in the document selection process, and nine documents were found published from
29 2022 to 2024, including journal articles, books, and conference papers. The results of the study show
30 that there is a significant trend and interest in cyberbullying, the metaverse, and virtual reality as the
31 main topics. However, research linking cyberbullying to the metaverse is still limited and separate, sug-
32 gesting an urgent need for research that integrates these two fields.

33 **Keywords:** Cyberbullying, metaverse, virtual reality, cybercrime, global research trends, bibliometric
34 analysis.

35

36 *Corresponding author: hijrawatil171208@gmail.com

37  © 2024 by the authors. This article is an open access article distributed under
38 the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).
39

41

42 Introduction

43 The rapid development of information and communication technology has
44 brought humans into an increasingly complex digital era, where social interaction is no
45 longer limited to physical space. The virtual world has evolved from just an entertain-
46 ment medium to a significant space for social interaction, especially among the
47 younger generation. According to Kowalski et al. (2014), the digital world has opened
48 up great opportunities for the emergence of new phenomena such as cyberbullying,
49 which is defined as the use of information and communication technologies to commit
50 repeated acts of aggression against individuals who cannot easily defend themselves.
51 Its impact on the mental and emotional health of victims has become a global concern
52 (Bansal et al., 2023).

53 Cyberbullying has been a major focus of research over the past decade, with
54 many studies examining its psychological impact on children and adolescents. Re-
55 search by Upadhyay et al. (2023) shows that cyberbullying is growing in this environ-
56 ment, which brings new threats to users in virtual interactions. This is supported by
57 research conducted by Hinduja and Patchin (2010), which identifies that victims of
58 cyberbullying are more likely to experience depression, anxiety, and decreased aca-
59 demic performance. Anonymity in the virtual world often exacerbates this situation,
60 where the perpetrator feels protected from legal and social consequences (Łosiak-
61 Pilch et al., 2022). Barlett and Gentile (2012) add that cyberbullying is often more dan-
62 gerous than traditional bullying due to its rapid and widespread spread, as well as the
63 difficulty of removing harmful content from the internet. The ever-evolving digital envi-
64 ronment can exacerbate the impact of cyberbullying, especially during its peak during
65 the COVID-19 pandemic. Marinoni et al. (2024) showed that during the COVID-19
66 pandemic, girls were more vulnerable to cyberbullying through social media, while
67 boys were more vulnerable to cybervictimization in online gaming, which was affected
68 by the time spent online.

69 A significant shift has occurred from traditional social media platforms to more
70 immersive virtual worlds such as the metaverse. Technological advances have led us
71 to the concept of the metaverse, which was first introduced by Stephenson in 1992 in
72 his novel "Snow Crash," describing the metaverse as a virtual world where individuals
73 can interact with each other and with a digital environment as if they were in the real
74 world (Wijaya, 2022). The metaverse offers a more immersive and realistic virtual ex-
75 perience compared to conventional digital platforms (Cruz & Oliveira, 2024). However,
76 along with this potential comes new challenges, including more complex and limitless

77 forms of bullying in this immersive environment. The phenomenon of the disinhibition
78 effect, in which social barriers disappear in cyberspace, also exacerbates aggressive
79 behaviors such as bullying in the metaverse (Suler, 2004). Walther et al. (2015) men-
80 tioned that the immersive aspect of the metaverse can exacerbate the psychological
81 impact of bullying, where negative experiences in the virtual world can feel just as real
82 and damaging as in the physical world. Di Pomponio & Cerniglia (2024) highlighted
83 that the use of social media and experiences in the metaverse can have a significant
84 impact on an individual's psychological well-being, both positively and negatively, by
85 identifying how social interactions and virtual activities affect users' mental health. Liv-
86 ingstone et al. (2022) argue that we are currently at a tipping point where a deep un-
87 derstanding of bullying in the virtual world is urgently needed to prevent damaging
88 long-term impacts. Huang & Chou (2010) emphasized the importance of understand-
89 ing this new dynamic due to the high complexity and emotional involvement in interac-
90 tions in the metaverse.

91 A significant increase in interest in cyberbullying and the metaverse has occurred,
92 especially since 2019. Many studies focus on the impact of online interactions on chil-
93 dren and adolescents (Fatmawati & Haryanto, 2023). In 2022, the metaverse became
94 a popular topic across various disciplines, but there are still few studies that explore
95 the direct relationship between cyberbullying and the metaverse, especially in the ap-
96 proach to education (Cassandra et al., 2023). The metaverse, with its immersive virtual
97 reality and anonymity, brings new risks to users, especially vulnerable groups such as
98 children and adolescents. Therefore, it is important to study this matter. Most of the
99 research, such as the one conducted by Kim (2021), focuses more on the commercial
100 aspects of the metaverse compared to social issues like cyberbullying. Research by
101 Qasem et al. (2022) highlights how communication and interaction in the metaverse
102 can create an environment that is vulnerable to cyberbullying, especially when users
103 vent stress in virtual spaces. The study supports the need for clear policies from
104 metaverse platforms to prevent such behavior. However, although many studies have
105 explored the technological and social dynamics in the metaverse, as revealed by Van-
106 debosch & van Cleemput (2009) and Cleemput et al. (2014), the main focus is still
107 more on technology than on the educational approach to overcoming cyberbullying.
108 Achuthan, Nair, et al. (2023) also show that online exploitation and cyberbullying are
109 growing on various social media platforms, but their application in the metaverse is still
110 minimal in the literature. A study by Hendry et al. (2023) highlights prevention strategies
111 through education and technology consulting, but does not fully target policy interven-
112 tion areas in the metaverse.

113 Some research, such as the one conducted by Boboc & Damaševičius (2024),
114 discusses the use of extended reality (XR) technology to address bullying but does not
115 specifically research the metaverse. Meanwhile, Ivanov & Ramos (2020) propose the
116 use of role-playing in virtual environments to address bullying, but its integration with
117 the metaverse has not been fully researched. Fadhel et al. (2024) uncover the role of
118 AI in creating immersive virtual environments in the metaverse, where social behaviors
119 such as cyberbullying can emerge and evolve; however, the study has not yet fully

120 identified areas that require policy intervention. Kiriakidis et al. (2019) add that under-
121 standing this new form of bullying is a crucial step in developing relevant policies and
122 interventions in the digital era. However, the study focuses more on the technological
123 aspect than the educational approach to addressing this problem. Additionally, global
124 research trends show an increase in cross-cultural collaboration in cyberbullying re-
125 search, with the United States leading the number of publications, followed by signifi-
126 cant contributions from Asian countries (Peker & Yalçın, 2022; Achuthan, Kolil, et al.,
127 2023). Currently, Ireland is the country with the highest research impact (Li & Li, 2024).
128 These studies often highlight how the COVID-19 pandemic exacerbated cyberbullying
129 incidents due to increased digital dependence. Meanwhile, metaverse-related publica-
130 tions saw a significant surge in 2022, with Singapore, Japan, China, and the United
131 Kingdom as the main contributors (Bizel, 2023). However, there has been no in-depth
132 research focused on cyberbullying and metaverse research trends by exploring the
133 interaction between cyberbullying and the metaverse. Although publications in both
134 areas continue to increase, there are still deep shortcomings in the literature. Existing
135 research is still limited to a few countries, and the involvement of studies in the litera-
136 ture has not fully met the need for a more comprehensive and in-depth analysis of the
137 interaction between the metaverse and cyberbullying.

138 This study seeks to explore gaps in the existing literature by conducting a com-
139 prehensive bibliometric analysis of global research trends on cyberbullying and the
140 metaverse, using data from the Scopus database. It aims to provide an overview of
141 the need for further research to fill the research gap regarding cyberbullying and the
142 metaverse, as well as its implications in education.

143 **Research Objectives and Questions**

144 The purpose of this research is to identify key trends and topics in the literature
145 on cyberbullying and the metaverse, as well as to describe the productivity of countries,
146 institutions, authors, and publication sources. This analysis reveals increasing publi-
147 cation trends, identifies key research themes, and highlights potential areas for future
148 research. This research specifically seeks to answer the following questions:

149 *Research Question 1: "What is the trend of research development on cyberbullying
150 and the metaverse in recent years?"*

151 *Research Question 2: "Which countries and universities are making a major contribu-
152 tion to cyberbullying and metaverse research?"*

153 *Research Question 3: "Which authors and sources have made major contributions to
154 cyberbullying and metaverse research?"*

155 *Research Question 4: "What is the dominant topic in cyberbullying and metaverse re-
156 search?"*

157

158 **Materials and methods**

159 This research is a bibliometric study conducted to systematically identify the lit-
160 erature (Burgos, 2024). This research is known as text data mining, and in its devel-
161 opment, it is often referred to as the big data method (Hassani et al., n.d.). This method
162 adopts a five-stage approach (Tranfield et al., 2003). The research will involve bibli-

163 metric mapping using tools such as Biblioshiny to analyze global research trends (Nur-
164 hayati, 2024). Bibliometrics can uncover research trends, identify research shortcom-
165 ings, and explore the relationships between studies (Ardiansyahroni et al., 2023).



166

167 *Figure 1. Five-step method bibliometric analysis*

168

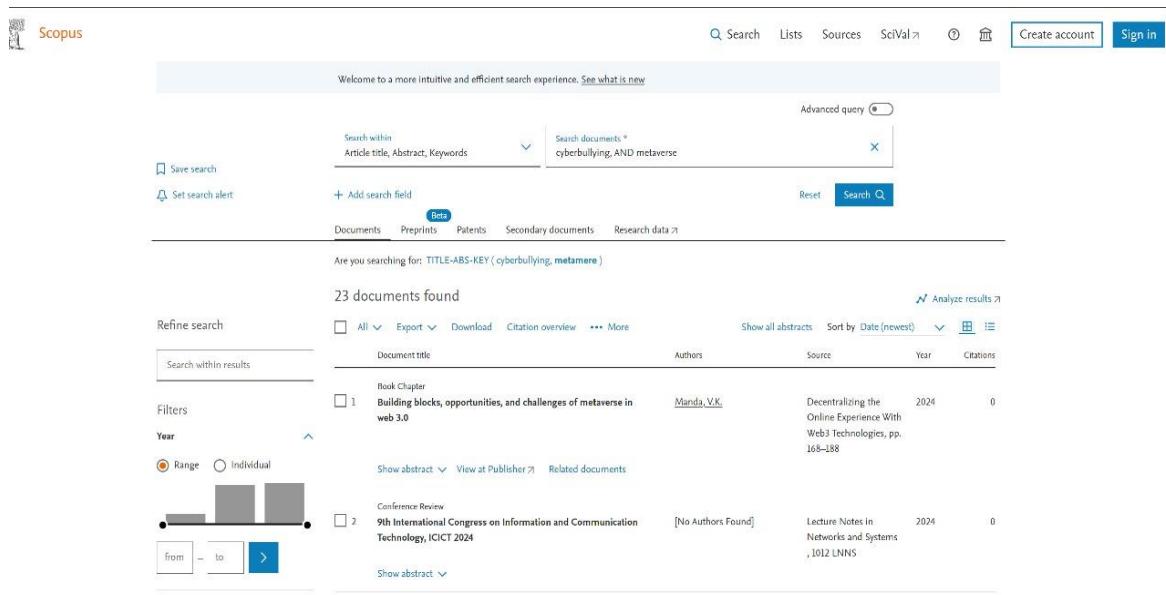
169 *Determine Search Keywords*

170 By using bibliometric mapping and keyword analysis of indexed articles, this
171 study aims to understand the themes as well as the research groups relevant to the
172 topic. This approach helps researchers gain in-depth insights into the development
173 and contribution of a field of science and measure the impact of research on the sci-
174 entific community (Sumedang, 2024). The first step in this method is to collect data
175 through the academic database "Scopus," using specific keywords, namely "cyberbul-
176 lying" and "metaverse." The search process will follow clear inclusion criteria by includ-
177 ing empirical studies that measure the relationship of cyberbullying in the context of
178 the virtual world.

179

180 *Initial Search results*

181 From the search results on the Scopus database on July 23, 2024, 23 documents
182 were found to have been published with these keywords. The documents identified are
183 in the form of scientific articles, books, and conference proceedings relevant to the
184 topic of cyberbullying and the metaverse in the context of the virtual world. The time
185 range for the publication of the documents is from 2022 to 2024, which shows that the
186 documents are still relatively new.



187

188 *Figure 2. Meta data mining results on Scopus database*

189

190

191 *Refinement of Search Results*

192 Documents will first be filtered by title and abstract. Irrelevant documents are
193 eliminated at this stage, followed by a full review to ascertain whether they are relevant
194 to the purpose of the study. In this stage, the PRISMA method is used to ensure that
195 the document selection process is carried out in a transparent and usable manner
196 (Liberati et al., 2009).

197

198

199

200

201

202

203

204

205

206

207

208

209

210

211

212

213

214

215

216

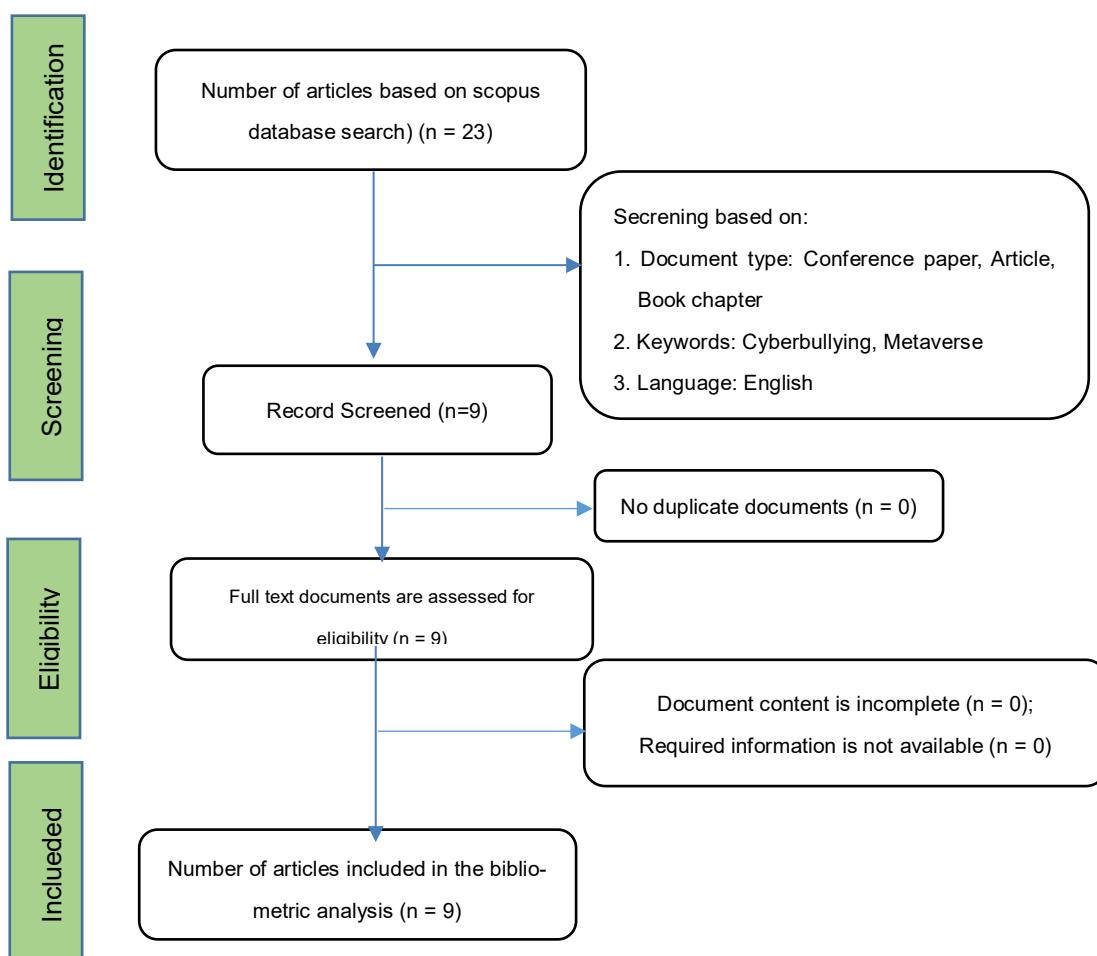
217

218

219

220

221



222 *Figure 3. Stages of the PRISMA method*

223

224 The prism process helps to select relevant and valid documents from the initial search
225 results by setting filters based on the criteria of document type, keywords, and lan-
226 guage (English). Of the 23 documents found through a search in Scopus, as many as
227 9 documents were selected for further analysis after going through the stages of iden-
228 tification, screening, and feasibility assessment. No documents were disqualified due
229 to incomplete or irrelevant information.

230

231

232 *Compile Preliminary Data Statistics*

233 The data collected from the 9 documents were then categorized based on several
234 components, including the year of publication, volume, and number of citations. Each

232 component is inspected to ensure the completeness and accuracy of the data. In addition, the source of publication and the name of the publisher of each document are 233 also analyzed to understand the distribution and origin of the publication. 234

235 **Data Analysis**

236 Once the relevant documents have been selected, the next step is data analysis. 237 Bibliometric analysis involves publication calculations, citation analysis, and trend 238 identification (Santika et al., 2024). This process includes defining search keywords, 239 conducting initial searches, filtering results, collecting statistics, and analyzing data. To 240 answer the research question, it employs three main approaches. First, a performance 241 analysis is carried out by calculating the number of citations and publications from re- 242 search topics. Furthermore, mapping is used to describe research topics that often 243 appear in the dataset through tree maps, as well as to track their temporal trends with 244 plots depicting thematic evolution. Finally, network analysis is conducted through key- 245 word co-occurrence to reveal the relationship between keywords in the same docu- 246 ment, as well as to identify keyword clusters that form the core topic in the research 247 field.

248

249 **Results**

250 *Research Question 1: "What is the trend of research development on cyberbullying*
251 *and the metaverse in recent years?"*

252 **1. General Statistical Information and Research Trends**

253 The results of this study provide an overview of research trends and statistical 254 information from published documents. It was found that there were nine documents 255 published in the period from 2022 to 2024.

256 **Table 1. Research Trends**

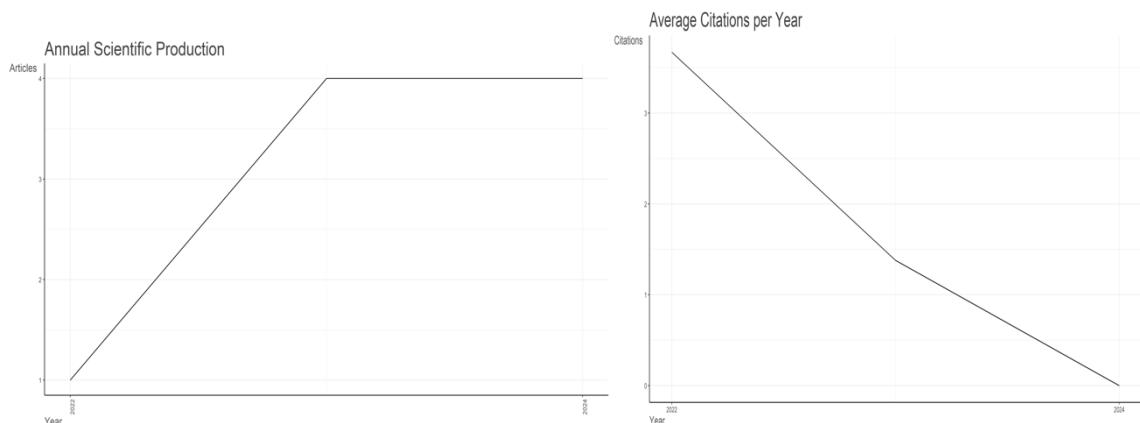
Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2022:2024
Sources (Journals, Books, etc)	9
Documents	9
Annual Growth Rate %	100
Document Average Age	0.667
Average citations per doc	2.444
DOCUMENT CONTENTS	
Keywords Plus (EN)	85
Author's Keywords (DE)	32
AUTHORS	
Authors	40
Authors of single-authored docs	0
AUTHORS COLLABORATION	
Single-authored docs	0
Co-Authors per Doc	4.44

International co-authorships %	11.11
DOCUMENT TYPES	
article	3
book chapter	1
Conference Paper	4
letter	1

257

258 This table shows that there are nine documents issued from 2022 to 2024,
259 with an annual growth rate of 100%. This indicates a significant increase in the
260 number of publications. These documents are still relatively new, with an average
261 age of 0.67 years, and have earned an average of 2,444 citations per document,
262 which reflects a good initial impact. There are 85 additional keywords and 32 au-
263 thor keywords, reflecting the broad scope and variety of research topics in the field
264 being studied. All documents are the result of collaboration, involving a total of 40
265 authors with an average of 4.44 authors per document. The level of international
266 collaboration reached 11.11%, indicating the existence of cross-border coopera-
267 tion in this study. The types of documents published include three journal articles,
268 one book chapter, four conference papers, and one letter. This type of document
269 signifies substantial contributions in various academic forums, as well as rapid
270 growth in research in the field being studied.

271



272

273 *Figure 4. Annual scientific production and Average citations per year*

274 *General statistical information on data (left), the trend in the number of articles (middle),*
275 *and the number of citations (right)*

276

277 Annual scientific production shows a significant increase in the number of
278 articles published during this period. This increase reflects the rapid growth in re-
279 search and publication activities. The trend graph shown in figure 4 (left) indicates
280 a consistent year-on-year increase and peaks in 2024, indicating that the field of
281 research continues to evolve and attract the attention of more researchers. The
282 increase in the number of articles published is an indication of the surge in interest

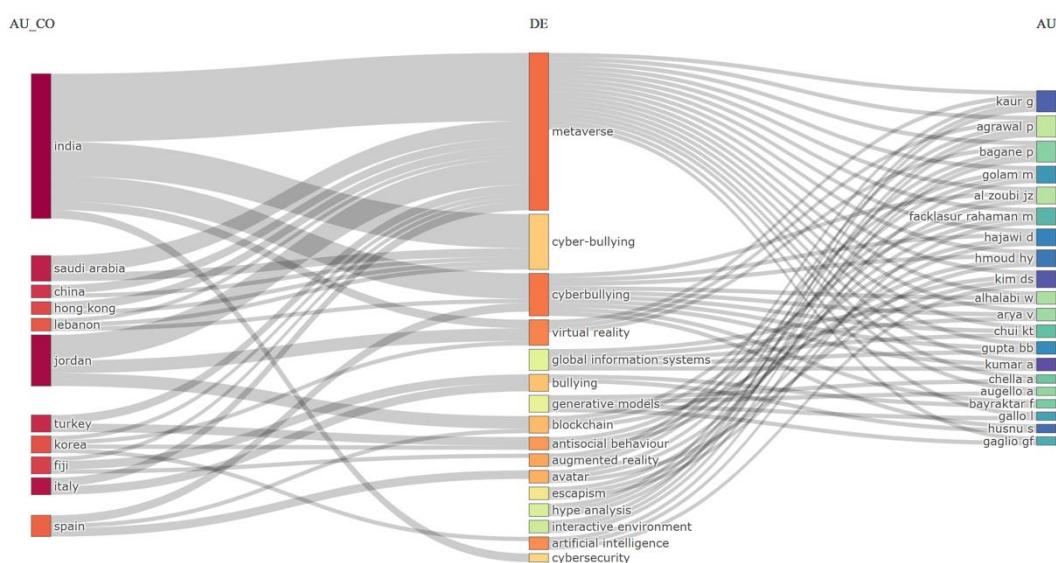
283 and contribution of the academic community to this topic, which is triggered by the
284 relevance and urgency of the issue being studied.

285 Figure 4 (right) illustrates the increase in the number of citations, over time.
286 This shows the relevance and influence of the published research. Publications
287 from 2022 have gained recognition and have been referenced by other research-
288 ers, showing a greater impact than older works. It should be noted that citations
289 tend to increase over time as more researchers access and use the work in their
290 research.

291
292 *Research Question 2: "Which countries and universities are making a major contribu-
293 tion to cyberbullying and metaverse research?"*

294 **2. Productivity and Impact of Countries and Institutions**

295 The influence and contribution of publications from a country or institution can
296 be analyzed through various bibliometric indicators. Figure 5 shows a Sankey dia-
297 gram showing the relationship between the author, the keywords used, and the
298 country from which the publication originated. This diagram makes it possible to
299 understand how authors, research topics, and countries of origin relate to each
300 other, as well as to provide insight into patterns of international collaboration in re-
301 search.



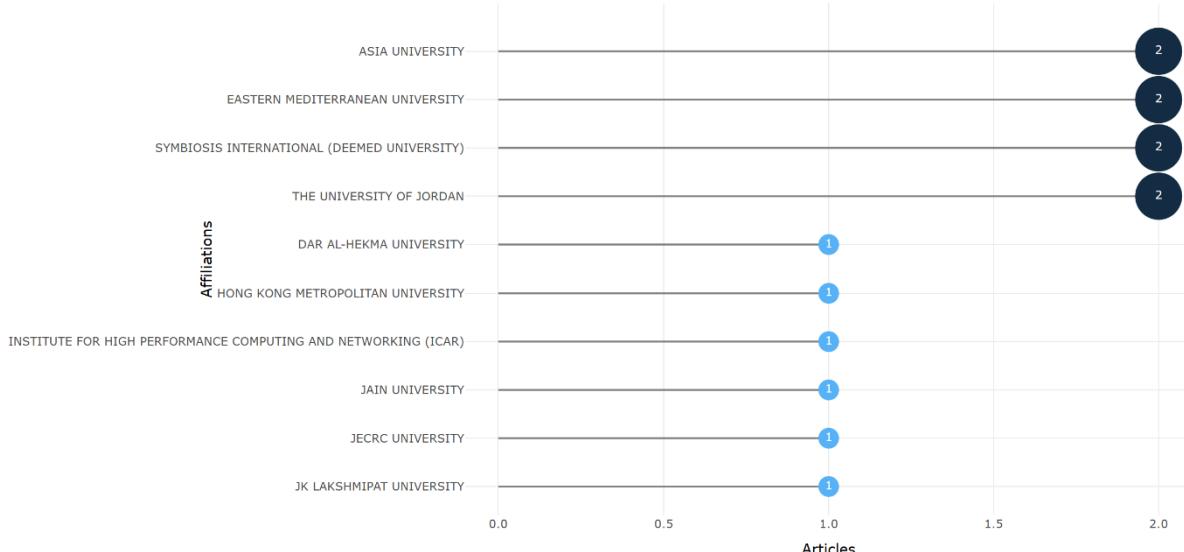
303 *Figure 5. Three-field plot for countries of publications, keywords in abstracts, and authors*

304
305 This diagram provides an overview of the relationship between leading coun-
306 tries and the keywords used in metaverse and cyberbullying research. The results
307 of the analysis show that India leads in the publication of research on this topic,
308 followed by countries such as Jordan, Saudi Arabia, Spain, Turkey, Korea, Fiji, Italy,
309 China, Hong Kong, and Lebanon. This geographical distribution indicates a strong
310 international collaboration in the fields of metaverse research and cyberbullying.

311 In the middle column, the larger red node shows the most frequently used key-
312 words in the study, with "metaverse", "cyber-bullying", "cyberbullying", "virtual real-
313 ity" and "cybersecurity" as the main keywords. Other keywords that also appeared
314 significantly included "global information systems", "bullying", "generative models",
315 "blockchain", "antisocial behaviour", "augmented reality", "avatar", "escapism",
316 "hype analysis", and "interative intelligence". These words reflect the main topics
317 that are being explored.

318 On the right side of the chart, the most productive authors in this field are sorted
319 by the number of articles published. The scatter plot shows that articles from India
320 tend to adopt five of the sixteen main keywords namely "metaverse", "cyber-bul-
321 "lying", "cyberbullying", "virtual reality", and "cybersecurity". On the other hand, articles
322 from Jordan more often use three keywords, namely "metaverse", "virtual reality",
323 and "blockchain".

324 Some of the prominent authors who contributed to this study include Kaur G.,
325 Agrawal P., Bagane P., Golam M., Al Zoubi J.Z., Facklasur Rahaman M., Hajawi D.,
326 Hmoud HY., Kim D., Alhalabi W., Arya V., Chui K.T., Gupta B., Kumar A., Chella A.,
327 Augello A., Bayraktar F., Gallo L., Husnu S., and Gaglio G.F. The productivity of
328 these authors demonstrates their active involvement in the development of research
329 related to the metaverse and cyberbullying, which has contributed to the growth of
330 global knowledge in this field.



331
332 *Figure 6. Top productive institutions in the world*
333

334 Figure 6 highlights the ten main institutions that played a significant role in the
335 publication of articles on the topic of cyberbullying and the metaverse during the
336 period from 2022 to 2024. Of these institutions, four institutions each produced two
337 articles, namely Asia University, Eastern Mediterranean University, Symbiosis Inter-
338 national (Deemed University), and The University of Jordan. In addition, other
339 institutional gymnastics, each published one article, including Dar Al-Hekma Uni-
340 versity, Institute for High Performance Computing and Networking (ICAR), Jain Uni-
341 versity, JECRC University, and JK Lakshmipt University. These findings show that

342 research on cyberbullying and the metaverse has attracted attention from universities
343 around the world, with the most notable contributions coming from institutions
344 in Asia and the Middle East. These institutions are becoming major centers for the
345 development of knowledge related to virtual world phenomena, demonstrating the
346 growth of collaboration and strong interest in these topics in different parts of the
347 world.

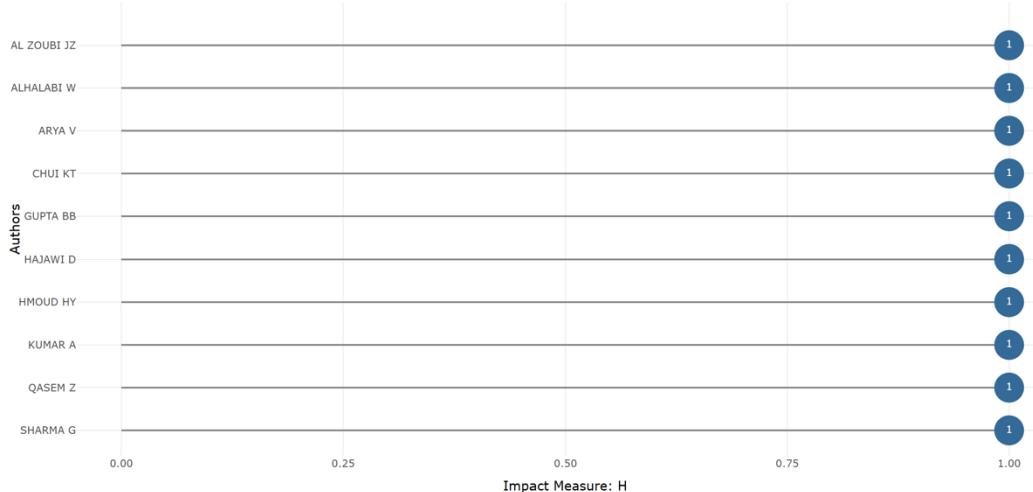
348

349 **Research Question 3: "Which authors and sources have made major contributions to**
350 **cyberbullying and metaverse research?"**

351 **3. Productivity and Impact of Sources and Authors**

352 This section highlights authors who contributed to scientific publications.
353 Productivity is measured based on the number of articles published by various
354 sources as well as the number of works produced by individual or group authors.

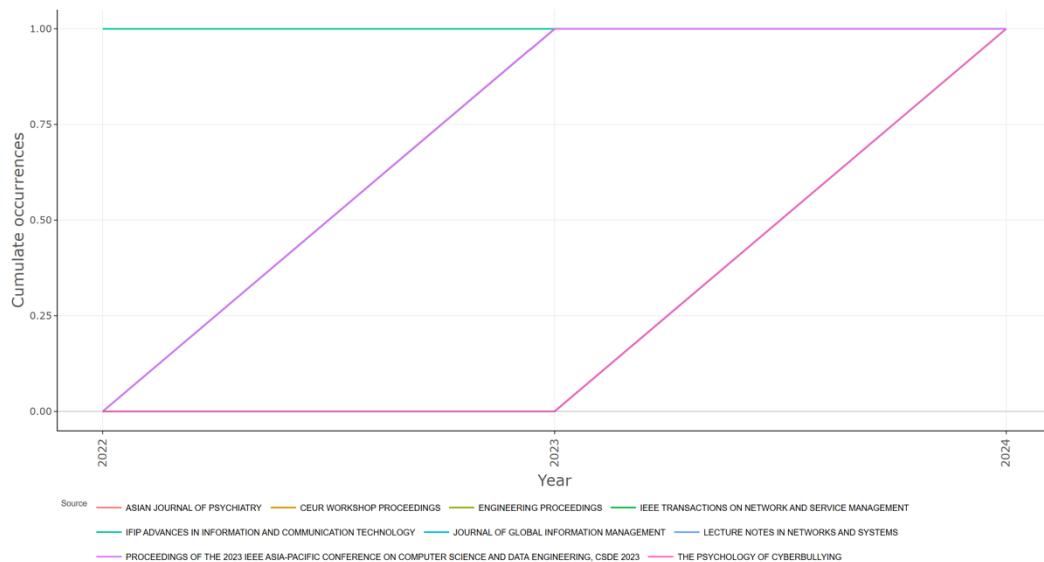
355



356

357 *Figure 7. The connection author and publication sources*

358 Figure 7 shows the productivity and impact of various authors, each of whom
359 has contributed a single article to a scientific publication. The names of the authors
360 mentioned, such as Al Zoubi JZ, Alhalabi W, Arya V, Chui KT, Gupta BB, Hajawi
361 D, Hmoud HY, Kumar A, Qasem Z, and Sharma G, all have the same productivity
362 figures. The impact indicator used is the h-index, which in this case is 1.00 for all
363 authors. This indicates that each author has at least one publication that has re-
364 ceived one citation. Although their productivity is limited (only one article), the fact
365 that the article is cited suggests that their work has a certain impact in the academic
366 community. To increase their influence in their fields, these writers need to in-
367 crease both productivity and the number of citations in their works.



368

369

370

371

The cumulative connection between authors and publication sources reflects a network of scientific collaborations spread across various journals and conference proceedings. A total of nine publication sources are the main publication sites for related research, with each publication source publishing one document from the 2022 to 2024 time span, covering a wide range of disciplines related to psychology, information technology, and network management. These sources include the Asian Journal of Psychiatry, CEUR Workshop Proceedings, Engineering Proceedings, IEEE Transactions on Network and Service Management, IFIP Advances in Information and Communication Technology, Journal of Global Information Management, Lecture Notes in Networks and Systems, Proceedings of the 2023 IEEE Asia-Pacific Conference on Computer Science and Data Engineering (CSDE 2023), and the Psychology of Cyberbullying. The connections between the authors and the various sources of this publication demonstrate the diversity of topics and multidisciplinarity occurring within the scientific community, as well as reflecting the broader impact of this research in a global context.

386

387 *Research Question 4: "What is the dominant topic in cyberbullying and metaverse research?"*

388

4. Distribution Keywords, Popular Topics, and Theme Development Trends

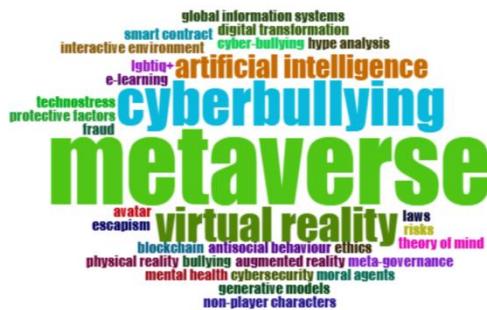
389

Keyword analysis in bibliometrics is often used in research to identify patterns and representations of specific topics that are of concern to researchers over time. The Biblioshiny program is used to analyze bibliometric data (Pathak & Singh, 2023), which helps measure how often key terms, topics, and trends come up together in various publications (Kirby, 2023).

395

396

Author keyword



Keywords plus

397

398

Title words



399

400

Figure 9. *tren* Author Keywords, keywords plus, and title words

401

402

The author keywords image is the result of the keyword analysis used, which describes a set of terms with large words, showing the keywords that are most often used by researchers and often appear in all research articles. The most frequently discussed keyword that became the main theme in the research article was the word "metaverse", followed by the keywords "cyberbullying", "virtual reality", and "artificial intelligence". There are also several other keywords, such as "cyber-bullying", "blockchain", "avatar", "augmented reality", "meta-governance", "mental health", "cybersecurity", "moral agents", "generative models", "non-player character", "physical reality", "bullying", "global information systems", "digital transformation", and "smart contracts". The keywords indicate areas that are closely related to this main topic.

412

413

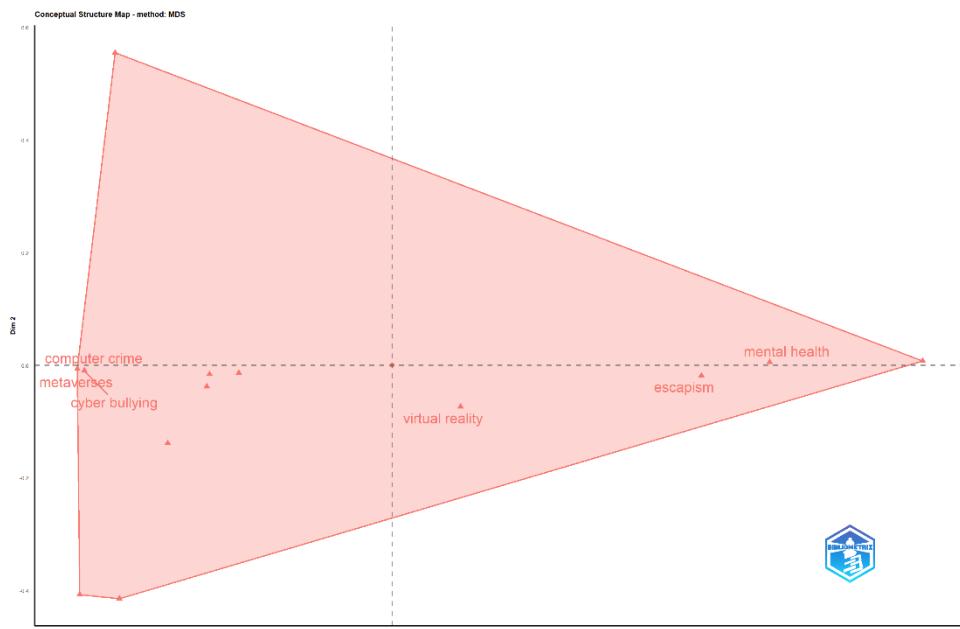
The keywords plus image shows the four most prominent terms: "metaverse", "cyberbullying", "computer crime", and "virtual reality". This emphasis on the plus keyword reflects an effort to explore the relationship between the use of technology and emerging social and criminal issues in digital contexts such as cyberbullying and bullying in the metaverse.

417

418

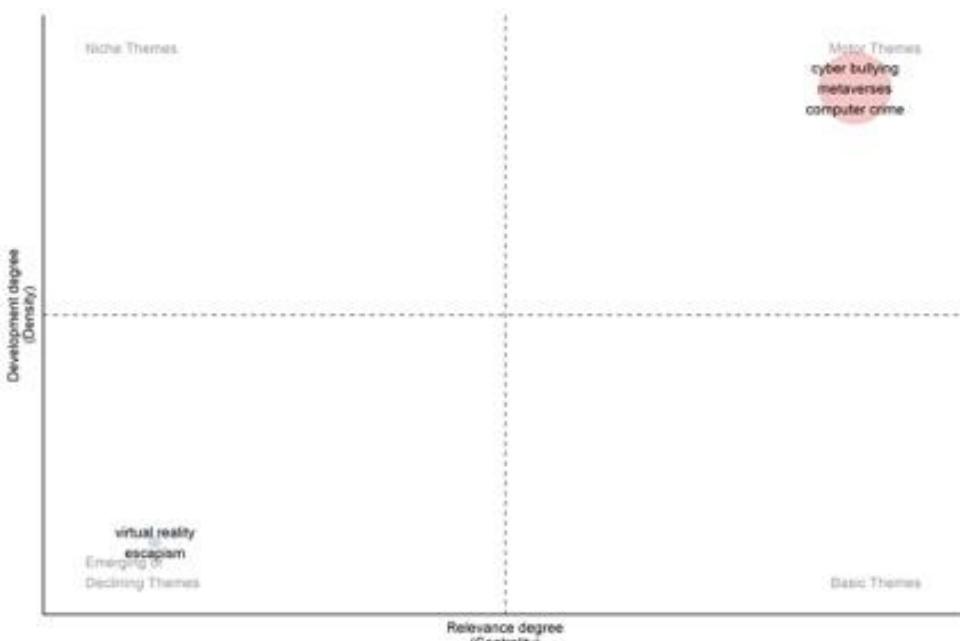
The title words image shows a text analysis that refers to the words that appear in the titles of research articles, to provide clues about the topic, focus, and main content of a document. The term can describe thematic relationships that represent latent trends in research on cyberbullying and the metaverse. Word clouds can effectively describe keywords in a study, but they are not enough to

422 fully understand how important terms relate to each other and to the topic being
423 researched (Xu et al., 2022).
424



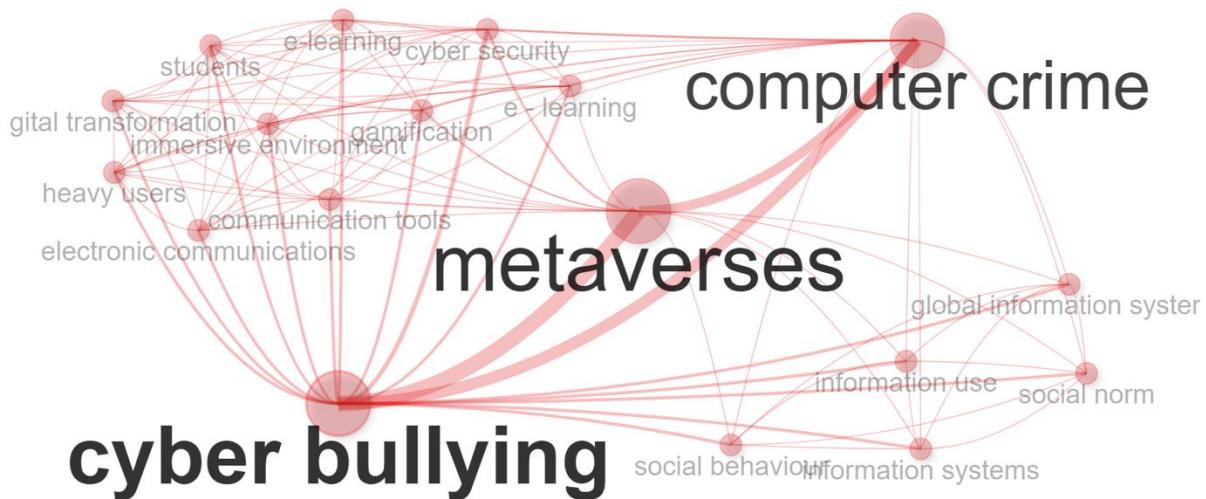
425
426 *Figure 10. The conceptual structure of factor analysis*
427

428 Figure 10 illustrates the conceptual structure of factor analysis that visu-
429 alizes the relationship between concepts and ideas using a multidimensional ap-
430 proach (MDS). A variety of topics were found with the keywords "metaverse,"
431 "cyberbullying," "computer crime," "virtual reality," "mental health," and "escapism."
432 In this diagram, the important terms are grouped based on their relevance in two
433 dimensions of the analysis.



434
435 *Figure 11. Thematic mapping from keywords*

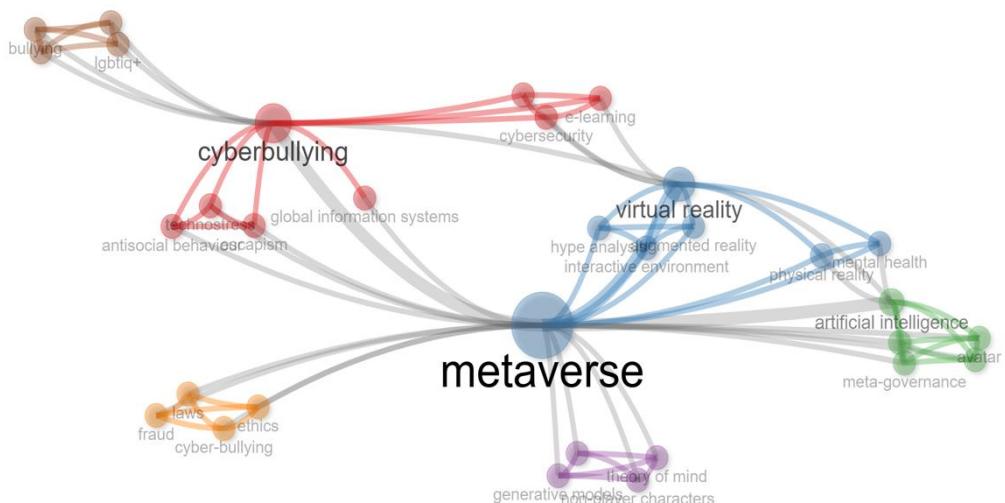
436 Figure 11 is a thematic map of the keywords in the research publication. This
437 thematic map maps keywords based on two main axes, namely degree of relevance
438 and degree of development. The diagram is divided into four quadrants, each of which depicts a different theme category. Quadrant 1 (top right) contains
439 three main themes, such as cyberbullying, metaverse, and computer crime. These
440 themes have a high degree of centrality, which means a high level of relevance
441 and density, indicating that these topics have developed well and become the center
442 of attention in academic policy. Quadrant 2 (top left) represents special themes
443 that have high density but low centrality. However, this quadrant does not show
444 any themes. Quadrant 3 (bottom left) contains two themes that have low centrality
445 and low density, such as "virtual reality" and "escapism." This suggests that over
446 time, these topics declined and began to lose relevance in the study. Quadrant 4
447 (bottom right) contains basic themes that have high centrality but low density. In
448 this quadrant, there are no themes. Thus, it can be concluded that the themes of
449 "cyberbullying," "metaverse," and "computer crime" are the main and central
450 themes in this study. Meanwhile, virtual reality and escapism are starting to decline
451 and lose relevance in key research topics.
452



453
454 *Figure 12. Co-occurrence network from the topics*

455 Figure 12 shows the network of linkages between the main topics in the study
456 based on the concurrent occurrence of keywords in the analyzed article. The size
457 of the circle indicates the importance of a keyword or topic, while the lines con-
458 nnecting the circles indicate the linkages or relationships between those topics. The
459 large circle in Figure 12 shows that the topic of "cyberbullying" often appears in
460 research articles. It shows that there are many connections with various other top-
461 ics that are highly connected and relevant. Likewise, the topic of "metaverse" has
462 a large circle, indicating that this topic is connected to cyberbullying, suggesting
463 that there is a connection between the two. Computer crime is also a very relevant
464 topic with the metaverse and cyberbullying, which shows that computer crime is
465 often studied in the context of virtual and cybersecurity.

466 The lines that connect these topics illustrate connections such as "social behavior," "information systems," "information use," "social norms," and "global information systems," related to the main topic, thus showing that social behavior and information use are important factors in the discussion regarding cyberbullying, the metaverse, and computer crime. Apart from the main topic, there are several other keywords such as "e-learning," "cyber security," "gamification," "environment," "students," "communication tools," "electronic communications," "heavy users," "immersive," "digital transformation," and "students." This topic is a sub-theme in the research. The relationship between the topics of cyberbullying, the metaverse, and computer crime indicates that these three topics are interconnected and often appear together in the scientific literature.



477

478 *Figure 13. Co-occurrence network from the topics*

479 Figure 13 helps in identifying relevant research areas and shows how various
480 topics are connected in the current literature. The network of associations seen in
481 Figure 13 shows that the metaverse is a key topic that connects various research
482 themes such as cyberbullying, virtual reality, and artificial intelligence. This rela-
483 tionship reflects research interest in the social, technological, and ethical implica-
484 tions of the growing virtual world.



486 *Figure 14. Flow diagram of longitudinal thematic evolution*

487 Figure 14 shows a thematic evolutionary analysis to track developments and
488 dynamic changes in research themes focused on the metaverse and cyberbullying.
489 Documents discussing these two themes were found from 2022 to 2024. On the
490 left side of the image, it can be seen that in the 2022-2023 period, the most prom-
491 inent and dominant keyword in the discussion in the research articles is the
492 metaverse. Then, on the right side in the 2024-2024 period, there is a thematic
493 shift with the emergence of additional keywords such as cyberbullying, which
494 shows that the topic of research is starting to shift towards social problems that
495 arise in the virtual world.

496

497 **Discussions**

498 The research aims to identify key trends and topics in the literature on cyberbul-
499 lying and the metaverse, as well as describe the productivity of countries, institutions,
500 authors, and publication sources. Related to cyberbullying and metaverse research,
501 nine documents were found published from 2022 to 2024, with various types of doc-
502 ments, including three journal articles, one book chapter, four conference papers, and
503 one letter. The diversity of these document types shows a multidisciplinary and sub-
504 stantial contribution in various academic forums. The research documents are still rel-
505 atively new, with an average age of about 0.67 years, but have had an impact, with an
506 average of 2,444 citations per document, showing a significant increase in the number
507 of publications each year. This indicates that this topic is increasingly attracting atten-
508 tion and showing a good initial influence in the scientific community. The nine published
509 research papers each offer different but complementary perspectives in providing an
510 overview of the dynamics of the virtual world and its implications for social behavior in
511 technology.

512 Research on cyberbullying and the metaverse has reached a global scale, each
513 highlighting important issues in their contexts. Rusyidi (2020) revealed that cyberbul-
514 lying has become a global issue with a negative impact on victims. Meanwhile, Koo-
515 hang (2023) shows that the metaverse, as an immersive virtual platform, has potential
516 applications in various sectors. However, although both of these topics have gained

517 significant attention, research linking cyberbullying to the use of the metaverse is still
518 very limited. Currently, these studies tend to be separate, each focusing on impact and
519 potential in different contexts without exploring the linkages between the two. Ad-
520 vances in digital technology have resulted in new forms of bullying, including cyberbul-
521 lying on social media platforms (Riswanto & Marsinun, 2020). Recently, with the emer-
522 gence of the metaverse as a 3D virtual space, there are new opportunities and chal-
523 lenges in the field of education (Indarta et al., 2022), especially in non-cognitive as-
524 pects such as social skills and self-control (Muslihati et al., 2023). Therefore, there is
525 still an urgent need for research that integrates these two fields to understand how the
526 use of the metaverse can affect cyberbullying behavior and its impact on social inter-
527 actions in the virtual world.

528 The issue of cyberbullying and the metaverse has become a global topic trend,
529 marked by international collaboration in the development of this research. Geograph-
530 ically, the State of India leads in terms of the number of publications, followed by Jor-
531 dan, Saudi Arabia, Spain, Turkey, and other countries. This is in line with the results
532 of bibliometric analysis (Aguspriyanti, 2023), which has highlighted emerging trends in
533 digital public space research, with Western countries leading the way in publications.
534 Global interest in this topic reflects the primary focus of research on the impact of tech-
535 nology on social behavior and safety in the virtual world. Social behavior towards
536 cyberbullying among adolescents has been extensively researched, emphasizing the
537 importance of parental supervision in reducing problematic social media use (Fazry &
538 Apsari, 2021). It is characterized by keywords that often appear in research, such as
539 "metaverse," "cyberbullying," "virtual reality," and "cybersecurity." Likewise, the contri-
540 bution of institutions from Asia and the Middle East shows the diversity of topics dis-
541 cussed, including the disciplines of science and technology, education, network man-
542 agement, and psychology.

543 The main focus of the research based on thematic mapping reveals that the
544 themes of cyberbullying, the metaverse, and computer crime are the primary focuses
545 of the research, while virtual reality and escapism tend to decrease in relevance. The
546 following is an explanation related to the research article document discussed:

- 547 1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only
548 a trend but also has the potential to change social interactions, including increasing
549 the risk of cyberbullying. The study provides a theoretical foundation about the
550 metaverse by developing a taxonomy and exploring its impact in general.
- 551 2. Research (Upadhyay et al., 2023) "cyberbullying in the metaverse: A prescriptive
552 perception on global information systems for user protection" shows the urgency of
553 developing a virtual world user protection mechanism to deal with cybercrime, in-
554 cluding cyberbullying in the metaverse.
- 555 3. Research (Grover et al., 2023) "Social Commerce and Metaverse in a New Virtual
556 World: Exploring Women's Adoption Intentions" Her study contributes to revealing
557 the potential of the metaverse as a social and economic platform, but is vulnerable
558 to the threat of cyberbullying, especially among women.
- 559 4. Research (Pathak-Shelat & Mehta, 2023) "The Future of Higher Education in Ethical
560 Metaverse: Co-existing in Virtually Enhanced Physical Reality" discusses the role

561 of institutions in combating cyberbullying behavior in an ethical metaverse through
562 an ethical-based approach, by introducing an education system that is its bulwark.

563 5. Research (Yildiz, I. & Tanyildizi, N.I., 2022) "An analysis on news containing cyber-
564 bullying in the metaverse" shows that the public perception of the risks of cyberbul-
565 lying in the metaverse is beginning to develop. The analysis is based on the repre-
566 sentation of cyberbullying in the metaverse through media coverage, so it can help
567 validate the importance of raising awareness of the dangers lurking in the virtual
568 world.

569 6. Research (Qasem et al., 2022) "The effect of technostress on cyberbullying in
570 metaverse social platforms" investigates the relationship between technostress and
571 cyberbullying, the results of which can strengthen the understanding of behaviors
572 that can trigger cyberbullying in the digital environment. This research is very rele-
573 vant because it links stress due to technology with an increased risk of negative
574 behavior on metaverse social platforms.

575 7. Research (Sanchez-Romeo, C. & Munoz-Jimenez, E.M., 2024) "Immersive environ-
576 ments at school: stop cyberbullying by proximity" offers virtual proximity-based so-
577 lutions used to combat cyberbullying. This study is relevant in the context of Educa-
578 tion to mitigate cyberbullying behavior among students. It emphasizes that the same
579 technology that can be used to harm, can also be used to protect.

580 8. The research (Facklasur et al.,2024) "Meta-Governance: blockchain-driven
581 metaverse platform for mitigating misbehavior using smart contracts and AI" intro-
582 duces the potential of innovative technologies to address bad behavior in the
583 metaverse using blockchain and smart contracts. Not only monitoring but also au-
584 tomatically controlling negative behavior on the metaverse platform.

585 9. Research (Bayraktar, F. & Husnu, S., 2024), "Risk and protective factors in
586 LGBTIQ+ Cybervictimization" This study shows that vulnerable communities be-
587 come victims of negative behavior, such as the LGBTIQ+ community in the
588 metaverse, so they need special protection in a virtual environment.

589 Each study offers a different but complementary perspective. The study con-
590 ducted by Kaur et al. (2024) provides a holistic view of metaverse trends, while more
591 focused research, such as that conducted by Upadhyay et al. (2023) and Yiliz &
592 Tanyildizi (2022), explores user protection against the risks of cyberbullying and bully-
593 ing in the metaverse. At the same time, Grover et al. (2022) conducted a study on the
594 adoption of the metaverse in the context of social commerce. This is reinforced by
595 research from Bayraktar & Husnu (2024), which reveals that the threat of cyberbullying
596 is particularly vulnerable to the LGBTIQ+ community, indicating that a comprehensive
597 approach is needed in the virtual world. Several innovative solutions have been pro-
598 posed by researchers, such as those proposed by Facklasur et al. (2024) with the use
599 of blockchain and AI, as well as by Pathak-Shelat & Mehta (2023) through the appli-
600 cation of ethical approaches. Both studies provide solutions to protect against negative
601 behavior in the virtual world through the involvement of technology.

602 Future research is expected to increase international collaboration and exploration
603 of relevant topics. The metaverse is predicted to make a significant contribution to
604 global GDP growth, with applications in education, health, business, and entertainment
605 (Syahrul & Baidarus, 2023). In education, the metaverse offers an interactive online
606 learning experience, overcoming limitations such as classroom capacity and distance
607 constraints (Setiawan, 2022). However, the emergence of digital technology also
608 raises concerns about cyberbullying, which can have psychological and physical im-
609 pacts on victims (Fathoni & Prasodjo, 2022). Research on cyberbullying and the
610 metaverse is still limited, and there are many other aspects that have not been devel-
611 oped, such as the exploration of its impact on antisocial behavior, policy interventions
612 in the educational environment, and the transformation of cyberbullying into bullying in
613 the metaverse.

614 **Conclusions**

615 The topic of cyberbullying and the metaverse has become a significant global
616 concern. The findings show that India made a major contribution to the publication of
617 the study, followed by Jordan, Saudi Arabia, Turkey, Korea, Fiji, Italy, China, Hong
618 Kong, and Lebanon. Various universities in these countries are leading in the produc-
619 tion of research in this field. Key authors and leading journals also play an important
620 role in the dissemination of related research. The analysis shows an increase in publi-
621 cations related to these two topics, with the discovery of nine still relatively recent doc-
622 uments published between 2022 and 2024. These documents, such as journal articles,
623 books, and conference papers, deal extensively with the impact of technology on social
624 behavior in the virtual world. Themes such as cyberbullying, the metaverse, virtual
625 reality, and cybersecurity dominate the literature. However, research linking these two
626 topics is still limited and separate. Therefore, it is important to recognize the urgent
627 need for research that integrates these two fields. The metaverse brings new chal-
628 lenges, especially when it comes to cyberbullying and its impact on social interactions.
629 Future research should expand this study by exploring the transformation of cyberbul-
630 lying into bullying in the metaverse environment, as well as developing effective policy
631 interventions in the field of education to address this problem.

632 **Acknowledgements**

633 Thank you to the academic community of Yogyakarta State University for the
634 support and facilities that have been provided to facilitate the preparation of this re-
635 search. My special thanks to my promoter, Prof. Dr. Edi Purwanta, M.Pd., and co-
636 promoter, Prof. Dr. Muhammad Nur Wangid, M.Pd., for their valuable input and con-
637 structive feedback. I am also very grateful to Dr. Abdul Manaf, M.Pd., who has helped
638 in the preparation of this research, as well as to Prof. Dr. Yoppy Wahyu Purnomo,
639 M.Pd., for his continuous encouragement and expert advice. Their support and exper-
640 tise have been key factors in the successful completion of this research.

642 **Conflict of interests**

643 The authors declare no conflict of interest.

645

646 Author Contributions

647 Conceptualization, H.A. and A.M.; methodology, A.M. and Y.W.P.; software, H.A., A.M.
648 & Y.W.P; statistical analysis and interpretation, and writing; E.P. and M.N.W.; supervi-
649 sion and critical revision, and editing.

650

651 References

652

- 653 Achuthan, K., Kolil, V. K., & Jyothy, S. N. (2023). Effectiveness of Virtual Laboratory
654 Teacher Training Workshops: A Kirkpatrick Model Analysis. *International Journal
655 of Emerging Technologies in Learning*, 18(15), 225–239.
656 <https://doi.org/10.3991/ijet.v18i15.40037>
- 657 Achuthan, K., Nair, V. K., Kowalski, R., Ramanathan, S., & Raman, R. (2023).
658 Cyberbullying research — Alignment to sustainable development and impact of
659 COVID-19: Bibliometrics and science mapping analysis. *Computers in Human
660 Behavior*, 140(November 2022), 107566.
661 <https://doi.org/10.1016/j.chb.2022.107566>
- 662 Aguspriyanti, C. D. (2023). Emerging Trends of Digital Public Spaces: a Bibliometric
663 Analysis Based on Vosviewer. *Journal of Architecture ARCADE*, 7(1), 50.
664 <https://doi.org/10.31848/arcade.v7i1.1189>
- 665 Ardiansyahroni, A., Tjalla, A., & Mahdiyah, M. (2023). Categorical Data in Research:
666 A Bibliometric Review. *Scientific Journal of Mandala Education*, 9(1), 796–802.
667 <https://doi.org/10.58258/jime.v9i1.4814>
- 668 Bansal, S., Garg, N., Singh, J., & Van Der Walt, F. (2023). Cyberbullying and mental
669 health: past, present and future. *Frontiers in Psychology*, 14.
670 <https://doi.org/10.3389/fpsyg.2023.1279234>
- 671 Barlett, C. P., & Gentile, D. A. (2012). Attacking others online: The formation of
672 cyberbullying in late adolescence. *Psychology of Popular Media Culture*, 1(2),
673 123–135. <https://doi.org/10.1037/a0028113>
- 674 Bayraktar, F., & Husnu, S. (2024). Risk and protective factors in LGBTIQ+
675 cybervictimization. *Journal of Gender and Cyberspace Studies*, 12(3), 45-59.
676 <https://doi.org/10.1016/j.jgcs.2024.05.004>
- 677 Bizeł, G. (2023). A Bibliometric Analysis: Metaverse in Education Concept. *Journal of
678 Metaverse*, 3(2), 133–143. <https://doi.org/10.57019/jmv.1310768>
- 679 Boboc, R., & Damaševičius, R. (2024). Confronting bullying in the digital age: Role of
680 Extended Reality. *Education and Information Technologies*, 1–30.
681 <https://doi.org/10.1007/s10639-024-12557-7>
- 682 Burgos, D. (2024). *Literature Review: Systematic Review* (pp. 9–17).
683 https://doi.org/10.1007/978-3-031-54431-6_2
- 684 Cassandra, C., Masrek, M., & Aman, F. (2023). *Bibliometric Analysis of Trend in
685 Metaverse Research*. <https://doi.org/10.1109/ICIMTech59029.2023.10277747>
- 686 Cleemput, K. Van, Desmet, A., Vandebosch, H., & Bastiaensens, S. (2014). A
687 *systematic review and meta-analysis of the efficacy of cyberbullying prevention
688 programs*. January 2016, 1–49.

- 689 https://www.researchgate.net/publication/289488562
690 Cruz, M., & Oliveira, A. (2024). Unravelling Virtual Realities—Gamers' Perceptions of
691 the Metaverse. *Electronics (Switzerland)*, 13(13).
692 https://doi.org/10.3390/electronics13132491
693 Di Pomponio, I., & Cerniglia, L. (2024). Exploring the Mental Health Frontier: Social
694 Media, the Metaverse and Their Impact on Psychological Well-Being.
695 *Adolescents*, 4(2), 226–230. https://doi.org/10.3390/adolescents4020016
696 Facklasur, J., Li, W., & Zhang, M. (2024). Meta-governance: Blockchain-driven
697 metaverse platform for mitigating misbehavior using smart contract and AI.
698 *Journal of Distributed Ledger Technology*, 29(2), 135-150.
699 https://doi.org/10.1016/j.jdltech.2024.04.002
700 Fadhel, M. A., Duhaim, A. M., Albahri, A. S., Al-Qaysi, Z. T., Aktham, M. A., Chyad, M.
701 A., Abd-Alaziz, W., Albahri, O. S., Alamoodi, A. H., Alzubaidi, L., Gupta, A., & Gu,
702 Y. (2024). Navigating the metaverse: unravelling the impact of artificial
703 intelligence—a comprehensive review and gap analysis. In *Artificial Intelligence
704 Review* (Vol. 57, Issue 9). Springer Netherlands. https://doi.org/10.1007/s10462-
705 024-10881-5
706 Fathoni, A., & Prasodjo, B. (2022). Cyberbullying and Its Impact on the Social
707 Development of Adolescents. *Factor : Scientific Journal of Education*, 9(3), 306.
708 https://doi.org/10.30998/fjik.v9i3.13054
709 Fatmawati, L., & Haryanto, H. (2023). Bibliometric Mapping Analysis of the
710 Cyberbullying Phenomenon Among Children. *Proceedings Series on Social
711 Sciences & Humanities*, 12, 186–193. https://doi.org/10.30595/pssh.v12i.795
712 Fazry, L., & Apsari, N. C. (2021). The Influence of Social Media on Cyberbullying
713 Behavior Among Adolescents. *Journal of Research and Community Service
714 (JPPM)*, 2(2), 272. https://doi.org/10.24198/jppm.v2i2.34679
715 Grover, A., Arora, N., & Sharma, P. (2023). *Social Commerce and Metaverse in a
716 New Virtual World: Exploring Women's Adoption Intentions* (pp. 262–286).
717 https://doi.org/10.4018/978-1-6684-8312-1.ch019
718 Hassani, H., Beneki, C., Unger, S., & Mazinani, M. T. (n.d.). *Text Mining in Big Data
719 Analytics*. 1–34. https://doi.org/10.3390/bdcc4010001
720 Hendry, B. P., Hellsten, L. ann M., McIntyre, L. J., & Smith, B. R. R. (2023).
721 Recommendations for cyberbullying prevention and intervention: A Western
722 Canadian perspective from key stakeholders. *Frontiers in Psychology*,
723 14(March), 1–10. https://doi.org/10.3389/fpsyg.2023.1067484
724 Hinduja, S., & Patchin, J. W. (2010). Bullying, cyberbullying, and suicide. *Archives of
725 Suicide Research*, 14(3), 206–221.
726 https://doi.org/10.1080/13811118.2010.494133
727 Huang, Y. Y., & Chou, C. (2010). An analysis of multiple factors of cyberbullying
728 among junior high school students in Taiwan. *Computers in Human Behavior*,
729 26(6), 1581–1590. https://doi.org/10.1016/j.chb.2010.06.005
730 Indarta, Y., Ambiyar, A., Samala, A. D., & Watrionthos, R. (2022). Metaverse:
731 Challenges and Opportunities in Education. *Journal of Basicedu*, 6(3), 3351–
732 3363. https://doi.org/10.31004/basicedu.v6i3.2615

- 733 Ivanov, L., & Ramos, N. (2020). *"Bully": A Virtual Reality Environment for Anti-*
734 *Bullying Education.*
- 735 Kaur, G., et al. (2024). A comprehensive review of metaverse: Taxonomy, impact, and
736 the hype around it. *Journal of Virtual Reality and Digital Interaction*, 34(1), 56-74.
737 <https://doi.org/10.1016/j.jvrd.2024.03.001>
- 738 Kim, J. (2021). Advertising in the Metaverse: Research Agenda. *Journal of Interactive*
739 *Advertising*, 21(3), 141–144. <https://doi.org/10.1080/15252019.2021.2001273>
- 740 Kirby, A. (2023). Exploratory Bibliometrics: Using VOSviewer as a Preliminary
741 Research Tool. *Publications*, 11(1). <https://doi.org/10.3390/publications11010010>
- 742 Kiriakidis, S., Kefallonitis, S., & Kavoura, N. (2019). *The Effect of Innovative*
743 *Communication Technologies in Higher Education* (pp. 545–558).
744 <https://doi.org/10.4018/978-1-5225-7365-4.ch043>
- 745 Koohang. (2023). Shaping the metaverse into reality: Multidisciplinary perspectives
746 on opportunities, challenges, and future research. *Journal of Computer*
747 *Information Systems*, 63(3), 1–41.
748 <https://www.tandfonline.com/doi/full/10.1080/08874417.2023.2165197?needAccess=true>
- 750 Kowalski, R. M., Giumetti, G. W., Schroeder, A. N., & Lattanner, M. R. (2014).
751 Bullying in the digital age: A critical review and meta-analysis of cyberbullying
752 research among youth. *Psychological Bulletin*, 140(4), 1073–1137.
753 <https://doi.org/10.1037/a0035618>
- 754 Li, H., & Li, B. (2024). The state of metaverse research: a bibliometric visual analysis
755 based on CiteSpace. *Journal of Big Data*, 11(1). <https://doi.org/10.1186/s40537-024-00877-x>
- 757 Liberati, A., Altman, D. G., Tetzlaff, J., Mulrow, C., Gøtzsche, P. C., Ioannidis, J. P. A.,
758 Clarke, M., Devereaux, P. J., Kleijnen, J., & Moher, D. (2009). The PRISMA
759 statement for reporting systematic reviews and meta-analyses of studies that
760 evaluate health care interventions: Explanation and elaboration. *PLoS Medicine*,
761 6(7). <https://doi.org/10.1371/journal.pmed.1000100>
- 762 Livingstone, S., Stoilova, M., Stänicke, L. I., Jessen, R. S., Graham, R., Staksrud, E.,
763 & Jensen, T. (2022). *Young people experiencing internet-related mental health*
764 *difficulties: the benefits and risks of digital skills. An empirical study.* 1–117.
765 <https://doi.org/10.5281/zenodo.6976424>
- 766 Łosiak-Pilch, J., Grygiel, P., Ostafińska-Molik, B., & Wysocka, E. (2022).
767 Cyberbullying and its protective and risk factors among Polish adolescents.
768 *Current Issues in Personality Psychology*, 10(3), 190–204.
769 <https://doi.org/10.5114/cipp.2021.111404>
- 770 Marinoni, C., Rizzo, M., & Zanetti, M. A. (2024). Social Media, Online Gaming, and
771 Cyberbullying during the COVID-19 Pandemic: The Mediation Effect of Time
772 Spent Online. *Adolescents*, 4(2), 297–310.
773 <https://doi.org/10.3390/adolescents4020021>
- 774 Muslihati, M., Hotifah, Y., Hidayat, W. N., Sobri, A. Y., Valdez, A. V., Ilmi, A. M., &
775 Saputra, N. M. A. (2023). How to Prevent Student Mental Health Problems in
776 Metaverse Era? *Journal of Guidance and Counseling Studies*, 8(1), 33–46.

- 777 <https://doi.org/10.17977/um001v8i12023p33-46>
- 778 Nurhayati, S. (2024). *Digitalization of MSMEs : A bibliometric analysis using Biblioshiny and VOSviewer*. 2023.
- 780 Pathak-Shelat, M., & Mehta, B. (2023). *The Future of Higher Education in Ethical Metaverse: Co-existing in Virtually Enhanced Physical Reality* (pp. 137–157).
781 https://doi.org/10.1007/978-3-031-40312-5_8
- 782 Pathak, S., & Singh, N. (2023). Trends in E-learning research: bibliometric analysis
783 on Scopus publications post COVID-19 in Asian context. *Journal of Economic
784 and Administrative Sciences*, ahead-of-p(ahead-of-print).
785 <https://doi.org/10.1108/JEAS-03-2022-0072>
- 786 Peker, A., & Yalçın, R. U. (2022). Mapping Global Research on Cyber Bullying in the
787 Context of Cross-Cultural Collaborations: A Bibliometric and Network Analysis.
788 *Frontiers in Communication*, 7(March), 1–7.
789 <https://doi.org/10.3389/fcomm.2022.768494>
- 790 Qasem, Z., Hmoud, H., Hajawi, D., & Al-Zoubi, M. (2022). *The Effect of Technostress
791 on Cyberbullying in Metaverse Social Platforms* (pp. 291–296).
792 https://doi.org/10.1007/978-3-031-17968-6_22
- 793 Riswanto, D., & Marsinun, R. (2020). Adolescent Cyberbullying Behavior on Social
794 Media. *Analytics*, 12(2), 98–111. <https://doi.org/10.31289/analitika.v12i2.3704>
- 795 Rusyidi, B. (2020). UNDERSTANDING CYBERBULLYING AMONG ADOLESCENTS.
796 *Journal of Conflict Resolution Collaboration*, 2, 100.
797 <https://doi.org/10.24198/jkrk.v2i2.29118>
- 798 Sanchez-Romeo, C., & Munoz-Jimenez, E. M. (2024). Immersive environments at
799 school: Stop cyberbullying by proximity. *Educational Technology & Society*,
800 27(4), 89-102. <https://doi.org/10.1109/ETS.2024.3256728>
- 801 Santika, P. A., Saputro, D. R. S., & Kurdhi, N. A. (2024). Bibliometric Analysis of
802 Vector Error Correction Model. *Nucleus*, 5(1), 37–45.
803 <https://doi.org/10.37010/nuc.v5i1.1541>
- 804 Setiawan, D. (2022). Analysis of the Potential of the Metaverse in the World of
805 Education in Indonesia. *JIIP - Scientific Journal of Educational Sciences*, 5(11),
806 4606–4610. <https://doi.org/10.54371/jiip.v5i11.1101>
- 807 Suler, J. (2004). The online disinhibition effect. *Cyberpsychology and Behavior*, 7(3),
808 321–326. <https://doi.org/10.1089/1094931041291295>
- 809 Sumedang, U. P. (2024). *Research Trends on the Influence of Social Media on Public
810 Perception: A Bibliometric Approach*. 7(1), 85–98.
- 811 Syahrul, M., & Baidarus, B. (2023). The potential and obstacles of the metaverse in
812 the current era. *JATI (Journal of Informatics Engineering Students)*, 7(3), 1452–
813 1460. <https://doi.org/10.36040/jati.v7i3.7397>
- 814 Tranfield, D., Denyer, D., & Smart, P. (2003). *Towards a Methodology for Developing
815 Evidence-Informed Management Knowledge by Means of Systematic Review **.
816 14.
- 817 Upadhyay, U., Kumar, A., Sharma, G., Gupta, B. B., Alhalabi, W., Arya, V., & Chui, K.
818 T. (2023). Cyberbullying in the metaverse: A prescriptive perception on global
819 information systems for user protection. *Journal of Global Information*
- 820

- 821 *Management*, 31(1), 1–25. <https://doi.org/10.4018/JGIM.325793>
- 822 Vandebosch, H., & van Cleemput, K. (2009). Cyberbullying among youngsters:
823 Profiles of bullies and victims. *New Media and Society*, 11(8), 1349–1371
824 <https://doi.org/10.1177/1461444809341263>
- 825 Walther, J. B., Van Der Heide, B., Ramirez, A., Burgoon, J. K., & Peña, J. (2015).
826 Interpersonal and hyperpersonal dimensions of computer-mediated
827 communication. *The Handbook of the Psychology of Communication
Technology, April 2018*, 1–22. <https://doi.org/10.1002/9781118426456.ch1>
- 828 Wijaya, F. (2022). Social Design Opportunities in Helping Small Industries in the
829 Metaverse Era. *Proceedings of the 2022 National Seminar on Social Design*,
830 309–315.
- 831 Xu, K., Lin, C., Lee, S. Y., Mao, L., & Meng, K. (2022). Comparative analysis of
832 complete *Ilex* (Aquifoliaceae) chloroplast genomes: insights into evolutionary
833 dynamics and phylogenetic relationships. *BMC Genomics*, 23(1).
834 <https://doi.org/10.1186/s12864-022-08397-9>
- 835 Yildiz, I., & Tanyildizi, N. I. (2022). An analysis on news containing cyberbullying in
836 the metaverse. *Cyberpsychology: Journal of Psychosocial Research on
Cyberspace*, 16(2), 22-34. <https://doi.org/10.5817/CP2022-2-3>
- 837
- 838
- 839

2.

**BUKTI KONFIRMASI
REVIEW DAN HASIL
REVIEW PERTAMA**

17 JANUARI 2025



← Back to Submissions

Submission

Review

Copyediting

Production

Round 1

Round 1 Status

Submission accepted.

Notifications

[\[IJCRSEE\] Editor Decision](#)

2025-01-17 02:45 PM

[\[IJCRSEE\] Editor Decision](#)

2025-02-10 10:06 AM

[\[IJCRSEE\] Editor Decision](#)

2025-02-11 01:52 PM

Reviewer's Attachments

[Search](#)

No Files

Revisions

[Search](#)[Upload File](#)

▶  13386	3060-Article Text-11640-12967-2-20240917-2.docx	January 18, 2025	Article Text
▶  13387	Author's biographies.docx	January 18, 2025	Other

Review Discussions

[Add discussion](#)

Name	From	Last Reply	Replies	Closed
▶ Revised Submission: Inclusion of ORCID, Full Author Names, and Year of Birth	171208_hijrawatil_171208	2025-01-18 05:19 AM	-	<input checked="" type="checkbox"/>
▶ Confirmation of suprotting documents for Publication	171208_hijrawatil_171208	2025-02-12 02:30 PM	-	<input type="checkbox"/>

3060 / **Aswat et al.** / Global Research Trends of Cyberbullying and the Metaverse in t**Library****Workflow****Publication****Notifications**

X

[IJCRSEE] Editor Decision

2025-01-17 02:45 PM

Hijrawatil Aswat Irra:

We have reached a decision regarding your submission to International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Our decision is: Revisions Required

Please, send us ORCID for all authors and full name and surname for last author. Also, we need the year of birth for all authors (for UDK).

[International Journal of Cognitive Research in Science, Engineering and Education \(IJCRSEE\)](#)

ISSN 2334-8496 (Online)



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] Editor Decision

1 pesan

Dr. Lazar Stosic <editor@ijcrsee.com>

17 Januari 2025 pukul 21.45

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

Hijrawatil Aswat Irra:

We have reached a decision regarding your submission to International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Our decision is: Revisions Required

Please, send us ORCID for all authors and full name and surname for last author. Also, we need the year of birth for all authors (for UDK).

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

3.

**BUKTI SUBMIT REVISI
PERTAMA**

18 JANUARI 2025

3060 / Aswat et al. / Global Research Trends of Cyberbullying and the Metaverse in t

Library

Workflow

Publication

Submission

Review

Copyediting

Production

Round 1

Round 1 Status

Submission accepted.

Revised Submission: Inclusion of ORCID, Full Author Names, and Year

X

of Birth**Participants** [Edit](#)

Dr. Lazar Stosic (lstosic)

Alla Belousova (abelousova)

Hijrawatil Aswat Irra (171208_hijrawatil_171208)

Messages

Note

From

We have made improvements, namely the addition of ORCID, the author's full name, and Year of birth

171208_hijrawatil_171208

2025-01-18 05:19 AM

Thank you

best regards

Hijrawatil Aswat

Add Message

[Publication](#)



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

2 pesan

Dr. Lazar Stosic <editor@ijcrsee.com>

17 Februari 2025 pukul 20.35

Balas Ke: Lazar Stošić <editor@ijcrsee.com>

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

You have a new notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE):

You have been added to a discussion titled "Final version" regarding the submission "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Link: <https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submission/3060>

Lazar Stošić

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

Hijrawatil Aswat <hijrawatil171208@gmail.com>

18 Februari 2025 pukul 12.24

Kepada: Lazar Stošić <editor@ijcrsee.com>

Dear Editorial Team

we have made revisions to the final file. each improvement has been marked in yellow in the text. we hope that the file used for publication is the one we have sent.
thank you for your attention.

Best regards,

Hijrawatil Aswat.

[Kutipan teks disembunyikan]

 **finishd 3060-Article Text-12106-13487-18-20250217.docx**
1169K

1 Author's biographies

2 **Hijrawatil Aswat**^{1*}, Doctoral Programme in Elementary Education, Faculty of Education and Psychology, Graduate School, Yogyakarta State University, Special Region of Yogyakarta 55281, Indonesia.

3 Orcid: <https://orcid.org/0000-0003-3187-2533>  Date of birth: January 01, 1992. E-mail: hijrawatila.wat.2023@student.uny.ac.id , hijrawatil171208@gmail.com

4 **Edi Purwanta**², Departemen of Elementary Education, Faculty of Education and Psychology, Yogyakarta State University, Special Region of Yogyakarta 55281, Indonesia. Orcid: <https://orcid.org/0009-0004-0587-8354>  Date of birth: November 05, 1960. Email: edi_purwanta@uny.ac.id

5 **Muhammad Nur Wangid**³, Departemen of Elementary Education, Faculty of Education and Psychology, Yogyakarta State University, Special Region of Yogyakarta 55281, Indonesia. Orcid: <https://orcid.org/0000-0003-0348-9238>  Date of birth: January 15, 1966. Email: m_nurwangid@uny.ac.id

6 **Abdul Manaf**⁴, Center for Educational Research, Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Orcid: <https://orcid.org/0009-0001-9551-2986>  Date of birth: January 19, 1987. Email: abdu103@brin.go.id

7 **Hayadin Hayadin**⁵, Center for Educational Research, Badan Riset dan Inovasi Nasional, Jakarta, Indonesia. Orcid: <https://orcid.org/0000-0001-5762-7558>  Date of birth: February 29, 1972. Email: hayadin@brin.go.id

4.

**BUKTI KONFIRMASI
KEPUTUSAN EDITOR**

10 FEBRUARI 2025

3060 / Aswat et al. / Global Research Trends of Cyberbullying and the Metaverse in t

Library

Workflow

Publication

Submission

Review

Copyediting

Production

Round 1

2025-02-10 10:06 AM

Hijrawatil Aswat Irra:

We have reached a decision regarding your submission to International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Our decision is to: Accept Submission

Please, send us ORCID and year of birth for all authors (need for UDC). Also, find enclosed documents and send us signed version.

According to the information on the website

https://www.ijcrsee.com/index.php/ijcrsee/Article_processing_charge it is necessary to pay 500 euros in the name of processing and publishing papers. If you need, we can send you an invoice. Payment should be made within 7 days of receiving this message. Check during the payment of the transfer commission obligation. Please send us a copy of the payment receipt after payment.

If not, you can pay with next instructions:

Payment instructions:

University Business Academy, Faculty of Economics and Engineering Management in

Novi Sad, Serbia

IBAN: RS35265100000088276065

SWIFT: RZBSRSBG

Rajfajzen banka a.d. Beograd (Raiffeisen Bank),

Djordja Stanojevica 16, Beograd, Serbia

[International Journal of Cognitive Research in Science, Engineering and Education \(IJCRSEE\)](#)

ISSN 2334-8496 (Online)

[Inclusion of ORCID,](#) 2025-01-18 05:19 AM

[Full Author Names,](#)
[and Year of Birth](#)

- ▶ [Confirmation of supporting documents for Publication](#) 171208_hijrawatil_171208 - 0



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] Editor Decision

2 pesan

Dr. Lazar Stosic <editor@ijcrsee.com>

10 Februari 2025 pukul 17.06

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

Hijrawatil Aswat Irra:

We have reached a decision regarding your submission to International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE), "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Our decision is to: Accept Submission

Please, send us ORCID and year of birth for all authors (need for UDC). Also, find enclosed documents and send us signed version.

According to the information on the website https://www.ijcrsee.com/index.php/ijcrsee/Article_processing_charge it is necessary to pay 500 euros in the name of processing and publishing papers. If you need, we can send you an invoice. Payment should be made within 7 days of receiving this message. Check during the payment of the transfer commission obligation. Please send us a copy of the payment receipt after payment.

If not, you can pay with next instructions:

Payment instructions:

University Business Academy, Faculty of Economics and Engineering Management in Novi Sad, Serbia

IBAN: RS35265100000088276065

SWIFT: RZBSRSBG

Rajfajzen banka a.d. Beograd (Raiffeisen Bank),

[Djordja Stanojevica 16, Beograd, Serbia](#)

[International Journal of Cognitive Research in Science, Engineering and Education \(IJCRSEE\)](#)

ISSN 2334-8496 (Online)

2 lampiran

[C-Author statements.doc](#)
31K

[C-Copyright IJCRSEE.docx](#)
34K

Hijrawatil Aswat <hijrawatil171208@gmail.com>
Kepada: "Dr. Lazar Stosic" <editor@ijcrsee.com>

11 Februari 2025 pukul 06.02

Dear Dr. Lazar Stosic,

Thank you very much for your email and for accepting our submission to the International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE). We are delighted to receive this positive news.

We will promptly prepare and send the required documents, including ORCID and date of birth details for all authors. Additionally, we will proceed with the payment as soon as possible and provide a copy of the payment receipt upon completion.

Best regards,
Hijrawatil Aswat
Universitas Negeri Yogyakarta, Indonesia
+6282346989061

[Kutipan teks disembunyikan]

5.

**BUKTI KONFIRMASI
PENYELESAIAN TAHAP
EDITING DAN PROSES
PRODUKSI**

11 FEBRUARI 2025

3060 / Aswat et al. / Global Research Trends of Cyberbullying and the Metaverse in t

Library

Workflow

Publication

Submission

Review

Copyediting

Production

Notifications

X

[IJCRSEE] Editor Decision

2025-02-11 01:52 PM

Hijrawatil Aswat Irra:

The editing of your submission, "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database," is complete. We are now sending it to production.

Submission URL:

<https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submission/3060>

[International Journal of Cognitive Research in Science, Engineering and Education \(IJCRSEE\)](#)



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] Editor Decision

Dr. Lazar Stosic <editor@ijcrsee.com>

11 Februari 2025 pukul 20.52

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

Hijrawatil Aswat Irra:

The editing of your submission, "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database," is complete. We are now sending it to production.

Submission URL: <https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submit/3060>

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

6.

**BUKTI KONFIRMASI
LENGKAP DOKUMEN
PENDUKUNG PUBLIKASI**

12 FEBRUARI 2025

3060 / Aswat et al. / Global Research Trends of Cyberbullying and the Metaverse in t

Library

Workflow

Publication

Submission

Review

Copyediting

Production

Round 1

Round 1 Status

Submission accepted.

Notifications**Messages**

Note

From

Dear Dr. Lazar Stosic,

171208_hijrawatil_171208

2025-02-12 02:30 PM

I hope you are doing well. Thank you for the update regarding the editorial process of my manuscript.

I would like to confirm that I have completed all the necessary requirements for publication, including:

1. Payment of the publication fee
2. Completion and submission of the Copyright Transfer Agreement
3. Completion and submission of the Author Statements
4. Submission of ORCID and Year of Birth

I also hope that my manuscript can be published in Volume 13, Issue 1, April 2025.

I truly appreciate your cooperation and support, and I look forward to the publication of my article.

Best regards,
Hijrawatil Aswat

 [Payment of the publication fee.pdf](#)

 [C-Copyright IJCRSEE.docx](#)

 [C-Author statements-2.docx](#)

 [Author's Orcid & Year of Birth.docx](#)



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] Editor Decision

Hijrawatil Aswat <hijrawatil171208@gmail.com>
Kepada: "Dr. Lazar Stosic" <editor@ijcrsee.com>

12 Februari 2025 pukul 21.27

Dear Dr. Lazar Stosic,

I hope you are doing well. Thank you for the update regarding the editorial process of my manuscript.

I would like to confirm that I have completed all the necessary requirements for publication, including:

1. Payment of the publication fee
2. Completion and submission of the Copyright Transfer Agreement
3. Completion and submission of the Author Statements
4. Submission of ORCID and Year of Birth

I have attached these documents to this email for your further review. I also hope that my manuscript can be published in Volume 13, Issue 1, April 2025.

I truly appreciate your cooperation and support, and I look forward to the publication of my article.

Best regards,

Hijrawatil Aswat

[Kutipan teks disembunyikan]

4 lampiran

Payment of the publication fee.pdf
908K

C-Copyright IJCRSEE.docx
43K

C-Author statements-2.docx
36K

Author's Orcid & Year of Birth.docx
29K

7.

**BUKTI PENGIRIMAN
NASKAH VERSI AWAL
UNTUK PUBLIKASI (FINAL
VERSION) OLEH EDITOR**

17 FEBRUARI 2025

Participants

Dr. Lazar Stosic (Istosic)

Hijrawatil Aswat Irra (171208_hijrawatil_171208)

Messages

Note	From
Dear Dr. Hijrawatil Aswat Irra, in the attachment is the first version of your article. Please, check it carefully and inform us that this version can be published. Also, we marked two references with red color, DOI is still not valid.	Istosic 2025-02-17 01:33 PM
Editorial team	
 01 Global Research Trends of Cyberbullying and the Metaversepdf	
▶ Dear Editorial Team we have made revisions to the final file. each improvement has been marked in yellow in the text. we hope that the file used for publication is the one we have sent. thank you for your attention.	171208_hijrawatil_171208 2025-02-18 05:11 AM
Best regards, Hijrawatil Aswat.	
 finishd 3060-Article Text-12106-13487-18-20250217.docx	
Dear Dr. Hijrawatil Aswat Irra,	Istosic 2025-02-28 01:19 PM



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Dr. Lazar Stosic <editor@ijcrsee.com>

17 Februari 2025 pukul 20.35

Balas Ke: Lazar Stošić <editor@ijcrsee.com>

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

You have a new notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE):

You have been added to a discussion titled "Final version" regarding the submission "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Link: <https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submit/3060>

Lazar Stošić

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

8.

**BUKTI PENGIRIMAN
NASKAH FINAL YANG
TELAH DIREVISI OLEH
PENULIS**

18 FEBRUARI 2025

in the attachment is the first version of your article. Please, check it carefully and inform us that this version can be published. Also, we marked two references with red color, DOI is still not valid.

Editorial team

 01 Global Research Trends of Cyberbullying and the Metaversepdf

► Dear Editorial Team

we have made revisions to the final file. each improvement has been marked in yellow in the text. we hope that the file used for publication is the one we have sent. thank you for your attention.

171208_hijrawatil_171208

2025-02-18 05:11 AM

Best regards,

Hijrawatil Aswat.

 finishd 3060-Article Text-12106-13487-18-20250217.docx

Dear Dr. Hijrawatil Aswat Irra,

Istosic

Please, check this version and inform us if you find more mistakes.

2025-02-28 01:19 PM

Editorial team

 01 Global Research Trends of Cyberbullying and the Metaversepdf

► Dear Editorial Team,

171208_hijrawatil_171208

Thank you for submitting the final version of the manuscript. I have reviewed the document and found an error in the first author's email address. The correct email address is as follows:

2025-03-01 10:12 PM

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Hijrawatil Aswat <hijrawatil171208@gmail.com>

Kepada: Lazar Stošić <editor@ijcrsee.com>

18 Februari 2025 pukul 12.24

Dear Editorial Team

we have made revisions to the final file. each improvement has been marked in yellow in the text. we hope that the file used for publication is the one we have sent.

thank you for your attention.

Best regards,

Hijrawatil Aswat.

[Kutipan teks disembunyikan]

 **finishd 3060-Article Text-12106-13487-18-20250217.docx**
1169K

9.

**BUKTI EDITOR
MENGIRIMKAN VERSI
NASKAH UNTUK DICEK
KEMBALI**

28 FEBRUARI 2025

Best regards,

Hijrawatil Aswat.

 [finishd 3060-Article Text-12106-13487-18-20250217.docx](#)

Dear Dr. Hijrawatil Aswat Irra,

Istosic

2025-02-28 01:19 PM

Please, check this version and inform us if you find more mistakes.

Editorial team

 [01 Global Research Trends of Cyberbullying and the Metaversepdf](#)

▶ Dear Editorial Team,

171208_hijrawatil_171208

2025-03-01 10:12 PM

Thank you for submitting the final version of the manuscript. I have reviewed the document and found an error in the first author's email address. The correct email address is as follows:

- hijrawatilaswat.2023@student.uny.ac.id
- hijrawatil171208@gmail.com

In addition, in the Discussion section, in the discussion "The following is an explanation related to the research article document discussed," the researcher's name and title in point 1 are incomplete. It should be written as follows:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It"

I have circled the section in red in the attached document for easy checking. Please make corrections so that the information in the publication is more accurate. I appreciate the attention and cooperation of the editorial



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Dr. Lazar Stosic <editor@ijcrsee.com>

28 Februari 2025 pukul 20.20

Balas Ke: Lazar Stošić <editor@ijcrsee.com>

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

You have a new notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE):

There is new activity in the discussion titled "Final version" regarding the submission "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Link: <https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submit/3060>

Lazar Stošić

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

10.

**BUKTI KLARIFIKASI DAN
PEMBAHARUAN INFORMASI
NASKAH**

1 MARET 2025

Please, check this version and inform us if you find more mistakes.

Editorial team

 [01 Global Research Trends of Cyberbullying and the Metaversepdf](#)

► Dear Editorial Team,

171208_hijrawatil_171208

2025-03-01 10:12 PM

Thank you for submitting the final version of the manuscript. I have reviewed the document and found an error in the first author's email address. The correct email address is as follows:

- hijrawatilaswat.2023@student.uny.ac.id
- hijrawatil171208@gmail.com

In addition, in the Discussion section, in the discussion "The following is an explanation related to the research article document discussed," the researcher's name and title in point 1 are incomplete. It should be written as follows:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It"

I have circled the section in red in the attached document for easy checking. Please make corrections so that the information in the publication is more accurate. I appreciate the attention and cooperation of the editorial team in the editing process of this manuscript. Thank you for your efforts.

Best Regards,

Hijrawatil Aswat

 [3060-Article Text-12186-13571-18-20250228.pdf](#)

Dear Dr. Hijrawatil Aswat Irra,

Istosic

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Hijrawatil Aswat <hijrawatil171208@gmail.com>

Kepada: Lazar Stošić <editor@ijcrsee.com>

2 Maret 2025 pukul 05.24

Dear Editorial Team,

Thank you for submitting the final version of the manuscript. I have reviewed the document and found an error in the first author's email address. The correct email address is as follows:

- hijrawatilaswat.2023@student.uny.ac.id
- hijrawatil171208@gmail.com

In addition, in the Discussion section, in the discussion "The following is an explanation related to the research article document discussed," the researcher's name and title in point 1 are incomplete. It should be written as follows:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It"

I have circled the section in red in the attached document for easy checking. Please make corrections so that the information in the publication is more accurate. I appreciate the attention and cooperation of the editorial team in the editing process of this manuscript. Thank you for your efforts.

Best regards,
Hijrawatil Aswat

Pada Jum, 28 Feb 2025 pukul 19.20 Dr. Lazar Stosic <editor@ijcrsee.com> menulis:

[Kutipan teks disembunyikan]

 [3060-Article Text-12186-13571-18-20250228.pdf](#)
1805K

11.

**PERMINTAAN PENJELASAN
TAMBAHAN OLEH EDITOR
TERKAIT KUTIPAN
REFERENSI**

6 MARET 2025

Taxonomy, Impact, and the Hype around It"

I have circled the section in red in the attached document for easy checking. Please make corrections so that the information in the publication is more accurate. I appreciate the attention and cooperation of the editorial team in the editing process of this manuscript. Thank you for your efforts.

Best Regards,

Hijrawatil Aswat

 [3060-Article Text-12186-13571-18-20250228.pdf](#)

Dear Dr. Hijrawatil Aswat Irra,

Istosic

2025-03-06 10:11 AM

Give us full text for point 1 to insert it. We cannot

understand where and how to add:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It"

Editorial team

► To The Editorial Team,

171208_hijrawatil_171208

2025-03-07 04:35 AM

Thank you for your message. I appreciate the team's efforts in reviewing my manuscript.

Regarding point 1, I apologize for the confusion. I have identified an error on page 14 regarding point 1. The citation listed is incomplete because it does not include the author's name, year, and full title.

Incomplete Citation in the text:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Dr. Lazar Stosic <editor@ijcrsee.com>

6 Maret 2025 pukul 17.12

Balas Ke: Lazar Stošić <editor@ijcrsee.com>

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

You have a new notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE):

There is new activity in the discussion titled "Final version" regarding the submission "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Link: <https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submit/3060>

Lazar Stošić

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

12.

**PENULIS MEMBERIKAN
KLARIFIKASI KUTIPAN DAN
KONTEKS REDAKSIONAL**

7 MARET 2025

Dear Dr. Hijrawatil Aswat Irra,

Istosic

2025-03-06 10:11 AM

Give us full text for point 1 to insert it. We cannot understand where and how to add:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It"

Editorial team

► To The Editorial Team,

171208_hijrawatil_171208

Thank you for your message. I appreciate the team's efforts in reviewing my manuscript.

2025-03-07 04:35 AM

Regarding point 1, I apologize for the confusion. I have identified an error on page 14 regarding point 1. The citation listed is incomplete because it does not include the author's name, year, and full title.

Incomplete Citation in the text:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

as in the following image:

The main focus of the research based on thematic mapping reveals that the themes of cyberbullying, the metaverse, and computer crime are the primary focuses of the research, while virtual reality and escapism tend to decrease in relevance. The following is an explanation related to the research article document discussed:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.
2. Research (Upadhyay et al., 2023) "cyberbullying in the metaverse: A prescriptive perception on global information systems for user protection" shows the urgency of developing a virtual world user protection mechanism to deal with cybercrime, including cyberbullying in the metaverse.
3. Research (Grover et al., 2023) "Social Commerce and Metaverse in a New Virtual World: Exploring Women's Adoption Intentions" Her study contributes to revealing the potential of the metaverse as a social and economic platform, but is vulnerable to the threat of cyberbullying, especially among women.
4. Research (Pathak-Shelat and Mehta, 2023) "The Future of Higher Education in Ethical Metaverse: Co-existing in Virtually Enhanced Physical Reality" discusses the role of institutions in combating cyberbullying behavior in an ethical metaverse through an ethical-based approach by introducing

1. The citation listed is incomplete because it does not include the author's name, year, and full title.

Incomplete Citation in the text:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

as in the following image:

The main focus of the research based on thematic mapping reveals that the themes of cyberbullying, the metaverse, and computer crime are the primary focuses of the research, while virtual reality and escapism tend to decrease in relevance. The following is an explanation related to the research article document discussed:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.
2. Research ([Upadhyay et al., 2023](#)) "cyberbullying in the metaverse: A prescriptive perception on global information systems for user protection" shows the urgency of developing a virtual world user protection mechanism to deal with cybercrime, including cyberbullying in the metaverse.
3. Research ([Grover et al., 2023](#)) "Social Commerce and Metaverse in a New Virtual World: Exploring Women's Adoption Intentions" Her study contributes to revealing the potential of the metaverse as a social and economic platform, but is vulnerable to the threat of cyberbullying, especially among women.
4. Research ([Pathak-Shelat and Mehta, 2023](#)) "The Future of Higher Education in Ethical Metaverse: Co-existing in Virtually Enhanced Physical Reality" discusses the role of institutions in combating cyberbullying behavior in an ethical metaverse through an ethical-based approach by introducing

The correct citation should be:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend, but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

Please let me know if there is anything that needs to be clarified. I really appreciate the team's help in finalizing this manuscript.

Best Regards,

Hijrawatil Aswat

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Hijrawatil Aswat <hijrawatil171208@gmail.com>
Kepada: Lazar Stošić <editor@ijcrsee.com>

7 Maret 2025 pukul 11.59

To The Editorial Team,

Thank you for your message. I appreciate the team's efforts in reviewing my manuscript.

Regarding point 1, I apologize for the confusion. I have identified an error on page 14 regarding point 1. The citation listed is incomplete because it does not include the author's name, year, and full title.

Incomplete Citation in the text:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

as in the following image:

The main focus of the research based on thematic mapping reveals that the themes of cyberbullying, the metaverse, and computer crime are the primary focuses of the research, while virtual reality and escapism tend to decrease in relevance. The following is an explanation related to the research article document discussed:

1. Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.
2. Research (Upadhyay et al., 2023) "cyberbullying in the metaverse: A prescriptive perception on global information systems for user protection" shows the urgency of developing a virtual world user protection mechanism to deal with cybercrime, including cyberbullying in the metaverse.
3. Research (Grover et al., 2023) "Social Commerce and Metaverse in a New Virtual World: Exploring Women's Adoption Intentions" Her study contributes to revealing the potential of the metaverse as a social and economic platform, but is vulnerable to the threat of cyberbullying, especially among women.
4. Research (Pathak-Shelat and Mehta, 2023) "The Future of Higher Education in Ethical Metaverse: Co-existing in Virtually Enhanced Physical Reality" discusses the role of institutions in combating cyberbullying behavior in an ethical metaverse through an ethical-based approach by introducing

The correct citation should be:

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend, but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

Please let me know if there is anything that needs to be clarified. I really appreciate the team's help in finalizing this manuscript.

Best Regards,

Hijrawatil Aswat

13.

**EDITOR MENGIRIMKAN
VERSI FINAL UNTUK
PEMERIKSAAN AKHIR**

7 MARET 2025

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend, but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

Please let me know if there is anything that needs to be clarified. I really appreciate the team's help in finalizing this manuscript.

Best Regards,

Hijrawatil Aswat

Dear Dr. Hijrawatil Aswat Irra,

Istosic

2025-03-07 10:35 AM

Please, check again this version and inform us if you find more mistakes.

Editorial team

 [01 Global Research Trends of Cyberbullying and the Metaversepdf](#)

► Dear Editorial Team,

171208_hijrawatil_171208

Thank you for your revision. After reviewing it again, I did not find any further errors in this version. The manuscript is ready to proceed to the publication stage.

2025-03-08 02:31 AM

Best regards,

Hijrawatil Aswat



Hijrawatil Aswat <hijrawatil171208@gmail.com>

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Dr. Lazar Stosic <editor@ijcrsee.com>

7 Maret 2025 pukul 17.36

Balas Ke: Lazar Stošić <editor@ijcrsee.com>

Kepada: Hijrawatil Aswat Irra <hijrawatil171208@gmail.com>

You have a new notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE):

There is new activity in the discussion titled "Final version" regarding the submission "Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis Using the Scopus Database".

Link: <https://www.ijcrsee.com/index.php/ijcrsee/authorDashboard/submit/3060>

Lazar Stošić

International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

ISSN 2334-8496 (Online)

14.

**PERSETUJUAN AKHIR ATAS
VERSI PUBLIKASI**

8 MARET 2025

1. Research (Kaur, G., et al., 2024) "A Comprehensive Review of Metaverse: Taxonomy, Impact, and the Hype around It" reveals that the metaverse is not only a trend, but also has the potential to change social interactions, including increasing the risk of cyberbullying. The study provides a theoretical foundation about the metaverse by developing a taxonomy and exploring its impact in general.

Please let me know if there is anything that needs to be clarified. I really appreciate the team's help in finalizing this manuscript.

Best Regards,

Hijrawatil Aswat

Dear Dr. Hijrawatil Aswat Irra,

Istosic

2025-03-07 10:35 AM

Please, check again this version and inform us if you find more mistakes.

Editorial team

 [01 Global Research Trends of Cyberbullying and the Metaversepdf](#)

► Dear Editorial Team,

171208_hijrawatil_171208

Thank you for your revision. After reviewing it again, I did not find any further errors in this version. The manuscript is ready to proceed to the publication stage.

2025-03-08 02:31 AM

Best regards,

Hijrawatil Aswat

[IJCRSEE] New notification from International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)

Hijrawatil Aswat <hijrawatil171208@gmail.com>

Kepada: Lazar Stošić <editor@ijcrsee.com>

8 Maret 2025 pukul 09.40

Dear Editorial Team,

Thank you for your revision. After reviewing it again, I did not find any further errors in this version. The manuscript is ready to proceed to the publication stage.

Best regards,

Hijrawatil Aswat

[Kutipan teks disembunyikan]

Workflow

Publication

Status: Published

This version has been published and can not be edited.

Title & Abstract

Contributors

Metadata

References

Galleys

Prefix

Examples: A, The

1. **What is the primary purpose of the following sentence?**

Title

Global Research Trends of Cyberbullying and the Metaverse in the Virtual World: Bibliometric Analysis



International Journal of Cognitive Research in Science, Engineering and Education (IJCRSEE)



[← Back to Submissions](#)

Abstract

Cyberbullying has evolved from a traditional form of bullying to a more complex digital form. One of the latest aspects of this development is the emergence of the metaverse as a new arena for cyberbullying behavior. This topic has received attention in research, signaling the need for in-depth studies to understand the impact and new mechanisms of existing challenges. The research aims to identify key trends and topics in the literature on cyberbullying and the metaverse, as well as to describe the productivity of countries, institutions, authors, and publication sources. Using bibliometric analysis, the study investigates the development of research in this field over the past few years. The PRISMA method was used in the document selection process, and nine documents

Save