

# Original Research Article

## A Scientometric Mapping of Indonesian Myth Research

---

### ABSTRACT

This study was carried out to investigate at previous studies themes related to Indonesian myth. So that it can map the trend of previous research themes and identify the topic of Indonesian myth that still have the opportunity to be investigated. This study utilized a descriptive methodology, which is carried out at Bina Nusantara University's Visual Communication Design Department between September 2022 and January 2023. This study uses scientometric analysis. The results study indicate that the trend production intend rapidly with the largest number published documents at 2021. Most dominant type of the publication is in article type with 67.1%. Archipel is the dominant publication source with 2 documents. The most productive countries, affiliations, and subject area in Indonesian myth research include the Indonesia with 31 documents, The Australian National University with 4 documents, and social sciences area with 45 documents. The visualization study indicate that the keywords implemented for the Indonesian myth study were categorized into ten clusters. From 2010 to 2020, these clusters act as the path map for Indonesian myth study. Additionally, depending on the visualization results, it is definite that there are still opportunities to perform studies on the topic of Indonesian myth using a wide - range of other themes and perspectives besides the terms previously depicted.

*Keywords: Indonesian, myth, scientometric, mapping, research*

### 1. INTRODUCTION

Indonesia is a country with a broad spectrum of cultures. The existing cultural pluralism derives from the diversity of ethnicities and races. People and culture are inextricably linked. Human activities and daily activities generate culture, which lives, believed, and is carried through generations. Culture, according to the Indonesians, originates from the term *buddhi-tunggal* or *buddhayah* (in Sanskrit), which implies the wisdom. Culture itself is classified into three categories based on its form: (1) culture as complex thoughts, ideas, norms, rules, and so on; (2) culture as structured behaviors or acts carried out by people in society; and (3) culture as things made by humans. [1]. The three aspects of the cultural form that emerge in Indonesian society are inextricably linked to human daily life. Mythology is one kind of culture that has emerged in Indonesia.

Myth is a stable or timeless human creation oriented from the past. Myth could be defined as a mythology narrative which is both oral and concrete. Myths emerge in people's daily lives in Indonesia as well. These developing myths continue to define the cultural values reflected in each subject's behaviors and tendencies. Consequently, myth has transformed into a type of cultural knowledge that is believed and practiced on a daily basis. Not only that, yet myths are engaged as a forms of education in the type of fairy tales or folk stories, which are considered ideologies yet are meant to advance specific cultural values, social norms, and beliefs. Myth is also used to stimulate creativity and the creation of ideas. Myth is created and used as a form of communication with a process of significance in order to ensure that it is accepted by reason [2].

Certain myths that act as instructional media, for example, are related to folk stories or fairy tales that were frequently told to adolescents. The story "Tan Nunggal and Bujang Nadi Dare Nandong," which originated in West Kalimantan, Indonesia, is one of the folktales that acts as a myth for educational purposes. The story depicts numerous concepts that are valuable to society and represent societal conduct and beliefs that are admirable [3]. Furthermore, myths frequently

function as rules or taboos to be followed by the society. Myths such as taboos, for example, are primarily directed towards pregnant women and concern foods, activities, and indications that should be avoided during pregnancy [4]. A lot of study has been done to understand the myths that exist in Indonesia, the majority being focused on investigating the significance behind these myths. Observing the meaning in order to uncover some common values embedded within it. These values include ethical values, religious values, educational values, artistic values, and cultural values. Meanwhile, the following characteristics of myths that have developed in Indonesia: (1) people believe them to be true stories; (2) the story is considered sacred and contains several good things; (3) the setting is in another world; (4) occurred in the past; (5) there are characters such as gods or demigods; and (6) the stories are sometimes unscientific. (7) The primary tale is about gods or heroes from the past; (8) the story's contents include interpretation; and (9) the story is told mysteriously. [4].

Previous studies to reveal the significance and value included in the myth itself encouraged the study of myth-related research in Indonesia. The studies were undertaken with the aim of finding new study themes linked to Indonesian myths that hadn't been yet investigated. Therefore the research trends regarding the Indonesia myth may be mapped and analyzed on a broad scale. As a reason, the scientometric method was applied to this study. This method is used to investigate research trends and mapping research on the topic of Indonesian myth that has previously been performed. The Scopus database was used as the data source. This is carried out to investigate research on the topic of Indonesian myth it has previously occurred in worldwide indexes. Thereby these findings can become a research gap for future research and be disseminated worldwide, which allows the advancement of studies regarding the topic of Indonesian myth.

## 2. METHODOLOGY

This study applies the scientometric method. Scientometric analysis is a method which is commonly used to investigate research distinctions and trends of certain research areas or subjects [5][6] The aim is to gain descriptive data on various publication themes related to Indonesian myth. Thus that the results of the analysis provide a big picture of trends, developments, and study opportunities in Indonesian myth research. Data is collected from the Scopus database, and the insights were visualized and analyzed. The Scopus database was considered since it is the world's greatest collection of many literature reports, with citations that offer abstracts or summaries of scientific material that has been properly reviewed [7]. The keywords "Indonesian myth" were used in the search (*TITLE-ABS-KEY: indonesian AND myth*). The search found 73 documents related to the topic of Indonesian myth. This insight is then visually and descriptively analyzed in order to obtain descriptive data on specific publication themes relating to Indonesian myth.

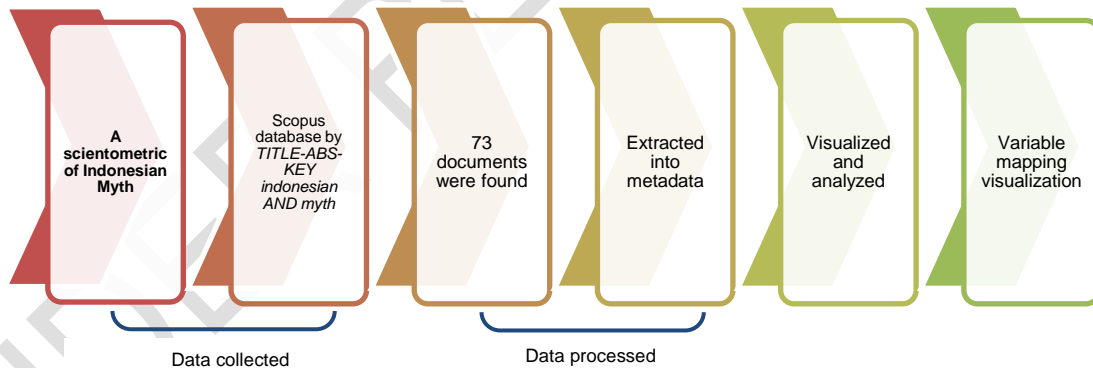
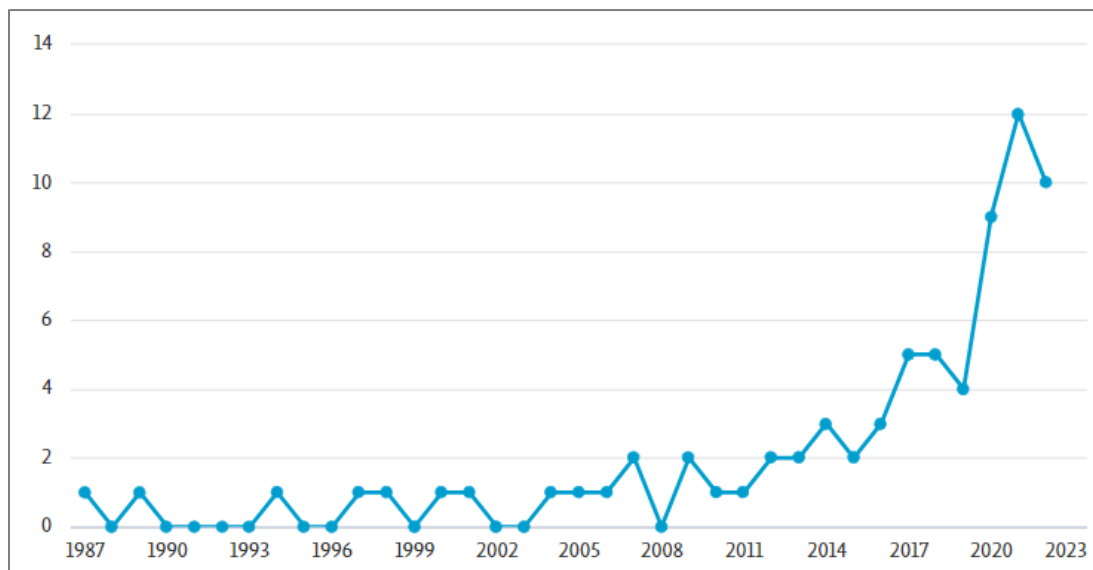


Fig. 1. The research process

### 3. RESULTS AND DISCUSSION

#### 3.1 RESULTS



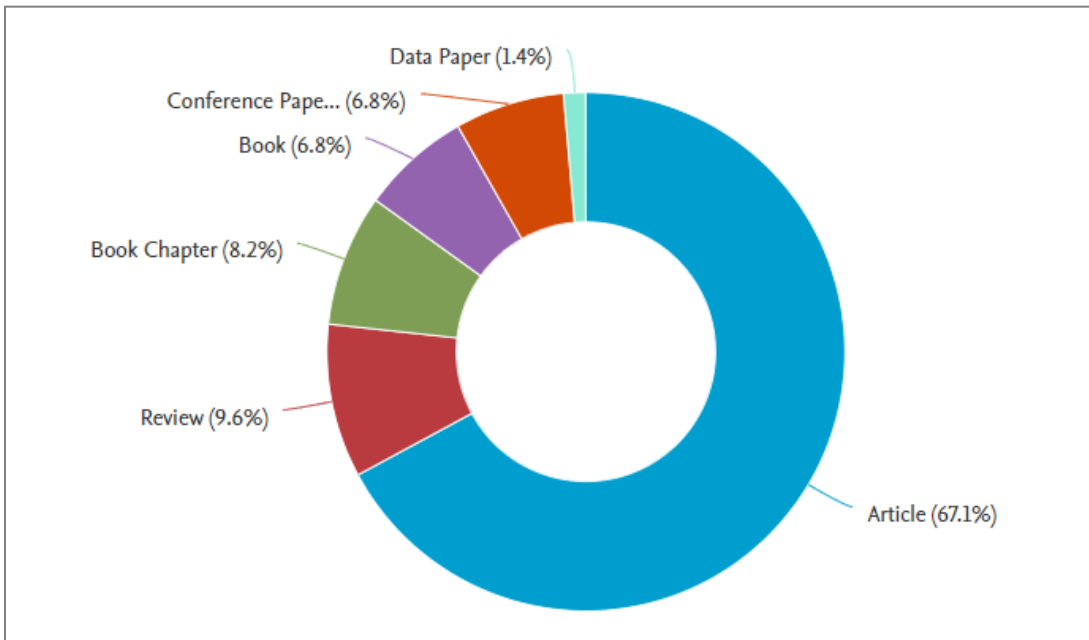
**Fig. 2. The numbers of documents based on per year publication of Indonesian myth research**

According to the data, research on Indonesian myth was indexed by Scopus from 1987 to 2022. The trend was advancing rapidly, with the largest number of published documents, at 12 documents in 2021 (Fig. 2). Table 1 shows the number of documents indexed in a single year.

**Table 1. Documents per year of Indonesian myth research**

Year	Documents	Year	Documents	Year	Documents
1987	1	2001	1	2015	2
1988	0	2002	0	2016	3
1989	1	2003	0	2017	5
1990	0	2004	1	2018	5
1991	0	2005	1	2019	4
1992	0	2006	1	2020	9
1993	0	2007	2	2021	12
1994	1	2008	0	2022	10
1995	0	2009	2		
1996	0	2010	1		
1997	1	2011	1		
1998	1	2012	2		
1999	0	2013	2		
2000	1	2014	3		

Source: Scopus, 2023



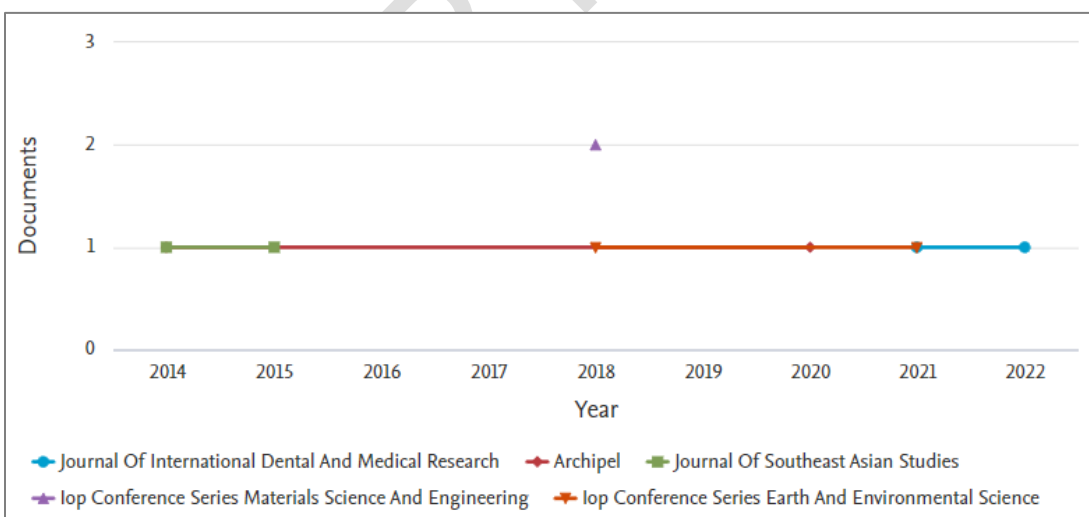
**Fig. 3. The numbers of documents based on publication type of Indonesian myth research**

Meanwhile, the 73 papers have been classified into several types. Article becomes the most dominant type of document, consisting to 49 documents (67.1%) (Fig. 3). Table 2 show the details for each quantity of document types.

**Table 2. Documents by type of Indonesian myth research**

Documents type	Total
Article	49
Review	7
Book Chapter	6
Book	5
Conference Paper	5
Data Paper	1

Source: Scopus, 2023



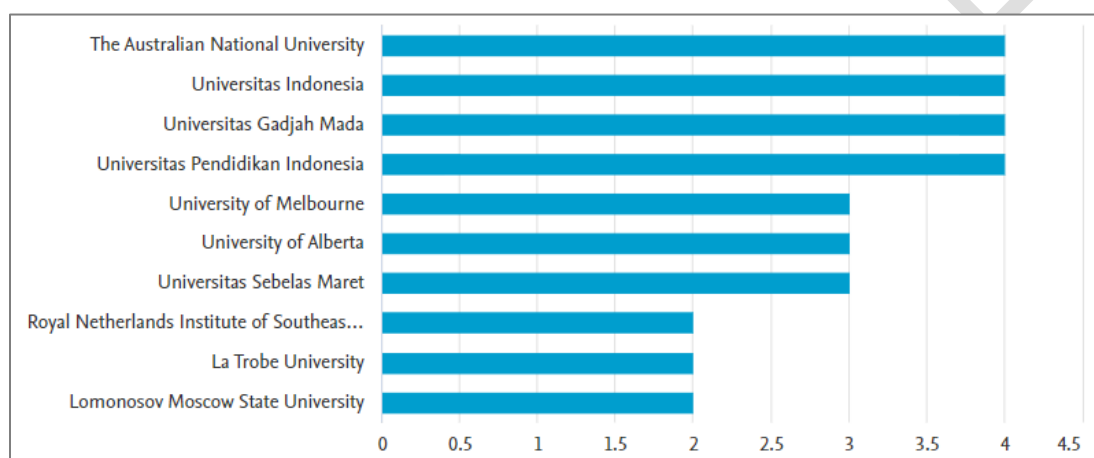
**Fig. 4. The numbers of documents based on publication source of Indonesian myth research**

A number of publications were identified regards to the Indonesian myth study. There are five sources of publishing with two papers for each during 2014-2022. (Fig. 4). Table 3 show the details for each quantity of publication sources.

**Table 3. Documents by publication source of Indonesian myth research**

Publication Source	Total
Archipel	2
IoP Conference Series Earth and Environmental Science	2
IoP Conference Series Materials Sciences and Engineering	2
Journal of International Dental and Medical Research	2
Journal of Southeast Asian Studies	2
Pertanika Journal of Social Sciences and Humanities	2
Anthropological Forum	1
Anthropos	1
Anthrozoos	1
Asia in Transition	1

Source: Scopus, 2023



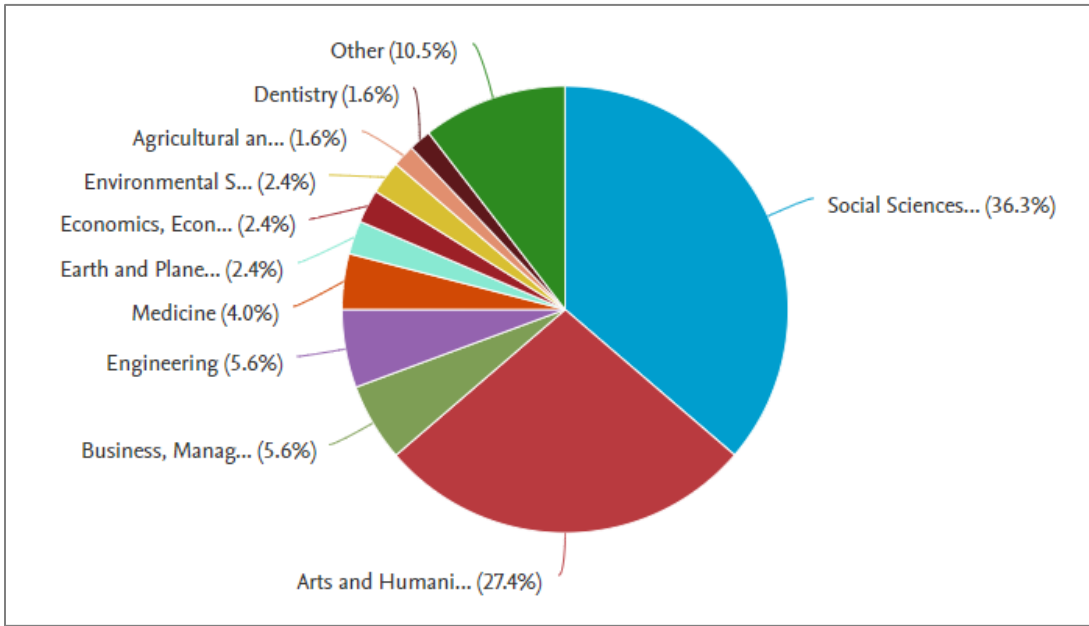
**Fig. 5. The numbers of documents based on affiliation of Indonesian myth research**

The number of affiliations with the number of indexed research documents related to Indonesian myth shows that there are 10 affiliations with the most documents (Fig. 5). The top five affiliations includes The Australian National University at the first with four documents. The Universitas Indonesia comes in second with four papers. Universitas Gadjah Mada comes in third with four papers. The Universitas Pendidikan Indonesia comes in fourth with four documents. And The University of Melbourne comes in fifth with 3 documents. Table 4 show the details for each quantity of the affiliation.

**Table 4. Documents by affiliation of Indonesian myth research**

Affiliation	Total
The Australian National University	4
Universitas Indonesia	4
Universitas Gadjah Mada	4
Universitas Pendidikan Indonesia	4
University of Melbourne	3
University of Alberta	3
Universitas Sebelas Maret	3
Royal Netherlands Institute of Southeast Asian and Caribbean Studies KITLV – KNAW	3
La Trobe University	2
Lomonosov Moscow State University	2

Source: Scopus, 2023



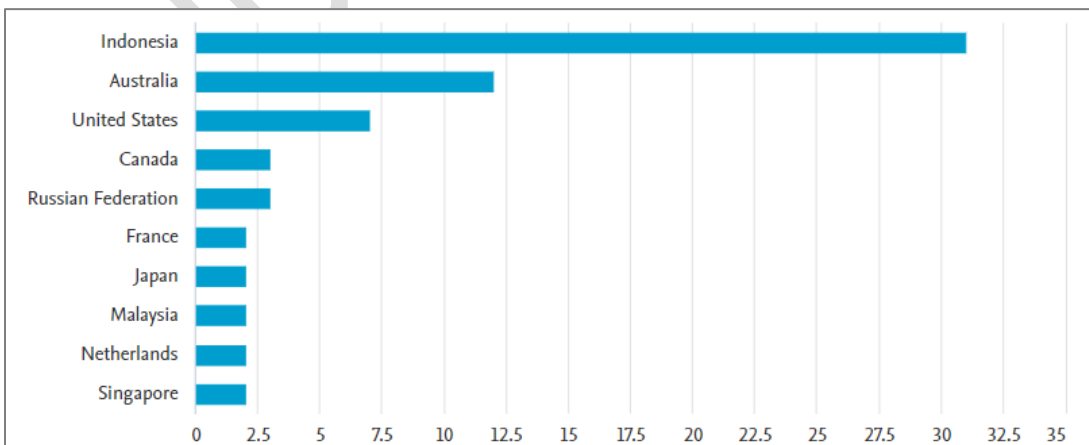
**Fig. 6. The numbers of documents based on research subject area of Indonesian myth research**

Related to the subject area of indexed Indonesian myth research, the dominant area is in the Social Sciences area of 36.3% with 45 documents. Then followed by the Arts And Humanities area of 27.4% with 34 documents. And other areas such as business, management and accounting, engineering, and others (Fig. 6). Table 5 show the details for each quantity of the subject area documents.

**Table 5. Documents by subject area of Indonesian myth research**

Subject Area	Total
Social Sciences	45
Arts and Humanities	34
Business, Management and Accounting	7
Engineering	7
Medicine	5
Earth and Planetary Sciences	3
Economics, Econometrics and Finance	3
Environmental Science	3
Agricultural and Biological Sciences	2
Dentistry	2

Source: Scopus, 2023



### Fig. 7. The numbers of documents based on country of Indonesian myth research

There are several countries with a dominant number of documents in Indonesian myth research (Fig. 7). These countries include Indonesia with 31 documents, Australia with 12 documents, United States with 7 documents, Canada with 3 documents, and Russian Federation with 3 documents. Table 6 show the details for each quantity of the countries documents.

**Table 6. Documents by country of Indonesian myth research**

Country	Total
Indonesia	31
Australia	12
United States	7
Canada	3
Russian Federation	3
France	2
Japan	2
Malaysia	2
Netherlands	2
Singapore	2

Source: Scopus, 2023

According to the most cited documents at the international level, there are 10 documents with a high citation level (Table 7). The book "Pretext for Mass Murder: The September 30th Movement and Suharto's Coup d'État in Indonesia" comes the most cited document with 241 citations [8].

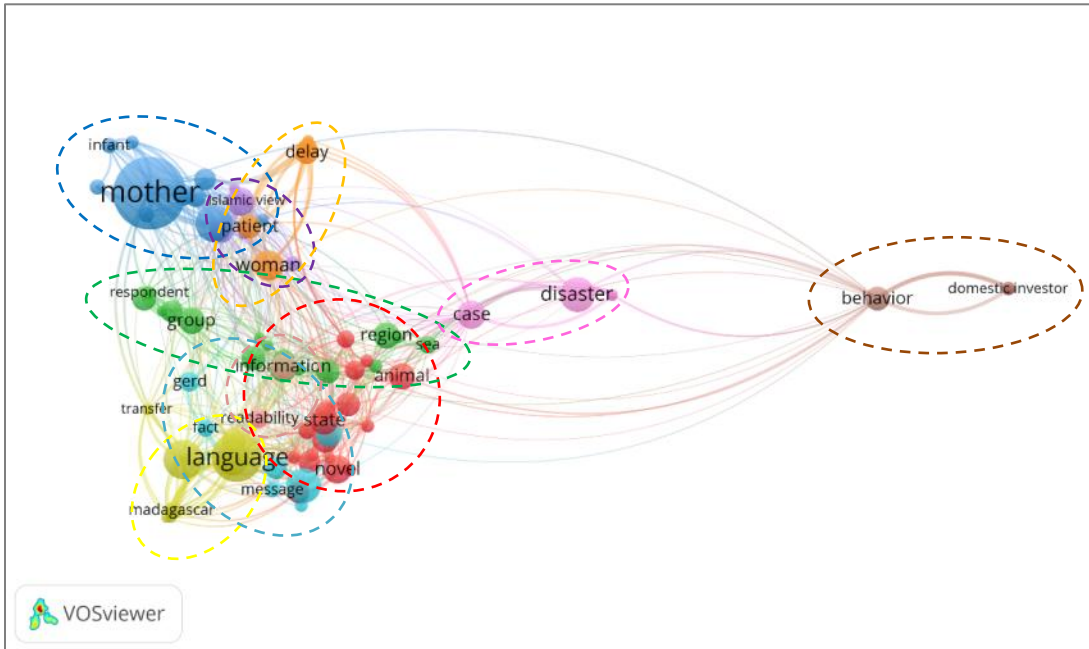
**Table 7. The most cited documents of Indonesian myth research**

Document Title	Year	Source	Cited
"Pretext for mass murder: The september 30th movement and Suharto's Coup d'État in Indonesia" [8]	2006	<i>Pretext for Mass Murder: The September 30th Movement and Suharto's Coup d'État in Indonesia</i> , pp. 1-329	141
"Barriers to utilization of postnatal care at village level in Klaten district, central Java Province, Indonesia" [9]	2017	<i>BMC Health Services Research</i> , 17(1),541	36
"Defining Indonesian Chineseness under the New Order" [10]	2004	<i>Journal of Contemporary Asia</i> , 34(4), pp. 465-479	33
"A genocide that never was: explaining the myth of anti-Chinese massacres in Indonesia, 1965–66" [11]	2009	<i>Journal of Genocide Research</i> , 11(4), pp. 447-465	26
"Responses to explosive volcanic eruptions by small to complex societies in ancient Mexico and central america" [12]	2012	<i>Surviving Sudden Environmental Change: Answers from Archaeology</i> , pp. 43-65	25
"Contemporary Wayang in global contexts" [13]	2007	<i>Asian Theatre Journal</i> , 24(2), pp. 338-369	24
"Myths, islamic view, and science concepts: The constructed education and knowledge of solar eclipse in Indonesia" [14]	2017	<i>Journal of Turkish Science Education</i> , 14(4), pp. 35-47	18
"Chinese Indonesians: Remembering, distorting, forgetting" [15]	2005	<i>Chinese Indonesians: Remembering, Distorting, Forgetting</i> , pp. 1-215	16
"Readability of sustainability reports: evidence from Indonesia" [16]	2020	<i>Journal of Accounting in Emerging Economies</i> , 10(4), pp. 621-636	14
"The myth of pluralism: Nahdlatul	2020	<i>Contemporary Southeast Asia</i> ,	14

Source: Scopus, 2023

### 3.2 DISCUSSION

After collecting the data, a visualization was built to map the previous research studies about Indonesian myth topics. There were 139 terms that fulfilled the criterion out of 2,742 keyword terms with a minimum of 5 occurrences. For each of the 139 terms a relevance score will be calculated. Based on this score, the most relevant terms will be selected and the number of terms to be selected is 83 terms (Fig. 8).

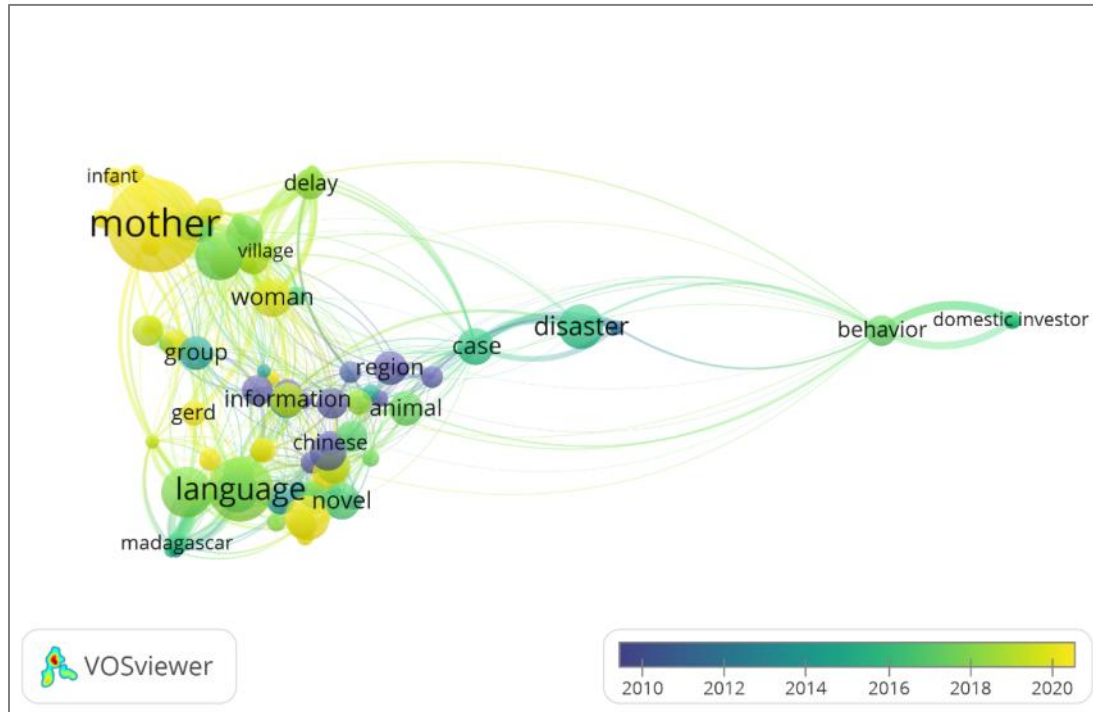


**Fig. 8. Network visualization of Indonesian myth research**

There were 10 clusters of research themes based on keywords related to Indonesian myths research. Table 8 show the details for each items based on the clusters.

**Table 8. The most cited documents of Indonesian myth research**

Cluster	Item
Red cluster	Included 18 items and dominated by keywords “state”, “novel”, and “animal”.
Green cluster	Included 16 items and dominated by keywords “group”, “conflict”, “region”, “sea”, and “infertility”.
Blue clusters	Included 10 items and dominated by keywords “mother”, “infant”, and “practice”.
Yellow clusters	Included 8 items and dominated by keywords “language”, “influence”, “evidence”, and “madagascar”.
Purple clusters	Included 7 items and dominated by keywords “solar eclipse”, “understanding”, and “science”.
Cyan clusters	Included 7 items and dominated by keywords “meaning”, “expression”, and “ideology”.
Orange clusters	Included 5 items and dominated by keywords “woman”, “delay”, and “breast cancer”.
Brown clusters	Included 4 items and dominated by keywords “behavior” and “domestic investor”.
Pink clusters	Included 4 items and dominated by keywords “disaster”, “case”, and “natural science”.
Peach clusters	Included 4 items and dominated by keywords “readability”,



**Fig. 9. Overlay visualization of Indonesian myth research**

Fig. 9 depicts the research theme trends that have emerged on the topic of Indonesian myth from year to year. Dark colors represent the oldest research, whereas bright colors represent the most recent advances in research themes. Although indexed papers have been known to exist since 1987, their quantities have just recently begun to stabilize. Based on the data and visualization results, it is clear that the theme of the Indonesian myth research topic still has a lot of possibilities. Discussions involving various themes and perspectives, such as social, cultural, artistic, and other perspectives, have yet to be discovered in the visualization results. So that these themes might be evolved into a proposed study that is novel on the topic of Indonesian myth.

#### 4. CONCLUSION

The results of this study indicate the position of the mapping and the common theme of Indonesian myth research. The research trend production intend rapidly with the largest number published documents at 2021. Most dominant type of the publication is in article type with 67.1%. Archipel is the dominant publication source with 2 documents. The most productive countries, affiliations, and subject area in Indonesian myth research include the Indonesia with 31 documents, The Australian National University with 4 documents, and social sciences area with 45 documents. The visualization study indicate that the keywords implemented for the Indonesian myth study were categorized into ten clusters. From 2010 to 2020, these clusters act as the path map for Indonesian myth study. Additionally, depending on the visualization results, it is definite that there are still opportunities to perform studies on the topic of Indonesian myth using a wide - range of other themes and perspectives besides the terms previously depicted.

#### REFERENCES

- [1] Mahdayeni, M. R. Alhaddad, and A. A. S. Saleh, “MANUSIA DAN KEBUDAYAAN,” *TADBIR: Jurnal Manajemen Pendidikan Islam*, vol. 7, no. 2, 2019.
- [2] S. Iswidayati, “The Function of Myth in Social Cultural Life of Its Supporting Community,” *Harmonia Jurnal Pengetahuan dan Pemikiran Seni*, vol. 8, no. 2, 2007.

- [3] Lizawati, "CERITA RAKYAT SEBAGAI SARANA PENDIDIKAN KARAKTER DALAM MEMBANGUN GENERASI LITERAT," *SeBaSa: Jurnal Pendidikan Bahasa dan Sastra Indonesia*, vol. 1, no. 1, May 2018.
- [4] Nasrimi, "Mitos-mitos dalam Kepercayaan Masyarakat," *Serambi Akademica Jurnal Pendidikan, Sains, dan Humaniora*, vol. 9, no. 11, 2021.
- [5] C. Lu *et al.*, "Knowledge Mapping of *Angelica sinensis* (Oliv.) Diels (Danggui) Research: A Scientometric Study," *Front Pharmacol*, vol. 11, Mar. 2020, doi: 10.3389/fphar.2020.00294.
- [6] Y.-B. Chen, X.-F. Tong, J. Ren, C.-Q. Yu, and Y.-L. Cui, "Current Research Trends in Traditional Chinese Medicine Formula: A Bibliometric Review from 2000 to 2016," *Evidence-Based Complementary and Alternative Medicine*, vol. 2019, pp. 1–13, Mar. 2019, doi: 10.1155/2019/3961395.
- [7] J. F. Burnham, "Scopus database: a review," *Biomed Digit Libr*, vol. 3, no. 1, p. 1, Dec. 2006, doi: 10.1186/1742-5581-3-1.
- [8] J. Roosa, *Pretext for mass murder: The september 30th movement and Suharto's Coup d'État in Indonesia*. University of Wisconsin Press, 2006. [Online]. Available: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84900129113&partnerID=40&md5=c16ab61d9b2c94842cc0c7f52be898ae>
- [9] A. Probandari, A. Arcita, K. Kothijah, and E. P. Pamungkasari, "Barriers to utilization of postnatal care at village level in Klaten district, central Java Province, Indonesia," *BMC Health Serv Res*, vol. 17, no. 1, 2017, doi: 10.1186/s12913-017-2490-y.
- [10] C. Chua, "Defining Indonesian Chineseness under the New Order," *J Contemp Asia*, vol. 34, no. 4, pp. 465–479, 2004, doi: 10.1080/00472330480000221.
- [11] R. Cribb and C. A. Coppel, "A genocide that never was: explaining the myth of anti-Chinese massacres in Indonesia, 1965–66," *J Genocide Res*, vol. 11, no. 4, pp. 447–465, 2009, doi: 10.1080/14623520903309503.
- [12] P. Sheets, "Responses to explosive volcanic eruptions by small to complex societies in ancient Mexico and central america," in *Surviving Sudden Environmental Change: Answers from Archaeology*, University Press of Colorado, 2012, pp. 43–65. [Online]. Available: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84893925969&partnerID=40&md5=bcb27f9f75345a2d82f22592a276de21>
- [13] M. I. Cohen, "Contemporary Wayang in global contexts," *Asian Theatre Journal*, vol. 24, no. 2, pp. 338–369, 2007, doi: 10.1353/atj.2007.0032.
- [14] N. Haristiani, T. Aryanti, A. B. D. Nandiyanto, and D. Sofiani, "Myths, islamic view, and science concepts: The constructed education and knowledge of solar eclipse in Indonesia," *Journal of Turkish Science Education*, vol. 14, no. 4, pp. 35–47, 2017, doi: 10.12973/tused.10211a.
- [15] T. Lindsey and H. Pausacker, *Chinese Indonesians: Remembering, distorting, forgetting*. Institute of Southeast Asian Studies, 2005. [Online]. Available: <https://www.scopus.com/inward/record.uri?eid=2-s2.0-84895018019&partnerID=40&md5=e3d3e6c1c0d39df1ac731e0145d295bd>
- [16] D. Adhariani and E. du Toit, "Readability of sustainability reports: evidence from Indonesia," *Journal of Accounting in Emerging Economies*, vol. 10, no. 4, pp. 621–636, 2020, doi: 10.1108/JAEE-10-2019-0194.
- [17] M. Mietzner and B. Muhtadi, "The myth of pluralism: Nahdlatul Ulama and the politics of religious tolerance in Indonesia," *Contemp Southeast Asia*, vol. 42, no. 1, pp. 58–84, 2020, doi: 10.1355/cs42-1c.