

# TRADITIONAL ART LEARNING: A BIBLIOMETRIC ANALYSIS IN THE SCOPUS DATABASE (August 2022)

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## **Abstrak**

The goal of this bibliometric analysis is to determine the general trend of publications. Larsen, P.O. and von Ins M.G. are the most influential authors. Routledge is the next most influential publication. The majority of the research on the issue of traditional art learning was backed by as many as 301 links. As novelty a result, this study invites researchers to dig deeper into the topic to boost the amount of research on traditional arts preservation.

*Keywords: Art; Bibliometric; Learning; Traditional.*

## **INTRODUCTION**

This study was conducted to determine how much research has been done on learning traditional arts. Based on the findings of this study, it is hoped that more research into the preservation of traditional arts through proper learning will be conducted in the future. Traditional art is an inherited heritage culture whose existence must be preserved despite the threat of extinction posed by the passage of time and technical advancements (Yang et al., 2018). One of the factors to examine is the importance of cultural preservation, as culture and traditional arts are resources that may be utilised effectively in community development (Zhang & Zhang, 2019). Traditional arts can be preserved as cultural heritage in a variety of ways, including by introducing and learning about these cultures to the community, particularly to the younger generation, who will be the successors and actors of these traditional cultural arts, to provide knowledge, belief, and learning about the importance of traditional arts (Nilson & Thorell, 2014). This is done so that the community has enough knowledge and can appreciate traditional arts as a priceless cultural heritage (Durham, 2013).

Traditional arts learning and cultural preservation are carried out to ensure the continuation of these arts. This is in response to a diminished sense of belonging and responsibility for the preservation of traditional arts. Of course, the local community, the government, and observers or experts in the field of culture are all accountable for the preservation of this culture (Hoang, n.d.).

To protect the world's artistic, cultural, and natural heritage, UNESCO issued a convention on the protection of the world's cultural and natural heritage, in the form of effective collective protection of the cultural and natural heritage of extraordinary universal value, which is held permanently and following modern science's method (*UNESCO World Heritage Centre - Convention Concerning the Protection of the World Cultural and Natural Heritage*, n.d.). As a result, UNESCO identified its culture, resulting in a list of countries with the greatest cultural heritage. **Figure 1** shows the ten countries with the most cultural heritage (*Countries With The Most UNESCO World Heritage Sites - WorldAtlas*, n.d.).

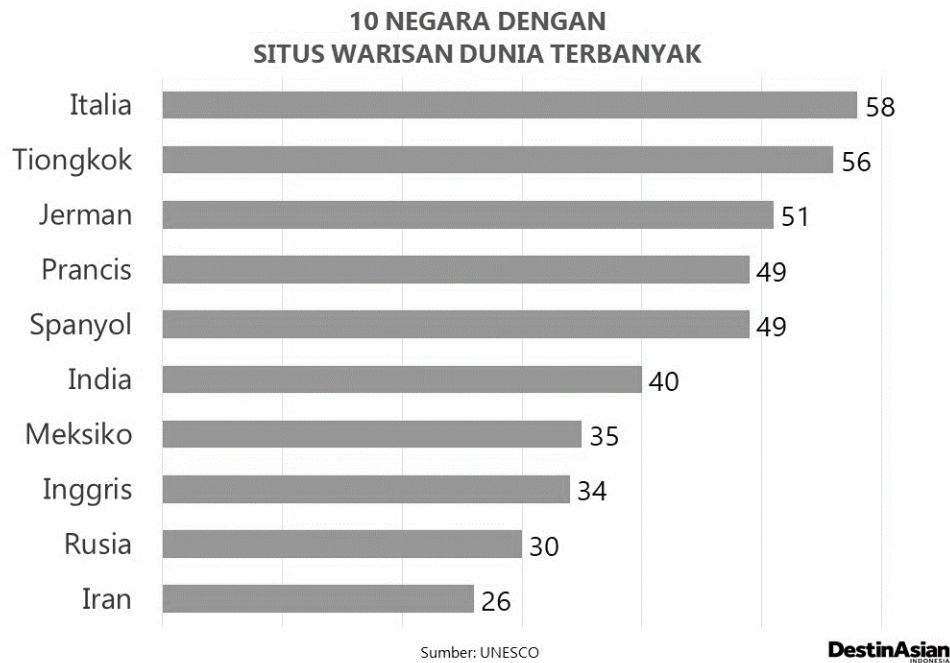


Figure 1. The 10 Countries with the Most Cultural Heritage

Cultural preservation efforts carried out by the community and the government do not always successful in preserving the arts and culture. The practice of copying prior cultural experiences, which are extremely different in the perspective of former generations and today's generations, is a crucial point in maintaining a tradition or sustaining a culture. In the past, culture imitation or replication was seen as part of a process (Ehteshami et al., 2020).

Many challenges and threats exist in the endeavour to maintain the natural culture, one of which is the most well-known, namely climate change, which has become a global hot topic.

Climate change is an ever-increasing threat to the world's cultural legacy, and it is the most rapidly threatening it (UNESCO World Heritage Centre - Convention Concerning the Protection of the World Cultural and Natural Heritage, n.d.). Cultural preservation is concerned not only with the preservation of that culture but also with the preservation of a culture that is maintained and maintained sustainably, resulting in a domino effect that benefits all parties involved, including local communities and the state in terms of revenue from tourist visits. **Table 1** and **Figure 2** show a list of the top ten tourist destinations based on global tourism rankings (*Top 10 Most Visited Countries in the World [Current\_date Format='Y']* » *Egypt Scholars*, n.d.).

Table 1. The Top 10 Most Visited Country in the World in 2022

No	Country	Visited (million)
1	France	90.0
2	Spain	83.7
3	United States	79.3
4	China	65.7
5	Italy	64.5
6	Turkey	51.2
7	Mexico	45.0
8	Thailand	39.8
9	Germany	39.6
19	United Kingdom	39.4

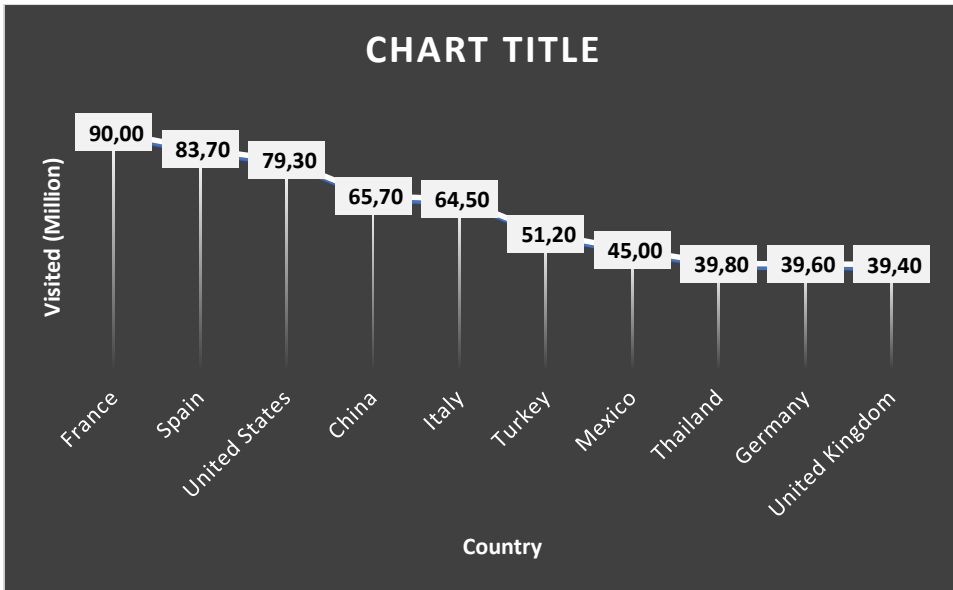


Figure 2. The 10 Most Visited Countries in the World in 2022

### RESEARCH METHODOLOGY

This study was conducted utilizing descriptive research methodologies and a bibliometric analytic strategy (Donthu et al., 2021) to search the Scopus database for 929 publications in the scientific literature. Bibliometric methods have been employed in a variety of fields and on a variety of themes in various nations (Bornmann et al., 2015), (Zacca-González et al., 2014). This strategy has been applied in a variety of areas, from medical to finance, to disclose development, influencers, and other facts on a variety of important topics (Devos & Menard, 2019), (Dong et al., 2019), (Khan et al., 2021), (Merediz-Solá & Bariviera, 2019), (Olczyk, 2016). This study focuses on numerical data or numbers that are processed using statistical methods in descriptive research to obtain a relevant overview of the issue under study. All information provided in articles, as well as scientific literature sources listed in the Scopus database, are included in the data collected for this study. Figure 3 shows a description of the approach followed in this investigation.

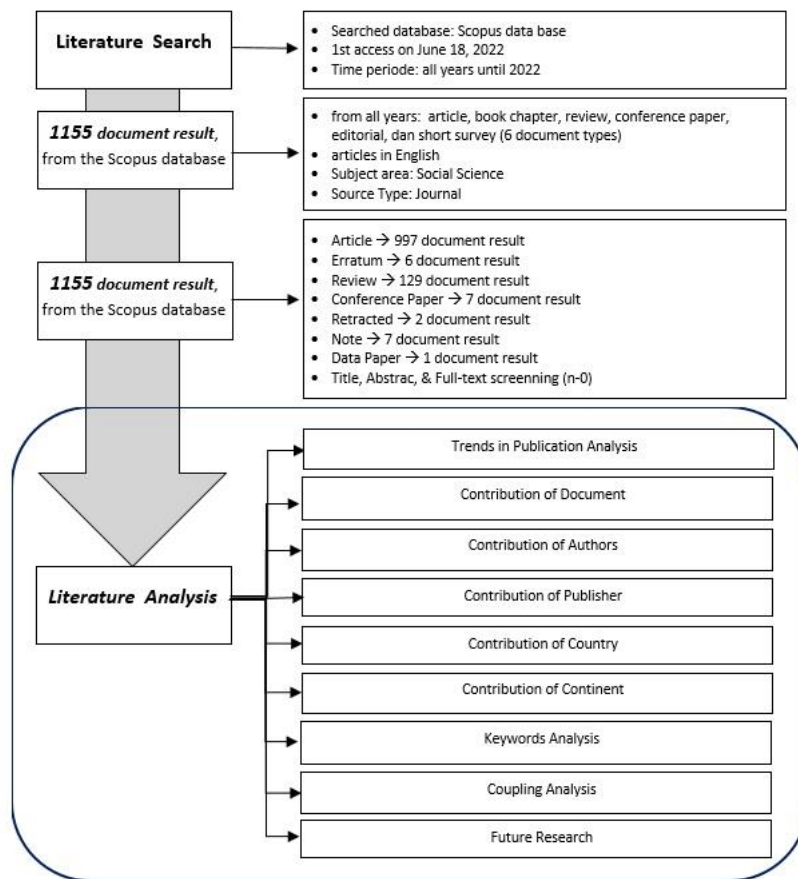


Figure 3. Retrieval Process

The Scopus database was used for this study because it includes a bigger number of indexed scientific publishing papers than other similar databases. This study employs bibliometric analysis, which includes the use of Excel and VOSviewer to examine trends and illustrate research findings. The data was presented and analyzed using the Scopus database and VOSviewer software. VOSviewer can produce maps based on network data, as well as visualize and study them (Mugabushaka et al., 2022).

On June 18, 2022, the scientific literature data utilized in this study was extracted from the Scopus database. A boolean operator search operation is used in the search strategy, which includes TITLE-ABS-KEY (traditional AND art) AND (LIMIT-TO (OA, "all")) AND (LIMIT-TO (SUBJAREA, "SOCI")) AND (LIMIT-TO (LANGUAGE, "English")) AND (LIMIT-TO (SRCTYPE, "j")).

The data is collected in the first stage from all accessible years. We utilize the term "traditional art learning" as a keyword or phrase to find articles that highlight the issue of traditional art learning in the context of sustaining traditional arts that are on the verge of extinction. The search was conducted in the title, abstract, and keyword sections of published publications for all years up to 2022, and 1155 documents were found using English in the Scopus database.

The next section examines the overall trend of scientific publications that focus on "traditional art learning," as well as several scientific publication metrics such as year of publication, author, citation, organization, document, publisher, and country. This research employs VOSviewer, Mendeley, and Excel software to analyze and visualize the network of authors, documents, organizations, countries, and keywords, as well as simultaneous analysis of networks between authors, citations, documents, organizations, countries, and keywords.

The novelty of this research is that it will provide data and trend information from the research literature that discusses "traditional art learning" as a reference in future research on the problem of the disappearance or extinction of traditional arts in society, with the expectation that it will also be

able to support the existence of ideas, ideas, and policy recommendations in the traditional arts preservation program.

## DISCUSSION AND RESULTS

### Trends in Publication Analysis

There were 1155 documents in the Scopus Database that fit the criteria for analysis in this study, based on publication papers connected to traditional art learning. The first published essay connected to traditional art learning, titled "On the enfeeblement of mathematical skills by current mathematics and similar soft intellectual rubbish in schools and universities," (Hammersley, 1968) was authored by Hammersley, J.M., according to VOSviewer and Mendeley, Kluwer Academic Publishers released it in 1968. This article highlights a problem with interpreting modern mathematics in terms of modern art: pure mathematicians should not experiment with contemporary mathematical art forms unless what they do in a university setting is not automatically taken as a template for society's mathematical needs or as the basis of a school syllabus.

#### Document Trends

The rise in publications is linked to the theme of conventional art education, as shown in Figure 4 from 1968 to 2022.

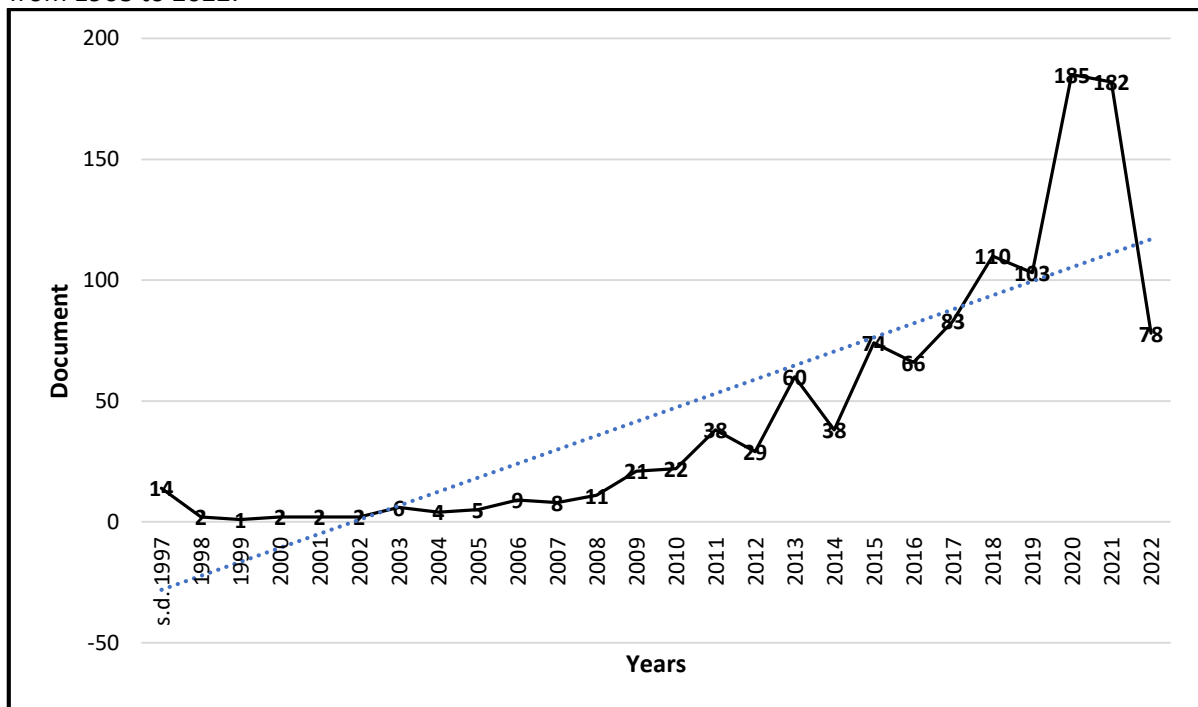


Figure 4: Scientific Publication Trends

The dotted line in Figure 4 depicts the trend of rising publications (in blue). From 1968 until 2002, authors and publishers paid little attention to publications about traditional art education. Only in 2003 did the publication's theme begin to attract the attention of authors and publishers, as evidenced by a rise in the number of publications. This will last until the year 2021. In 2009, 2011, 2013, 2015, 2017, 2018, and 2020, the number of publications increased significantly. Although there was a decline (3 documents) in 2021, the total number of publications was still relatively high, at 182. In addition, the number of publications decreased significantly in 2012, 2014, 2016, and 2019. Because the number of publications for a year will only be known at the end of December 2022, no analysis has been done for 2022.

#### Citation-Based Trends

The 1155 publications received a total of 12,412 citations based on the bibliometric metadata. In addition, as shown in Table 2, the number of citations can be split down by year, with graphical visualization in Figure 5.

Table 2. The Number of Times an Article Has Been Cited in A Given Year.

No	Year	Cited	%
1	s.d. 1997	774	6,24
2	1998	61	0,49
3	1999	104	0,84
4	2000	93	0,75
5	2001	199	1,60
6	2002	43	0,35
7	2003	136	1,10
8	2004	50	0,40
9	2005	441	3,55
10	2006	193	1,55
11	2007	157	1,26
12	2008	389	3,13
13	2009	369	2,97
14	2010	848	6,83
15	2011	674	5,43
16	2012	336	2,71
17	2013	765	6,16
18	2014	544	4,38
19	2015	1449	11,67
20	2016	754	6,07
21	2017	1079	8,69
22	2018	946	7,62
23	2019	712	5,74
24	2020	951	7,66
25	2021	317	2,55
26	2022	28	0,23

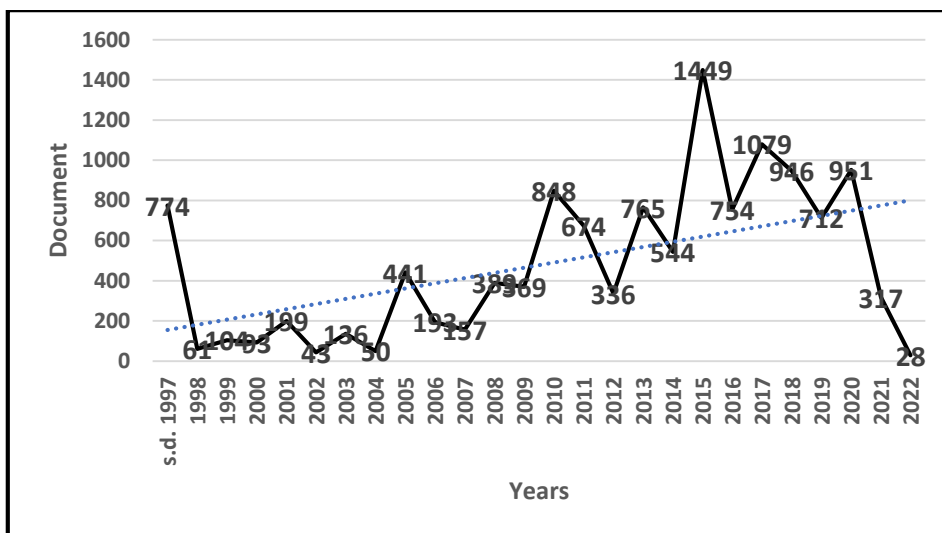


Figure 5. Citation PublicationTrend

The tendency may be seen in Figure 6 when looking at the quality of the paper by dividing the number of citations by the length of publication (years).

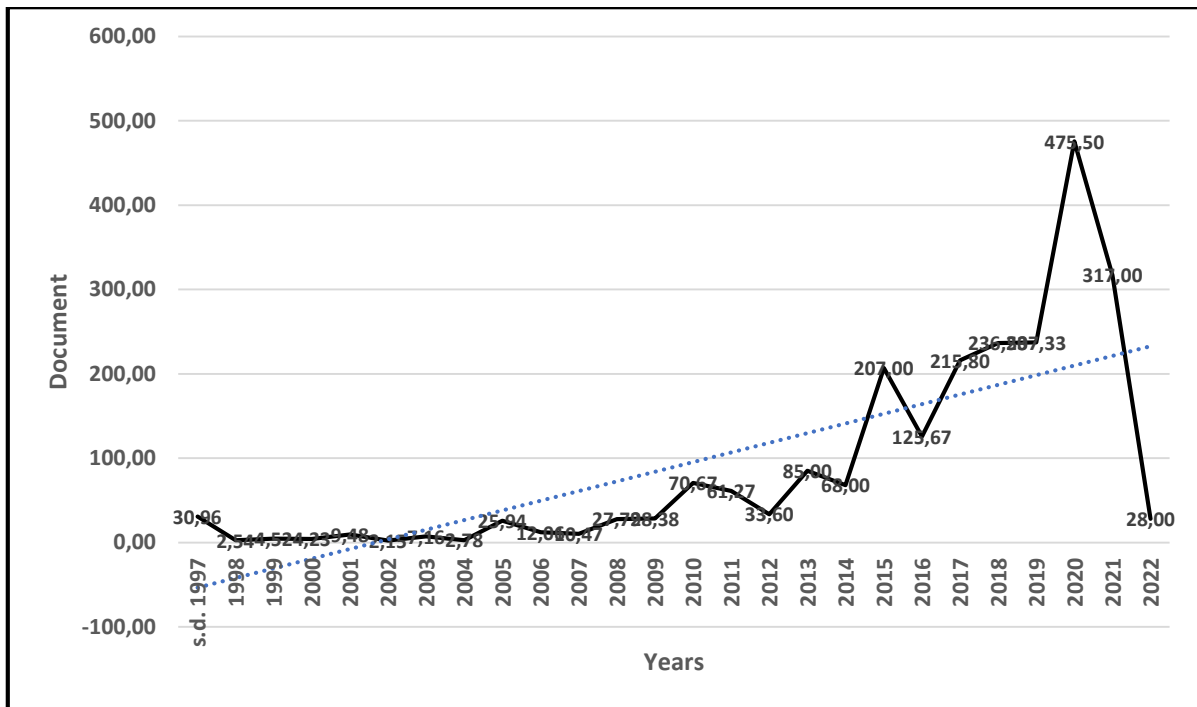


Figure 6. Citation Trends per Year

Figure 6 shows that the number of citations to articles increases year after year, as evidenced by the increase in citations until 2021. In 2005, 2010, 2013, 2013, 2015, and 2020, there was a considerable increase in the number of citations per year.

#### Trends Citation Quality Per Year

The ratio between the number of citations and the number of documents multiplied by 100 is the quality of citations per year. The magazine had a high quality paper (104,00) in 1999, i.e. one document of 104 pages. Table 3 shows the year-by-year quality of citations.

Table 3. Quality of Citation per Year

No	Year	Cited	QoC/Y*)
1	s.d. 1997	774	55,29
2	1998	61	30,50
3	1999	104	104,00
4	2000	93	46,50
5	2001	199	99,50
6	2002	43	21,50
7	2003	136	22,67
8	2004	50	12,50
9	2005	441	88,20
10	2006	193	21,44
11	2007	157	19,63
12	2008	389	35,36
13	2009	369	17,57
14	2010	848	38,55
15	2011	674	17,74
16	2012	336	11,59
17	2013	765	12,75
18	2014	544	14,32
19	2015	1449	19,58
20	2016	754	11,42

21	2017	1079	13,00
22	2018	946	8,60
23	2019	712	6,91
24	2020	951	5,14
25	2021	317	1,74
26	2022	28	0,36

QoC/Y=the number of citations divided by the number of documents

### Contribution of Document

This analysis included 1155 documents, which were divided into seven categories: 997 articles, 7 conference papers, 1 data paper, 6 erratum, 7 notes, 2 retracted documents, and 129 reviews (Figure 7).

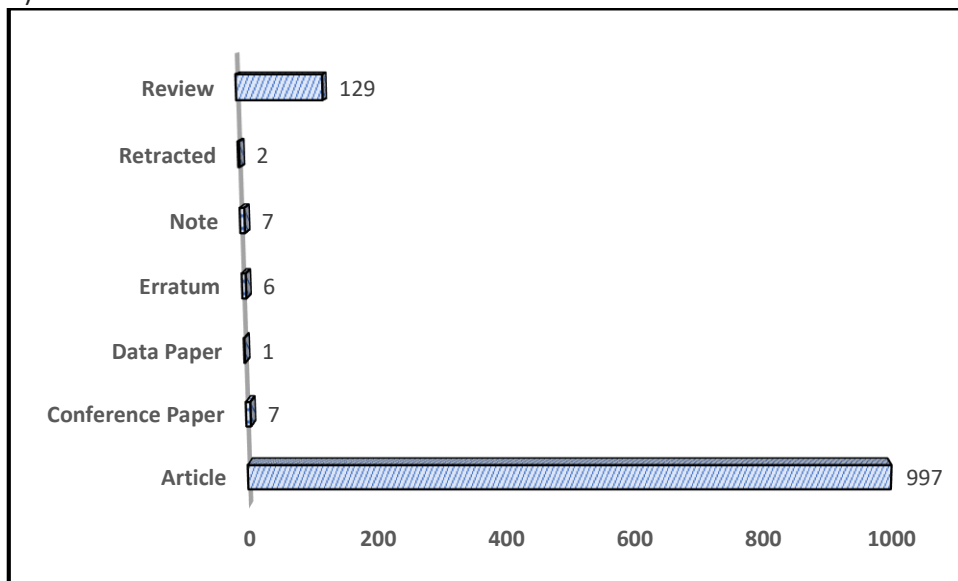


Figure 7. Document Type

There were 12,412 citations in total for the 1155 documents. After ranking the citations on documents, it was discovered that 71 documents received at least one citation out of a total of 12412 citations. Ten documents received more than 150 citations out of the 71 that were the most impactful (Table 4).

Table 4. The 22 Most Influential Articles

No	Title	Authors	Year	Citation
1	The rate of growth in scientific publication and the decline in coverage provided by science citation index	Larsen P.O., von Ins M.	2010	542
2	Planning for conjunctive goals	Chapman D.	1987	457
3	Automatic deception detection: Methods for finding fake news	Conroy N.J., Rubin V.L., Chen Y.	2015	432
4	Short-term forecasting of passenger demand under on-demand ride services: A spatio-temporal deep learning approach	Ke J., Zheng H., Yang H., Chen X.M.	2017	333
5	Methodology and indicators of economy-wide material flow accounting: State of the art and reliability across sources	Fischer-Kowalski M., Krausmann F., Giljum S., Lutter S., Mayer A., Bringezu S.,	2011	307



		Moriguchi Y., Schütz H., Schandl H., Weisz H.		
6	Cultural industries and cultural policy	Hesmondhalgh D., Pratt A.C.	2005	271
7	Combining hazard, exposure and social vulnerability to provide lessons for flood risk management	Koks E.E., Jongman B., Husby T.G., Botzen W.J.W.	2015	250
8	A Meta-Analysis of State-of-the-Art Electoral Prediction From Twitter Data	Gayo-Avello D.	2013	175
9	Pharmacy education and practice in 13 middle eastern countries	Kheir N., Zaidan M., Younes H., El Hajj M., Wilbur K., Jewesson P.J.	2008	171
10	Relationships between fauna and people and the role of ethnozoology in animal conservation	Alves R.R.N.	2012	167
11	Spaceborne, UAV and ground-based remote sensing techniques for landslide mapping, monitoring and early warning	Casagli N., Frodella W., Morelli S., Tofani V., Ciampalini A., Intrieri E., Raspini F., Rossi G., Tanteri L., Lu P.	2017	142
12	Patent scope and innovation in the software industry	Cohen J.E., Lemley M.A.	2001	141
13	Review of vision-based steel surface inspection systems	Neogi N., Mohanta D.K., Dutta P.K.	2014	138
14	Supporting Self-Regulated Learning in Online Learning Environments and MOOCs: A Systematic Review	Wong J., Baars M., Davis D., Van Der Zee T., Houben G.-J., Paas F.	2019	138
15	Scarcity effects on desirability: Mediated by assumed expensiveness?	Lynn M.	1989	133
16	Some like it bad: Testing a model for perceiving and experiencing fictional characters	Konijn E.A., Hoorn J.F.	2005	125
17	Telecommuting and travel: state of the practice, state of the art	Mokhtarian P.L.	1991	118
18	Modeling the relationships among reading instruction, motivation, engagement, and achievement for adolescents	Guthrie J.T., Klauda S.L., Ho A.N.	2013	113
19	A survey on health monitoring systems for health smart homes	Mshali H., Lemlouma T., Moloney M., Magoni D.	2018	113

20	DL-Droid: Deep learning based android malware detection using real devices	Alzaylaee M.K., Yerima S.Y., Sezer S.	2020	111
21	Using Social Media and Mobile Technologies to Foster Engagement and Self-Organization in Participatory Urban Planning and Neighbourhood Governance	Kleinhans R., Van Ham M., Evans-Cowley J.	2015	109
22	Design as bricolage: Anthropology meets design thinking	Louridas P.	1999	104

It can be observed from Table 4 above that the article titled “The rate of growth in scientific publication and the decline in coverage provided by science citation index” (Larsen & von Ins, 2010) is the most influential piece, with 542 citations from the time it was published until the time this study was conducted. Furthermore, on the second rank, the most significant article is titled “Planning for conjunctive goals” (Chapman, 1987) with 457 citations. The most influential article on the third rank is titled “Automatic deception detection: Methods for finding fake news” (Conroy et al., 2015) with 432 citations.

Furthermore, 19 articles out of 1155 received a QoP/Y of greater than 15 when examined in terms of article quality per year (Table 5).

Table 5. The 19 Articles with The Most Influential Quality of Paper per Year

No	Title	Year	Citation	QoP/Y*
1	Short-term forecasting of passenger demand under on-demand ride services: A spatio-temporal deep learning approach	2017	333	66,60
2	Automatic deception detection: Methods for finding fake news	2015	432	61,71
3	DL-Droid: Deep learning based android malware detection using real devices	2020	111	55,50
4	Supporting Self-Regulated Learning in Online Learning Environments and MOOCs: A Systematic Review	2019	138	46,00
5	The rate of growth in scientific publication and the decline in coverage provided by science citation index	2010	542	45,17
6	From Bricks and Mortar to Remote Teaching: A Teacher Education Program’s Response to COVID-19	2020	76	38,00
7	Vision-based robotic grasping from object localization, object pose estimation to grasp estimation for parallel grippers: a review	2021	38	38,00
8	Combining hazard, exposure and social vulnerability to provide lessons for flood risk management	2015	250	35,71
9	Land use/land cover in view of earth observation: data sources, input dimensions, and classifiers—a review of the state of the art	2021	29	29,00
10	Spaceborne, UAV and ground-based remote sensing techniques for landslide mapping, monitoring and early warning	2017	142	28,40
11	A survey on health monitoring systems for health smart homes	2018	113	28,25

12	Methodology and indicators of economy-wide material flow accounting: State of the art and reliability across sources	2011	307	27,91
13	Real-time city-scale ridesharing via linear assignment problems	2019	64	21,33
14	A Meta-Analysis of State-of-the-Art Electoral Prediction From Twitter Data	2013	175	19,44
15	Fraud in animal origin food products: Advances in emerging spectroscopic detection methods over the past five years	2020	36	18,00
16	Plant-based alternatives to yogurt: State-of-the-art and perspectives of new biotechnological challenges	2021	18	18,00
17	Review of vision-based steel surface inspection systems	2014	138	17,25
18	Factors influencing peer learning and performance in MOOC asynchronous online discussion forum	2018	68	17,00
19	Relationships between fauna and people and the role of ethnozoology in animal conservation	2012	167	16,70

QoP/Y= the number of article citations divided by the age of the article

Table 5 shows that, based on the number of citations and the age of the citations, the article entitled "Short-term forecasting of passenger demand under on-demand ride services: A spatio-temporal deep learning approach" (Ke et al., 2017) With a score of 66.60, it was placed #1 in QoP/Y in 2017. In the second position, is an article titled "Automatic deception detection: Methods for finding fake news" (Conroy et al., 2015) With a rating of 55.50, it was released in 2015. The third position is taken by an article titled "DL-Droid: Deep learning based android malware detection using real devices" (Alzaylaee et al., 2020) With a rating of 46.00, it was released in 2020.

Looking at Tables 4 and 5 above, it appears that 14 articles have the greatest influence and receive the best QoP/Y (Table 6).

Table 6. The 14 Articles with The Highest Citation and QoP/Y

No	Title	Year	Citation	QoP/Y
1	Short-term forecasting of passenger demand under on-demand ride services: A spatio-temporal deep learning approach	2017	333	66,60
2	Automatic deception detection: Methods for finding fake news	2015	432	61,71
3	DL-Droid: Deep learning based android malware detection using real devices	2020	111	55,50
4	Supporting Self-Regulated Learning in Online Learning Environments and MOOCs: A Systematic Review	2019	138	46,00
5	The rate of growth in scientific publication and the decline in coverage provided by science citation index	2010	542	45,17
6	Combining hazard, exposure and social vulnerability to provide lessons for flood risk management	2015	250	35,71
7	Spaceborne, UAV and ground-based remote sensing techniques for landslide mapping, monitoring and early warning	2017	142	28,40
8	A survey on health monitoring systems for health smart homes	2018	113	28,25
9	Methodology and indicators of economy-wide material flow accounting: State of the art and reliability across sources	2011	307	27,91

10	A Meta-Analysis of State-of-the-Art Electoral Prediction From Twitter Data	2013	175	19,44
11	Review of vision-based steel surface inspection systems	2014	138	17,25
12	Relationships between fauna and people and the role of ethnozoology in animal conservation	2012	167	16,70
13	Cultural industries and cultural policy	2005	271	15,94
14	Using Social Media and Mobile Technologies to Foster Engagement and Self-Organization in Participatory Urban Planning and Neighbourhood Governance	2015	109	15,57

### Contributor of Authors

There were 2897 writers involved in the 1155 documents included in this study, according to VOSviewer. There was one author with five documents, three writers with four documents, ten authors with three documents, 66 authors with two documents, and 2831 authors with one document among the 1,897 authors. Table 7 shows 14 authors with three or more documents.

Table 7. The 14 Highest device author with most documents

No	Author	Document	Citation	Total Link Strength
1	Wang, J.	5	44	13
2	Wang, L.	4	48	19
3	Liu, X.	4	21	16
4	Kim, S.	4	2	9
5	Wang, Y.	3	36	13
6	Huang, X.	3	12	11
7	Liu, G.	3	15	8
8	May, S.K.	3	71	8
9	Bennett, D.	3	53	6
10	Wang, H.	3	10	6
11	Insoll, T.	3	33	4
12	Xu, L.	3	3	3
13	Chen, Y.	3	449	2
14	Lin, Z.	3	10	2

Table 7 shows that Wang, J. (5 documents) has the most citations in articles about "learning" and "traditional arts,". And then followed by 1) Wang, L. (4 documents) with 48 citations; 2) Liu, X. (4 documents) with 21 citations; 3) Kim, S. (4 documents) with 2 citations; 4) Wang, Y. (3 documents) with citations; 5) Huang, X. (3 documents) with 12 citations; 6) Liu, G. (3 documents) with 15 citations. Chen, Y. had the most citations among the 14 authors (449 from three papers), topping Wang, J. (44 from five documents) and Wang, L. (48 citations from 4 documents). Meanwhile, Wang, L. (19 TLS), the originator of Total Link Strength (TLS), defeated Wang, J. (13 TLS). Wang, J. has a lower TLS than Liu, X. (16 TLS).

### Contribution of Publisher

Through VOSviewer, it was discovered that 287 publishers were participating in this study of 1155 publications. There are 16 publications out of 287 that publish more than ten documents (Table 8).

Table 8. The 16 Publishers with the most documents

No	Publisher	Document	Cite Score 2021	SJR 2021	SNIP 2021
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1	Routledge	117	2,3	0.519	1.387
2	MDPI	102	5,0	0.664	1.310
3	SAGE Publication Ltd.	83	3,3	0.577	1.316
4	Elsevier	66	5,0	0.664	1.310
5	Springer	54	0,1	NA	NA
6	Taylor and Francis Inc.	39	0.7	0.127	0.352
7	BioMed Central	26	3.9	0.997	1.516
8	Canadian Center of Science and Education	21	NA	0.124	0.341
9	Blackwell Publishing Inc	19	2.3	0.763	0.924
10	Kassel University Press (International Association of Online Engineering)	19	3.8	0.632	1.414
11	Cambridge University Press	15	1.6	0.322	0.733
12	John Wiley and Sons Inc	15	1.1	0.219	0.394
13	Frontiers Media S.A.	13	3.4	0.544	1.000
14	Oxford University Press	13	7.7	3.811	3.503
15	Brill Academic Publishers (KITLV Press)	12	0.6	0.123	0.515
16	Emerald Group	12	3.0	NA	0.944

Table 8 shows that "Routledge" is the most influential publisher in terms of publication in this study, having published 117 publications. Routledge has a Cite Score of 2.3, an SJR of 0.519, and a SNIP of 1.387 in publishing.

#### Contribution of Country

Based on bibliometric metadata from the Scopus database, it was discovered that 90 nations contributed to the theme of this research, although one country was not detected in the Scopus database, leaving 89 countries to be examined. The number of documents in these Contribution countries exceeds the number of documents used in this study; this is because each document has many authors from several countries, hence VOSviewer detects more documents by country. Furthermore, out of the 116 countries, eight are the top contributors to publications with 50 or more documents (Table 9).

Table 9. Contribution of Country

No	Country	Documents	Citations	Total Link Strength
1	United States	203	2798	94
2	United Kingdom	188	2075	112
3	China	90	1203	48
4	Australia	64	1112	39
5	Italy	53	674	60
6	Netherlands	53	1067	52
7	Spain	52	514	38
8	Canada	50	856	33

The United States is the third-largest contributor to the most articles with the top rank, with 203 documents, 2798 citations, and 94 overall link strength, as shown in Table 8. With 188 documents, 2075 citations, and 112 total link strengths, the United Kingdom is ranked second. With 90 documents, 1203 citations, and 48 total link strengths, China takes third place.

With 203 papers, the United States is the most prolific contributor to articles, indicating that academics and publishing authors in Spain are paying more attention to the topic of traditional art learning than in other nations.

**Contribution of Continent**

Furthermore, the 89 countries are divided into Continental Regions based on their location on five continents (*5 Continent World Map Set Vector Download*, n.d.), with the African continent having 14 countries, the Americas having 12 countries, the Asian continent having 29 countries, the Australian continent having 2 countries, and the Continent of Europe having 32 countries (Table 10).

Table 10. Contribution of Continent

No	Continent	Country	%
1	Africa	14	15,73
2	America	12	13,48
3	Asia	29	32,58
4	Europe	32	35,96
5	Australia	2	2,25

In terms of the number of countries on each continent, it appears that conventional art learning publications by European authors outnumber those by authors from other continents (America, Asia, Africa, and Australia). This demonstrates that traditional art learning receives greater scholarly attention in developed countries, such as those in Europe than in developing countries, such as those in Asia and Africa. Developed countries such as the Americas and Australia, on the other hand, have not made this a research priority.

**Keyword Analysis**

A total of 6825 keywords were detected in this study's 1155 papers using VOSviewer. Furthermore, out of the 6825 keywords, 6784 have fewer than 10 occurrences, with 5692 having one occurrence, 573 having two occurrences, 237 having three occurrences, 120 having four occurrences, 61 having five occurrences, 29 having six occurrences, 23 having seven occurrences, 14 having eight occurrences, and 15 having nine occurrences. There are ten keywords for terms with more than 25 occurrences (Table 11).

Table 11. The 10 Keywords with The Most Occurrences

No	Keywords	Occurrence
1	human	81
2	humans	65
3	art	63
4	article	47
5	female	41
6	education	40
7	male	39
8	adult	36
9	learning	26
10	students	26

In addition, Network Visualization of Keywords is performed with a minimum of 4 occurrences, resulting in 323 keywords being displayed (Figure 8).

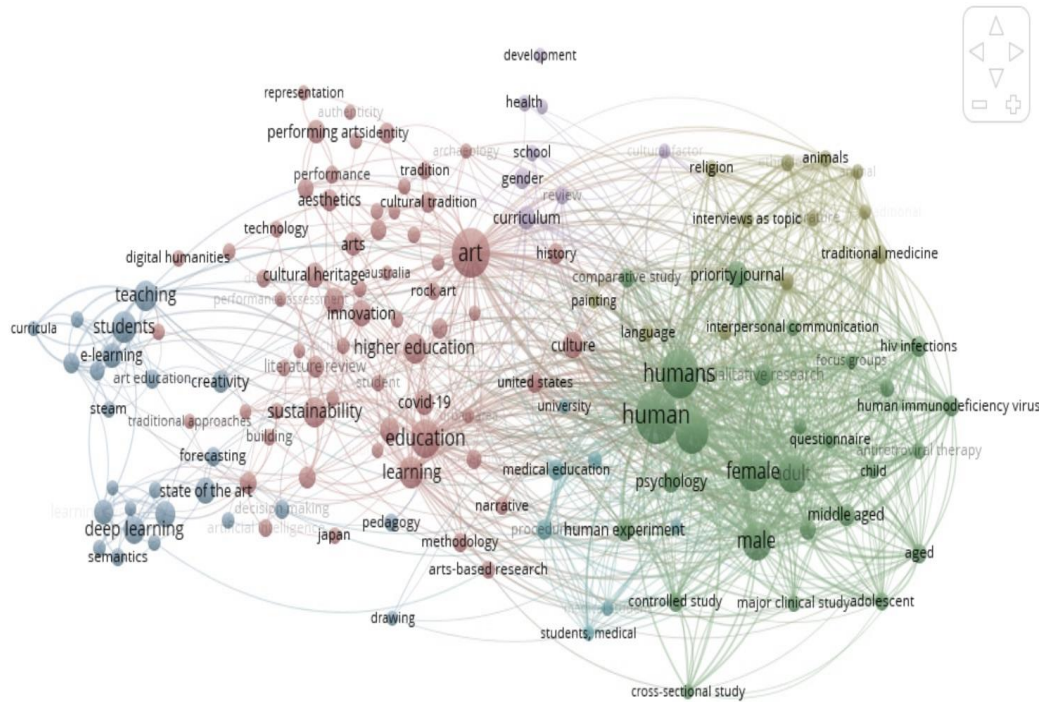


Figure 8. Keywords Network Visualization

Furthermore, the 323 keywords are separated into four clusters, with Cluster 1 in red having 110 items, Cluster 2 in green having 99 items, Cluster 3 in blue having 41 items, Cluster 4 in yellow having 33 items, Cluster 5 in purple having 22 items, and Cluster 6 in mint blue having 18 items.

In the keyword network, the six clusters are significantly connected, namely:

- 1) Cluster 1 has no dominant identity among the keywords. The keywords "education computing," "teaching," and "sustainable," each with 25 occurrences, and "deep learning," with 21 occurrences, are described with larger circles and identities. Art education, arts computers, digital art, e-learning, learning algorithms, learning systems, state of the art, and state-of-the-art methodologies are all keywords in this cluster (Figure 9).

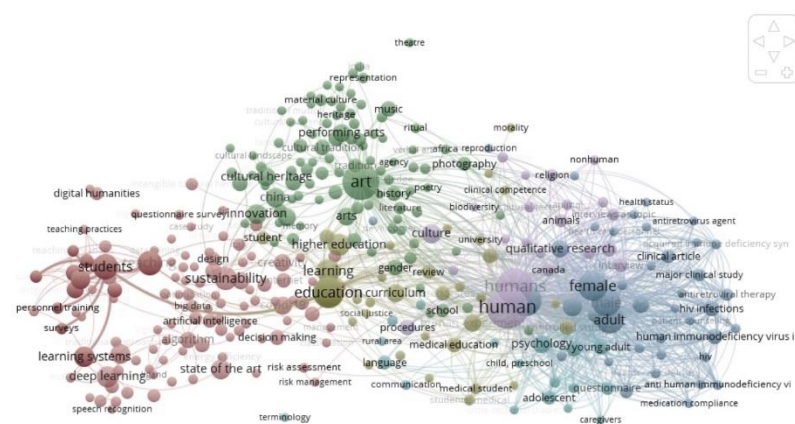


Figure 9. Keywords Network Visualization Cluster 1

- 2) Cluster 2 with the identity "art," indicating that the keyword "art" appears frequently in this cluster, which is distinguished by the circle and the greatest identity, among other things. The keyword "art" has 63 occurrences, significantly outnumbering keywords with only 20 or fewer occurrences. Art, arts, contemporary art, cultural heritage, cultural history, cultural identity, cultural influence, cultural landscape, cultural policy, cultural sustainability, cultural tradition, film, martial arts, material culture,



modern art, performing arts, rock art, traditional art, and verbal art are some of the keywords in this cluster (Figure 10).

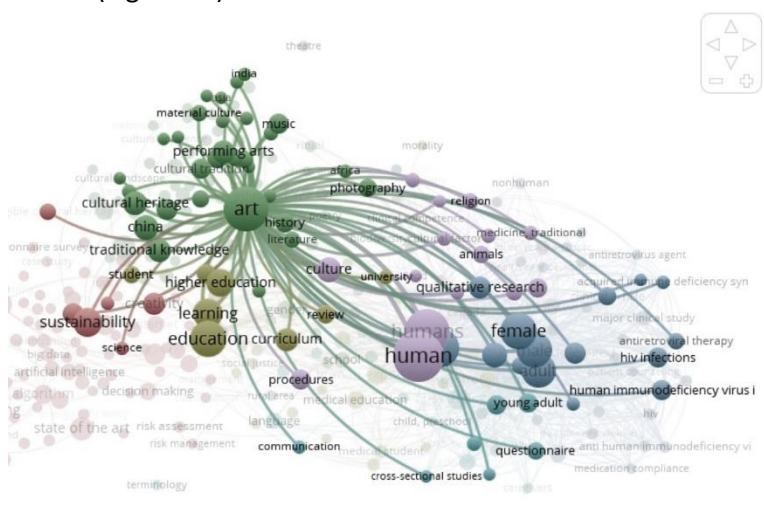


Figure 10. Keywords Network Visualization Cluster 2

- 3) Cluster 3 has 47 occurrences of the identification "article," which is the term that dominates its occurrence in this cluster, including adult, article, female, focus groups, health service, health status, hiv, male, marriage, middle age, politics, reproduction, sexual behaviour, and traditional healer are some of the key phrases in this cluster (Figure 11).

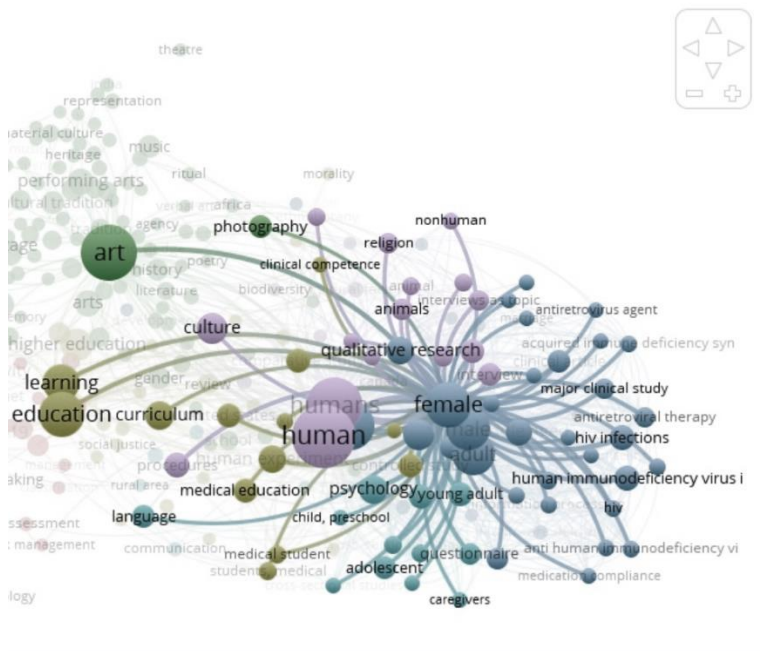


Figure 11. Keywords Network Visualization Cluster 3

- 4) Cluster 4 has 40 occurrences of the identification "education," which is the term that dominates its occurrence in this cluster. Accreditation, assessment, curriculum, emotion, empathy, ethics, liberal arts, morality, review, skill, student, and university are some of the keywords in this cluster (Figure 12).



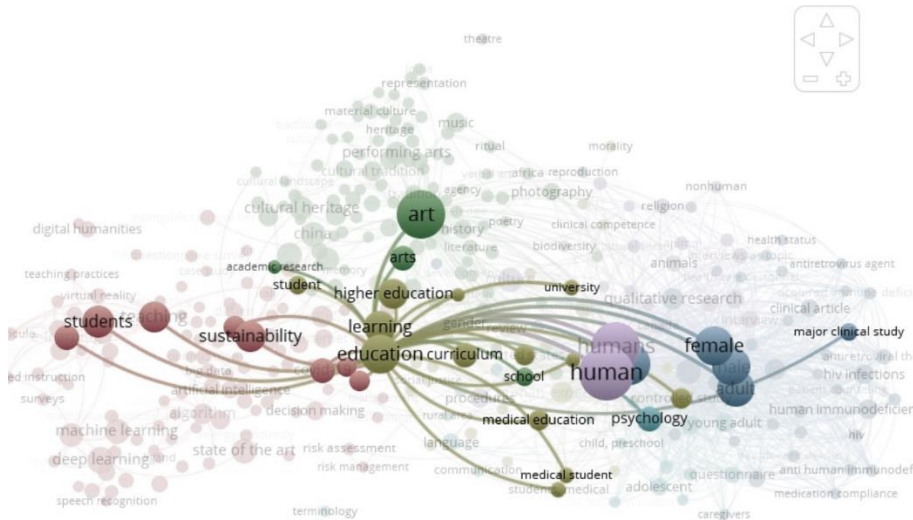


Figure 12. Keywords Network Visualization Cluster 4

- 5) Cluster 5, with 81 occurrences of the identifier "humans," is the term that dominates its occurrence in this cluster, and its occurrence is nearly matched by the keyword "humans," which has 65 occurrences. Animal, attitude, culture factor, ethnology, human, humans, interview, non-human, physiology, procedure, religion, and traditional medicine are some of the key phrases in this cluster (Figure 13).

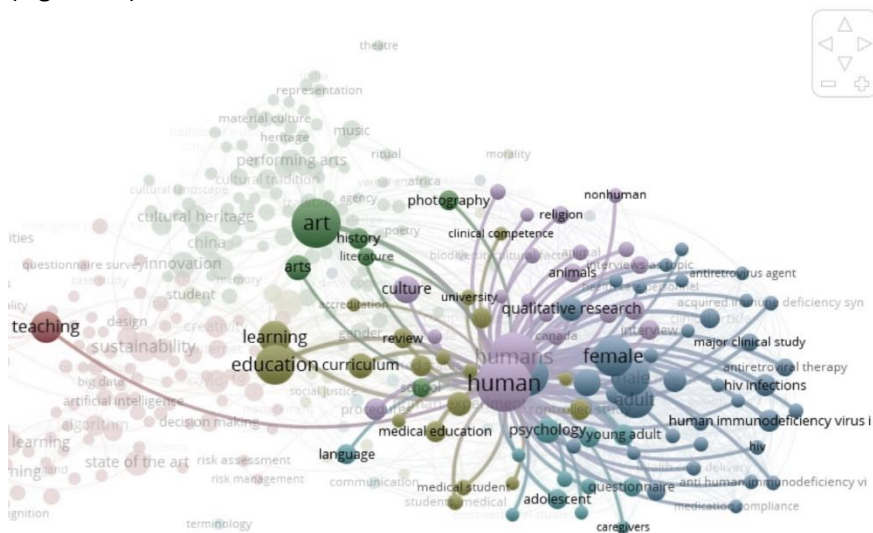


Figure 13. Keywords Network Visualization Cluster 5

- 6) The identification "language" has 9 occurrences in Cluster 6, and it is the term that dominates its occurrence in this cluster. The following keywords are included in this cluster: elderly, kid, cognition, communication, drawing, language, psychology, rural region, terminology, and young adult (Figure 14).

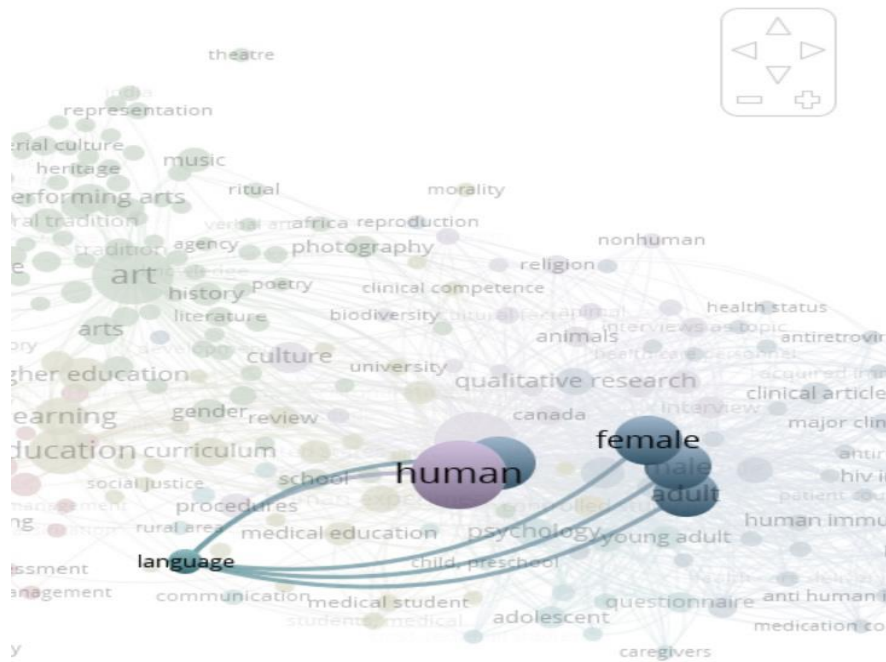


Figure 14. Keywords Network Visualization Cluster 6  
 Overlay Visualization Co-occurrence Keywords as Figure 15.

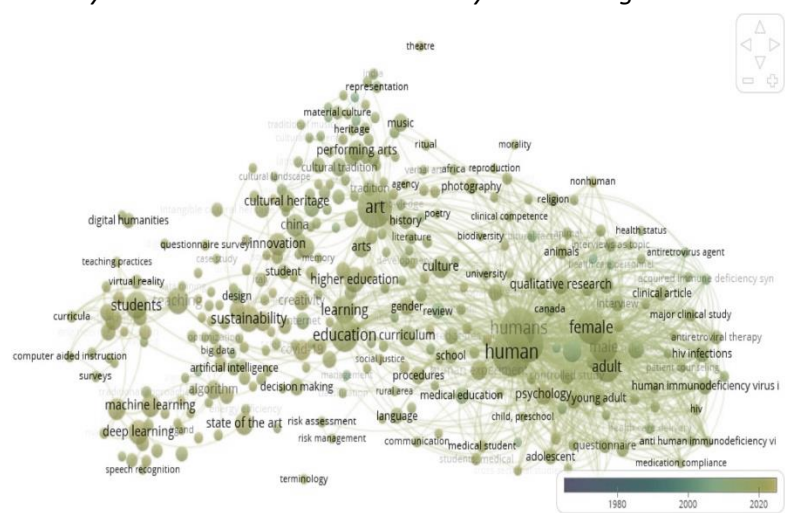


Figure 15. Overlay Visualization

As can be seen in Figure 15, the majority of the 1155 documents published in this study were published near or after 2020. The strong yellow colour that dominates the Overlay Visualization of the term network in this study demonstrates this. The lack of a circle emblem and a dark identification implies that very few publications were published before 2020.

Density Visualization Co-occurrence Keywords as Figure 16.

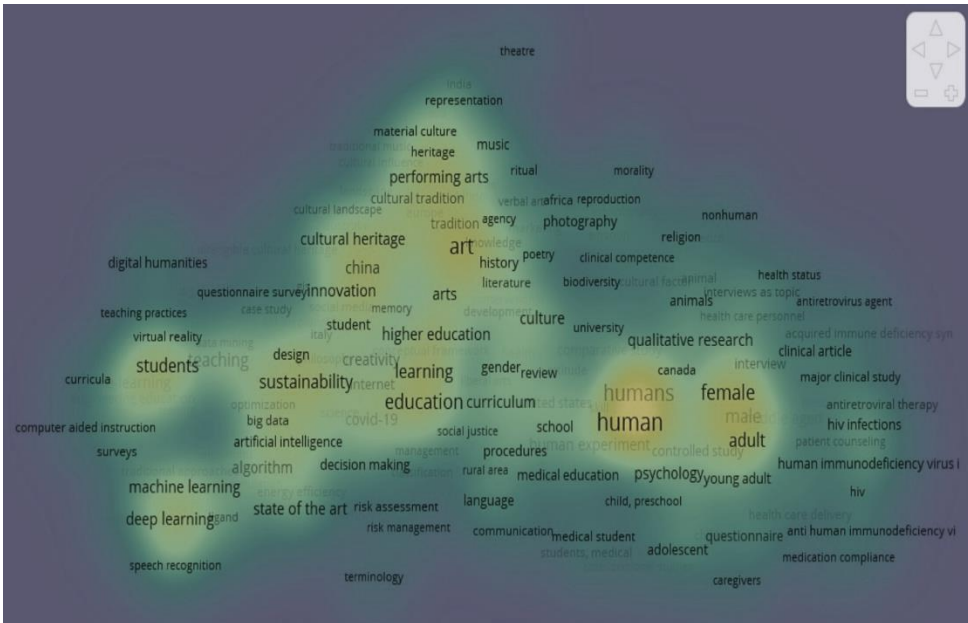


Figure16. Density Visualization

Keywords that dominate or appear frequently (such as art, human, female, learning, students, adult, and education) are highlighted in bright yellow in Figure 16. Keywords that come infrequently are denoted by darker residents).

### **Bibliometric Coupling Analysis**

The study is based on the notion of bibliographic coupling to obtain a more accurate image of the research issue under current conditions (Zhao & Strotmann, 2008). This study uses bibliometrics to examine four units of analysis: author, organization, document, and country.

#### **Authors' Coupling Analysis**

Coupling Analysis by Authors on 2897 authors involved in this publication using at least 2 occurrences found 80 authors grouped into 8 clusters, namely Cluster 1 in red consists of 19 items, Cluster 2 in green consists of 7 items, Cluster 1 in red consists of 19 items, Cluster 2 in green consists of 7 items, Cluster 1 in red consists of 19 items, Cluster 2 in green consists of 7 items Cluster 3 is blue and contains four items, Cluster 4 is yellow and contains three items, Cluster 5 is purple and contains three items, Cluster 6 is mint blue and contains three items, Cluster 7 is orange and contains two items, and Cluster 8 is brown. There are two pieces in this set. Furthermore, 14 of the 80 authors were able to create three or more documents, with nine authors achieving citations of 50 or more citations and as many as ten authors achieving TLS of 200 or more (Figure 17).

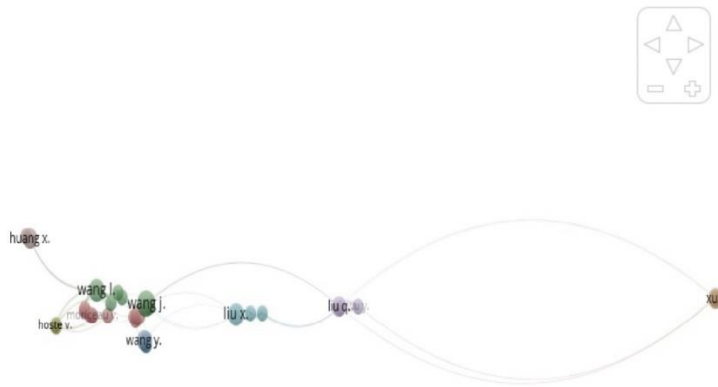


Figure 17. Coupling Analysis by Authors

The author clusters in this article are not significantly related to one another, as can be shown in Figure 17.

*Coupling Analysis by Organization*

The 1155 documents in this study involved 2104 author organizations, and they were all grouped into 57 clusters using VOSviewer, with the top 5 clusters containing more than 50 items, as shown in Figure 18. Cluster 1 in red (354 items), Cluster 2 in green (91 items), Cluster 3 in blue (68 items), Cluster 4 in yellow (66 items), and Cluster 5 in purple (63 items) are the top 5 clusters.

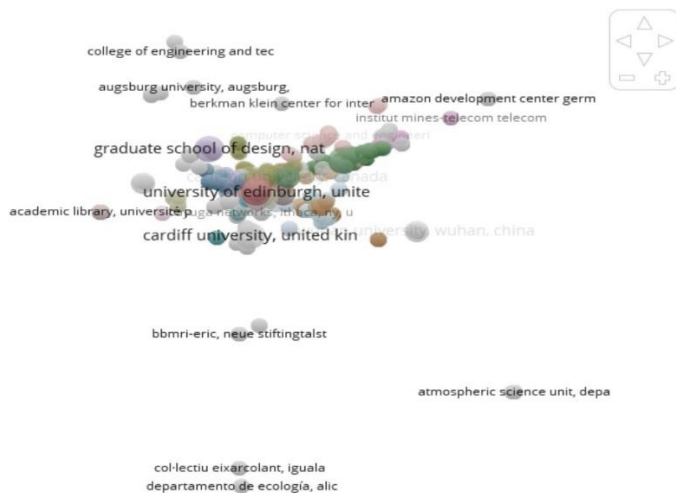


Figure 18. Analysis Coupling by Organization

Figure 18 shows that there is no substantial association between clusters in general, as evidenced by the lack of a clear link (network) between them.

*Coupling Analysis by Document*

VOSviewer with at least one network with other documents discovered 792 documents from 1155 documents in this study, which are organized into 28 clusters. Cluster 1 is red (32 items), Cluster 2 is green (25 goods), Cluster 3 is blue (23 items), Cluster 4 is yellow (22 items), Cluster 5 is purple (21 items), Cluster 6 is mint blue (20 items), and Cluster 7 is orange (20 things) are the seven clusters with the most items (with 20 or more) as shown in Figure 19.

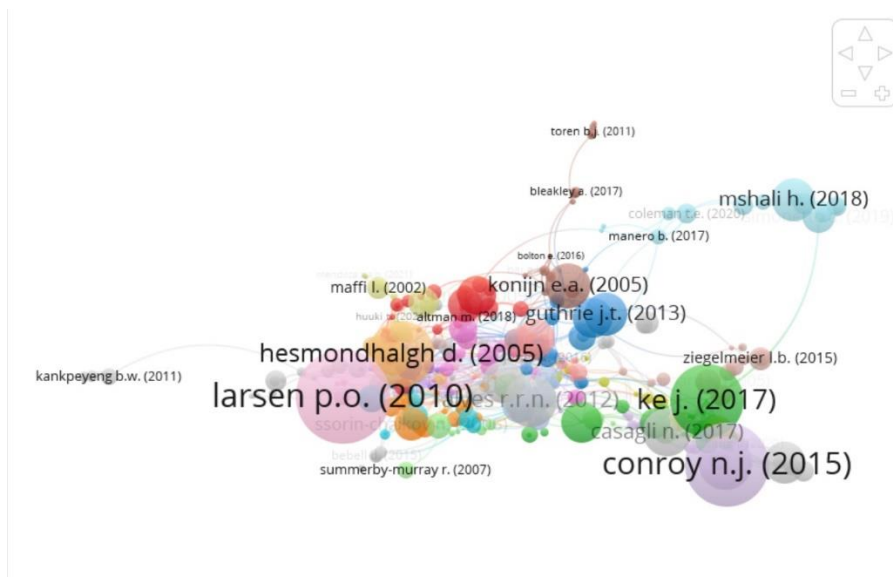


Figure 19. Analysis Coupling by Document

Figure 19 shows that there are eight dominating clusters, each identified by the size of the circle and the cluster identification, such as Cluster 18, which is light purple and has the identity "Larsen, P.O. (2010)" with a document titled "The rate of growth in scientific publication and the decline in coverage provided by Science Citation Index" (Larsen & von Ins, 2010), Cluster 14 is purple and has the identity "Conroy, N.J. (2015)" with a document titled "Automatic deception detection: Methods for finding fake news" (Conroy et al., 2015), Cluster 2 is green and has identity "Ke, J. (2017)" with a document titled "Short-term forecasting of passenger demand under on-demand ride services: A spatio-temporal deep learning approach" (Ke et al., 2017), Cluster 16 in light orange with identity "Hesmondhalgh, D. (2005)" with a document titled "Cultural industries and cultural policy" (Hesmondhalgh & Pratt, 2005), Cluster 25 is gray and identity "Alves, R.R.N. (2012)" with a document titled "Relationships between fauna and people and the role of ethnozoology in animal conservation" (Alves, 2012), Cluster 8 is brown and identity "Konijn, E.E. (2005)" with a document titled "Some Like It Bad: Testing a Model for Perceiving and Experiencing Fictional Characters" (Konijn & Hoorn, 2005), Cluster 3 is blue and identity "Guthrie, J.T. (2013)" with a document titled "Modeling the Relationships Among Reading Instruction, Motivation, Engagement, and Achievement for Adolescents" (Guthrie et al., 2013), dan Cluster 15 is light blue and identity "Mshali, H. (2018)" with a document titled "A survey on health monitoring systems for health smart homes" (Mshali et al., 2018).

#### *Coupling Analysis by Country*

Through VOSviewer, it was discovered that 117 countries were engaged in this study's 1155 documents. Then 74 countries were discovered with at least two instances, which were divided into 11 clusters. Cluster 1 is red (14 things), Cluster 2 is green (13 items), Cluster 3 is blue (9 items), Cluster 4 is yellow (8 items), Cluster 5 is purple (6 items), and Cluster 6 is mint blue (5 items), and may be seen in the diagram (Figure 20).



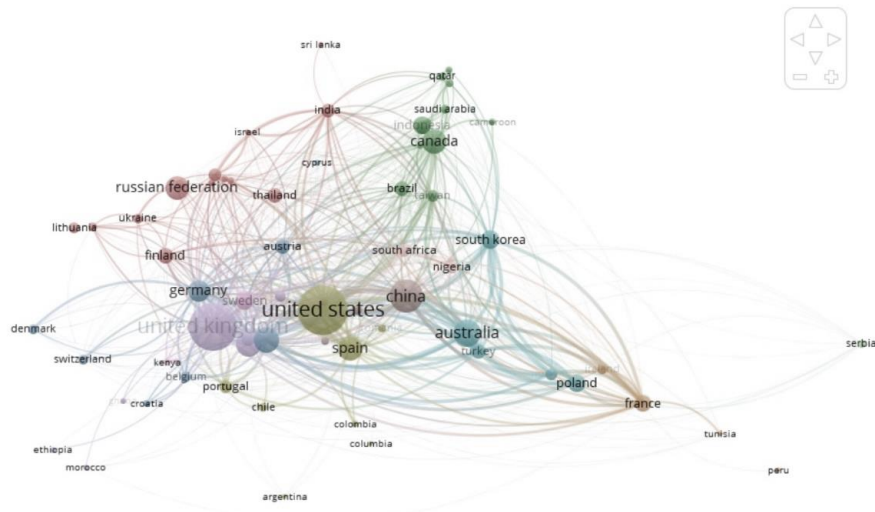


Figure 20. Analysis Coupling by Country

Figure 20 shows that every country in each cluster has a significant association, with only a few exceptions. Sri Lanka, Peru, and Colombia are some of the countries with which we have no substantial ties.

### Future Research Analysis

It's worth noting that of the 6825 keywords, 5692 have only one occurrence, 573 have two occurrences, and 237 have three occurrences.

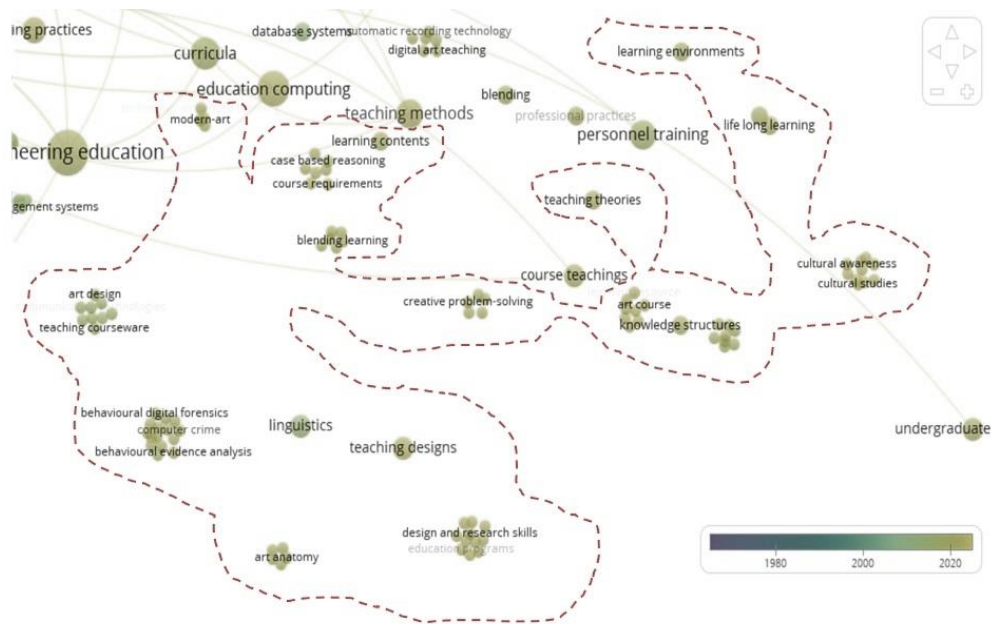
Keywords with 1 occurrence include barriers, counselling, denial, father, manpower, paediatrics, risk factor, ritonavir, systems theory, black haw, infertility, liver injury, audio recording, cultural competence, narration, transcultural care, voice, family functioning, viral load, virology, home, care, lifting, normal human, reaction force, supermarket, risk-taking, utilization, disability, event-related potential, predictive value, cultural diversity, industry, risk analysis, trial and error, arts and illustration, language arts, interest, gesture, posture, sitting position, work-rest-ratio, learning test, and urban areas.

Keywords with 2 occurrences include nurse, travel, hiv test, mass screening, risk factor, task performance, writing, professional role, occupation, social work, poverty, brain, plant growth, self-concept, behaviour, melatonin, case report, Likert scale, eves, web services, mobility, social change, household, meditation, depression, factor analysis, GPS, sales, life cycle, illustrations, medicine, schools, competition, nursing, capitalism, parents, satellite data, digital storage, impact, urban design, resolution, social class, integrity, dan methods.

Keywords with 3 occurrences include food insecurity, caregiver, public health, men, virus load, vision, professionalism, social support, safety, fieldwork, follow-up, trust, monitoring, accuracy, age factors, motivation, attention, robotics, income, awareness, ergonomics, libraries, metadata, arts-based, empowerment, healing, digitalization, visual arts, transfer learning, design methods, paintings, spatial analysis, product design, industry 4.0, crime, linguistics, online learning, equity, self, multimedia, social capital, career, artist, and novel.

Keywords with less than 2 times the number of occurrences are quite common, accounting for 95.27 per cent of all keywords. This shows that 95.27 per cent of these keywords have been used in a study, but that no follow-up research has been conducted, or that researchers have not been interested in researching the theme of these keywords. By paying close attention to the previous description and Figure 16, as a result, there are still plenty of chances to research a variety of topics relevant to conventional art education. As indicated in Figure 21, several keywords have the potential to be used in the future study.

Figure 21. Future Research Analysis



## CONCLUSIONS

Traditional arts must be preserved for them not to become extinct. Learning traditional arts is one of the ways to keep traditional arts alive. There have been several studies on the subject of "learning" and "traditional art," but there is no one-size-fits-all approach to research. Traditional art and "learning" "From 2017 to 2021, they began to gain the attention of scholars, albeit there was no domination on certain research themes. In general, the number of publications has increased in tandem with the number of citations and the paper's quality. According to the findings of this study, improving article quality has an impact on raising citations from these publications related to the use of keywords in research.

This research is unique in that several previous studies focused on general art and culture books, whereas this one focused on a more specific topic, traditional arts.

As a result, the findings of this study suggest that traditional art learning actors and observers study more about traditional art learning to increase the quantity and quality of research results related to the latest innovations to preserve traditional arts, whose survival is under threat, by current technological advancements.

## ACKNOWLEDGEMENTS

All of the leaders and facilitators at the Center for Public Policy Research, as well as colleague researchers, deserve our gratitude for their excitement and encouragement in conducting research and publishing scholarly papers.

## CONFLICT OF INTEREST

In this study, we state that there is no conflict of interest with any party, either with institutions or with individuals.

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