

# PalArch's Journal of Archaeology of Egypt / Egyptology

## THEMATIC SONGS IN EDUCATION A BIBLIOMETRICS ANALYSIS (2010-2019)

*J. Julia<sup>1</sup>, Tedi Supriyadi<sup>2</sup>, Prana Dwija Iswara<sup>3</sup>*

<sup>1,2,3</sup> Elementary Teacher Education Program, Universitas Pendidikan Indonesia,  
Bandung, Indonesia

Correspondence: [juli@upi.edu](mailto:juli@upi.edu)

**J. Julia, Tedi Supriyadi, Prana Dwija Iswara. Thematic Songs In Education A Bibliometrics Analysis (2010-2019)-- PalArch's Journal Of Archaeology Of Egypt/Egyptology 17(4), 2107-2130. ISSN 1567-214x**

**Keywords Thematic Songs, Bibliometric Analysis, Music Education, Publication Trends**

### ABSTRACT

Thematic songs are an urgent research topic in many countries. Mapping the studies on thematic songs, specifically on the publication trends, most cited articles, keywords used, and author collaboration, is needed to give directions for future studies, especially in academic world. This article aims at identifying and analyzing studies of thematic songs in reputable international journals in the period of 2010-2019 through a bibliometrics study, hence, it is expected that this research can practically direct teachers or academicians to develop learning using songs. This study employs a systematic and structured mind mapping method, which was done in four stages, namely: (1) article searching in the Scopus database using the Publish or Perish application; (2) article filtering to be included in the bibliometrics analysis; (3) article metadata examination and completion; and (4) bibliometrics analysis using VOSviewer. The analysis carried out resulted in six findings. To conclude, this research found that in the period 2009-2019, there were 555 authors, 555 keywords, 12 author collaborations, and 122 institutions involved in the research on thematic song publication. These findings can provide direction to other researchers to conduct future studies on thematic songs.

### INTRODUCTION

In Indonesia, the learning process at the elementary school level has been carried out with an integrated thematic approach (Culture, 2016). In its implementation, the thematic curriculum cannot be separated from musical activities (Sinaga et al., 2018). Musical activities are found to be benefits in classrooms. According to Ilari et al. (2013), the benefits for students when songs are used in the teaching process are: (1) deepening knowledge about culture, language, and music; (2) developing vocal skills in speaking and

singing; (3) enhancing social skills in global and multicultural societies and a strong sense of self-identity and understanding of others; and (4) increasing emotional expression. Therefore, music is a joint string between experience and culture. Songs are able to shift emotion and knowledge, and potentially reach students in ways that cannot be done by other teaching strategies (Governor et al., 2013).

In other words, teachers can use songs in the thematic learning process to deliver teaching materials (Azimah & Utomo, 2018). Therefore, thematic learning through songs is beneficial. This requires the teacher's creativity to understand and compose songs thematically in the learning process to improve students' ability to understand the materials (Azimah & Utomo, 2018). However, the results of field studies show that only a few teachers in primary schools in Indonesia had musical competence or music education background, which has less influence on cognition and mastery of the elements in the art of music (Julia et al., 2019; Julia, Supriyadi, et al., 2020). Therefore, there is an urgency to equip the teachers with literature studies on how to develop learning using thematic songs.

To equip teachers with musical competence, a comprehensive and in-depth study of the literature on thematic songs in the learning process in elementary school is fundamental. Observing and studying the progress of thematic songs that have been researched in different countries can provide new directions for academics who focus on this field. Thus, it is necessary to conduct a bibliometric study on thematic-songs-related articles, especially those that are published in reputable journals.

Songs do not merely function to express feeling, but also as a therapy media in which the song selection helps clients live a more satisfying life (Reiter, 2019). In addition, spreading spiritual knowledge in a society group can be done through songs with religious and spiritual messages (Singh et al., 2017; Supriyadi & Julia). Moreover, the selection certain songs can also be used as learning media (Good et al., 2015).

There have been several studies on thematic songs conducted by researchers. For instance, Bradt et al. (2019) conducted a study on the benefits of songwriting therapy in military. In this study, a music therapy was given to 11 military personnel that suffered from mild intracranial injury, post-traumatic stress disorder, and mental health conditions. The service took place at the National Intrepid Center of Excellence, a Directorate of Walter Reed National Military Medical Center in the USA. 14 songs written by the participants of this study were analyzed. The study found four main themes in the songs, including relational challenges, moving forward, personal struggles and obstacles to recovery, and positive connection and assistance. The songs tell the military members' experiences of military service, homecoming, injury, recovery, and transition from active-duty. Often for the first time, the activity of writing songs allowed the service members to share their emotions, thoughts, hopes, and fears with friends, family, and other providers, which is important in their process of personal growth and recovery (Bradt et al., 2019).

Additionally, Fiore (2016) conducted a study on songwriting as a group intervention that was often utilized to help grieving adolescents and children express the feelings and thoughts related to sad experience. Other studies have shown that the thematic content of song lyrics written by grieving adolescents and children may vary depending on their age and understanding of death. Fiore adds to this finding by analyzing 33 studies participants, and then found five themes in three age groups, with two of them present in all groups. Most of the participants enjoyed the process of writing songs but there was no clear indication on the preference for verbal or written contribution based on age and gender. The content of the song lyrics were different across age groups, but the older groups had more diverse content and growth in their understanding of death (Fiore, 2016).

Moreover, Beech (2015) conducted a qualitative heuristic study on the subjective experience of transformation that comes as a result of songwriting in nonclinical populations. In the study, 6 male and 6 female songwriters aged 35-69 were interviewed with semi-structured format. The thematic content analysis found 6 top-level themes, including Communicating, Connecting, Affirmation, Wellbeing, Making a Difference, and Personal Growth. The subthemes in the Connecting theme showed a wide variety of transpersonal experiences from the participants. Then, the Communicating theme showed how songwriting allowed the participants to use a language superior to speech for Sending a Message, Expressing Feelings, and Sharing Self. Furthermore, the Personal Growth theme was found due to the subthemes of Processing Experience and Empowerment expressed by the participants. Additionally, the Making a Different theme was found because the participants were explicitly learning that their songs had a significant impact on others. These findings are in line with models of transformation in the expressive arts literature, where both songwriter and listeners are transformed through transpersonal encounters in liminality (Beech, 2015).

Several research in Indonesia has sought to conduct the studies related to the songs development in the thematic learning, for examples, Azimah and Utomo (2018) who had explored the teachers' creativity in using songs in thematic learning. The results revealed that the use of songs is only limited to the adjustment of the theme of the teaching material presented because the teachers do not have a music education background. However, the utilization of songs can grow the students' attention to focus on the teaching material. Furthermore, Sinaga (2010) develop song learning themes in improving students' language skills. The results revealed that the teachers encountered several obstacles, such as in making songs and lyrics, choosing a suitable diction to build a song in accordance with the learning material, matching phrases with song melodies, and matching syllables with melodies and verses. In addition, they also found it difficult to determine high or low notes, note values, and writing song notations. These results are in line with the previous studies in which the main factor of these difficulties are due to the educational background of the teachers who are not from music education so that it is necessary to develop musical competences for teachers in schools.

In contrary with previous studies above, this study was motivated by the lack of studies of thematic songs from the bibliometrics point of view: (1) comprehensive investigation on thematic songs as learning media is needed to prepare teachers in using them in their own teaching; and (2) providing direction for teachers and researchers are believed to be important in developing thematic songs-related research and learning. Bibliometric studies have become significant in revealing the patterns of document utilization, literature development, or sources of information of certain subject (Meara, 2012; Pattah, 2013). Therefore, this study aims at examining the literature of thematic songs within the bibliometrics framework in the last 10 years (2010-2019). It is expected that this research can practically direct teachers or academician to develop learning using songs. This bibliometrics study explores the following:

Q1: How is the publication trend of thematic songs in 2010-2019?

Q2: What are the frequently keywords used in the studies of thematic songs in 2010-2019?

Q3: How is the collaboration pattern of the authors in the studies of thematic songs in 2010-2019?

Q4: What is the pattern of citation in the studies of thematic songs in 2010-2019?

Q5: How is the pattern of collaboration of research institutions on studies of thematic songs in 2010-2019?

Q6: Which country contributed the most to the studies of thematic songs in 2010-2019?

Regardless the abovementioned research contribution, there are limitations found in conducting this study, such as (1) the database used was only Scopus, (2) the software used to conduct the bibliometrics analysis was only VOSviewer, and (3) the types of bibliography analyzed were only articles available in the Scopus database. Therefore, to expand the study on this topic, it is advisable to use other bibliometrics analysis software, use several sources/databases, and include other types of writing, such as review papers, proceedings, and book chapters. In relation to the classroom practices, this bibliometric studies are expected to provide teachers with guidance in composing thematic songs related to subjects as a characteristic of the 2013 Curriculum. Hence, the teachers can develop their own research related to thematic songs using research maps presented in this bibliometric study.

### **CONCEPTUAL FRAMEWORK**

The function of songs that can embody and encapsulate memory has been an inseparable part of artistic representation in literature and music for hundreds of years (Funabiki & Konishi, 2003; Harvey, 2010; Thym, 2012). Intrinsically, singing a song can motivate, focus attention, and give happiness to students of all ages (Good et al., 2015). Song is widely used by educators to support encoding and retrieval of information (Bilalovic Kulset & Halle, 2020; Bradt et al., 2019; Funabiki & Konishi, 2003; Good et al., 2015; Tamminen et al., 2017).

Songs have been shown to be able to support text recalls, which then endure following various lengths of delay. The advantage of song in recalling text persists following short, 15- to 20-minute delays (Ho et al., 2003; Kilgour et al., 2000; Purnell-Webb & Speelman, 2008; Schellenberg & Weiss, 2013; Wallace, 1994; Wallace & Rubin, 1991), and extends to longer delays in the order of weeks (Calvert & Billingsley, 1998; Calvert & Tart, 1993; Rainey & Larsen, 2002), and even years (Calvert & Tart, 1993). Rainey and Larsen (2002) found that participants learning baseball player names using familiar tunes took fewer attempts to learn the names again after a week compared to those who had learned the names without a familiar melody.

Specifically, songs become more advantageous when the melody are familiar to the listeners (Moussard et al., 2012, 2014; Purnell-Webb & Speelman, 2008; Wallace, 1994) and with increases in the simplicity of the melodic structure (Wallace, 1994) and text setting (Gingold & Abravanel, 1987; Peynircioğlu et al., 2008; Racette & Peretz, 2007; Wallace & Rubin, 1991). Therefore, Jensen (2000) advocates using songs for teaching and learning. Music has the potential to be used as a teaching strategy because the way the brain process it and how the tunes and words combined provide many neural pathways beneficial for memories. Words in songs can be utilized as a tool for understanding teaching materials experience (Governor et al., 2013; Jensen, 2005, 2008).

Based on a study of the use and benefits of songs in learning, the bibliometrics study of thematic songs is expected to provide direction to researchers or teachers in developing learning through thematic songs to improve students' ability to understand learning materials. The ability of teachers to develop learning activities implies that teachers are expected to read literatures that can improve their literacy skills, considering that teacher learning is researched, which then resulted into models of teacher professional learning (James & McCormick, 2009; Nisbet & Shucksmith, 2017; Olson & Craig, 2001). Furthermore, this is believed to be significant because they study and resolve by developing or applying theory to teacher-related discussions change over time (Clarke & Hollingsworth, 2002).

## **METHOD**

In this study, the procedure carried out follows a bibliometrics study conducted by Julia, Supriatna, Isrokatun, Aisyah, Hakim, et al. (2020) and Julia, Supriatna, Isrokatun, Aisyah, Nuryani, et al. (2020), which includes the following steps: 1) Examination Procedure, 2) Bibliographic Filters, 3) Bibliography Attributes, and 4) Bibliometrics Analysis. What follow is the elaboration of each steps conducted in this study.

### ***Examination procedure***

In searching and examining bibliography, two applications were used. The first is Publish or Perish (PoP) and the second is reference manager software named EndNote X9. PoP was used to search bibliographic databases. The database source used to search the bibliography in PoP is Scopus. The reason

of choosing Scopus is because its database source is one of the major providers of peer review literature (Salisbury, 2009) compared to other database providers (Salisbury, 2009; Shareefa & Moosa, 2020). Another advantage of Scopus database is that it contains 70% more resources compared to WoS (López-Illescas et al., 2008; Shareefa & Moosa, 2020).

The bibliography search was carried out based on several criteria: 1) The bibliography must be in the type of journal; 2) the searched title and keywords were limited to two words namely “thematic songs”; 3) The bibliography search was limited to the last 10 years between 2010-2019, which was conducted in mid-June 2020. Figure 1 below is the preview of the process on PoP.

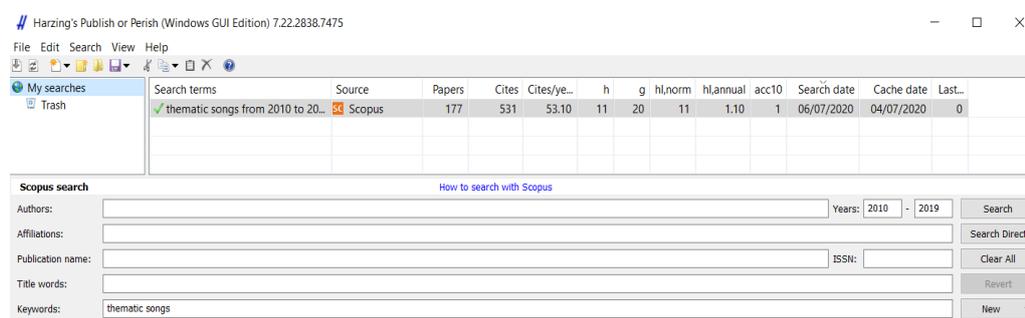


Figure 1. Bibliography Search Process on PoP

Search results from PoP were stored in the EndNote X9 application. After the files were saved, then metadata were examined and completed.

### *Bibliographic filters*

Following the first step, bibliography selection and sorting process was carried out. There are several criteria in selecting the bibliography: 1) Must be about thematic songs, 2) must be written in English, and 3) must be published by a reputable publisher. Then, every selected bibliography was examined in the Scopus database that had been extracted from PoP. In this process, the type of bibliography selected was only journal. Therefore, erratum, notes, conference articles, reviews, editorials, or articles without abstracts were not included as data for analysis.

The initial PoP search process resulted in 177 bibliographies. From the search results, 109 bibliographies met the criteria and 68 bibliographies did not.

**Table 1.** Number of Bibliographies Each Year

Year	Include	Exclude	Total
2010	4	9	13
2011	3	7	10
2012	5	10	15
2013	14	8	22
2014	5	6	11

2015	14	4	18
2016	10	6	16
2017	21	10	31
2018	15	6	21
2019	18	2	20
Total	109	68	177

### *Bibliography attributes*

To analyze the bibliographies that have been filtered, the metadata of the bibliographies were examined and completed. The attributes examined include the author's name, title, author keywords, abstract, year, volume, issue number, page, affiliation, country, number of citations, article links, and publisher. Bibliometrics analysis can be performed after the metadata is completed.

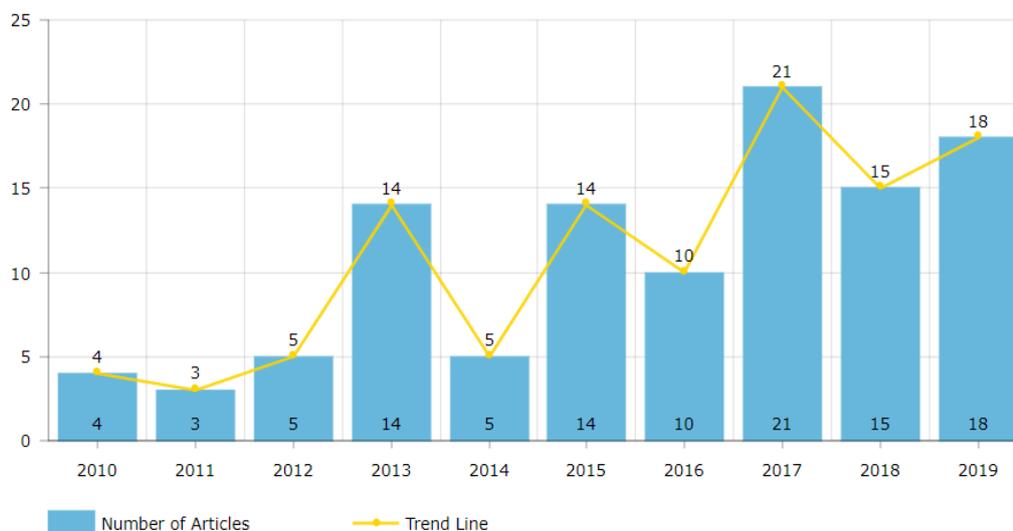
### *Bibliometrics analysis*

Bibliometrics analysis was carried out based on six aspects, including (1) trends in the publication of thematic songs, (2) author keywords, (3) pattern of author collaboration, (4) most cited articles, (5) pattern of collaboration in institution, and (6) top-10 countries with most research on thematic songs. The VOSviewer application was utilized to help carry out the bibliometrics method and draw the results of the analysis (Hudha et al., 2020; Martínez-López et al., 2020; Shukla et al., 2020). This application was employed due to its ability to operate proficiently with a very big information index and can provide a variety of interesting description, examinations, and findings (Rafols et al., 2012; Van Eck & Waltman, 2010, 2014). It is also able to map author, publication, or journal in accordance with a co-citation system or construct maps of keyword based on a shared system (Martínez-López et al., 2020). The files that were inputted into the VOSviewer application for analysis were inputted into the EndNote (enw) bibliography file.

## **RESULTS**

### *Publication trend analysis*

Figure 2 below shows that there were 109 articles on thematic songs from 2010-2019. The publication trends show four increases and four declines. The increases occurred in 2011-2012, 2012-2013, 2014-2015, and 2016-2017. Meanwhile, the declines occurred in 2010-2011, 2013-2014, 2015-2016 and 2017-2018. From the period of 2010-2019, the fewest publications were in 2011 and the most publications were in 2017. Overall, in the last ten years, the number of publications on thematic songs had increased significantly.



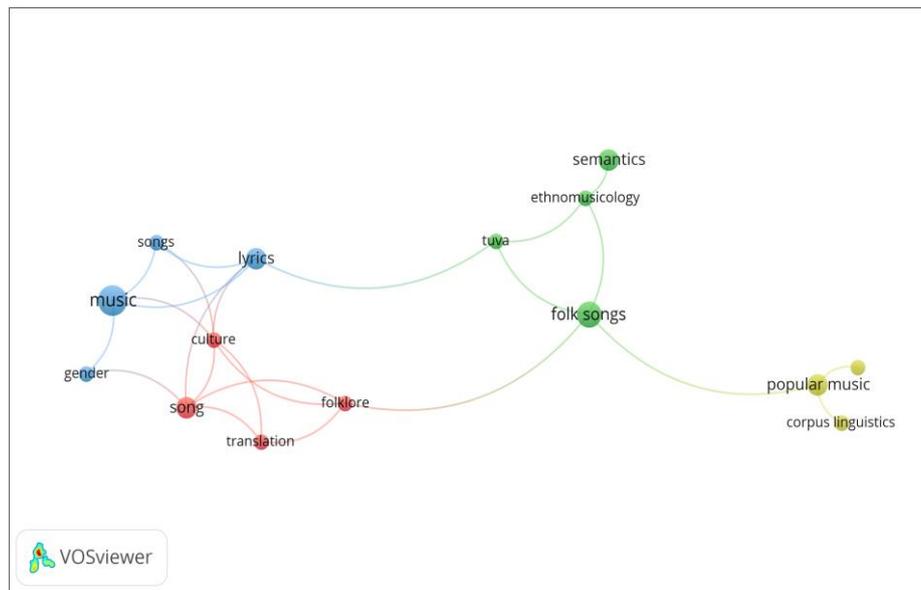
**Figure 2.** Publication Trend

### *Author keywords analysis*

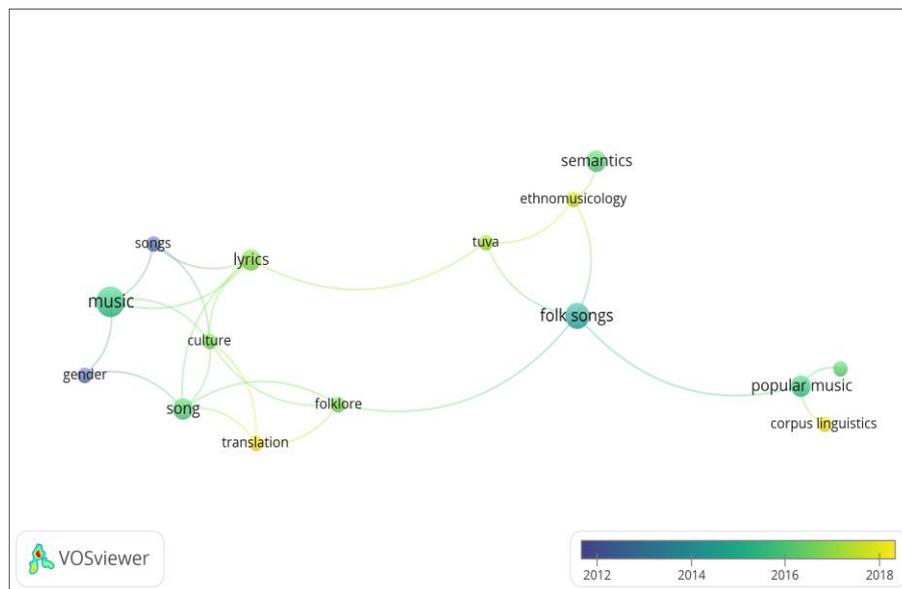
In this process, 555 author keywords with minimum two occurrences were analyzed. Furthermore, 15 author keywords with strong links were found. The following table and figures respective show the author keywords clustering, the author keywords network visualization, the author keywords overlay visualization, and the author keywords density visualization.

**Table 2.** Author Keywords Clustering

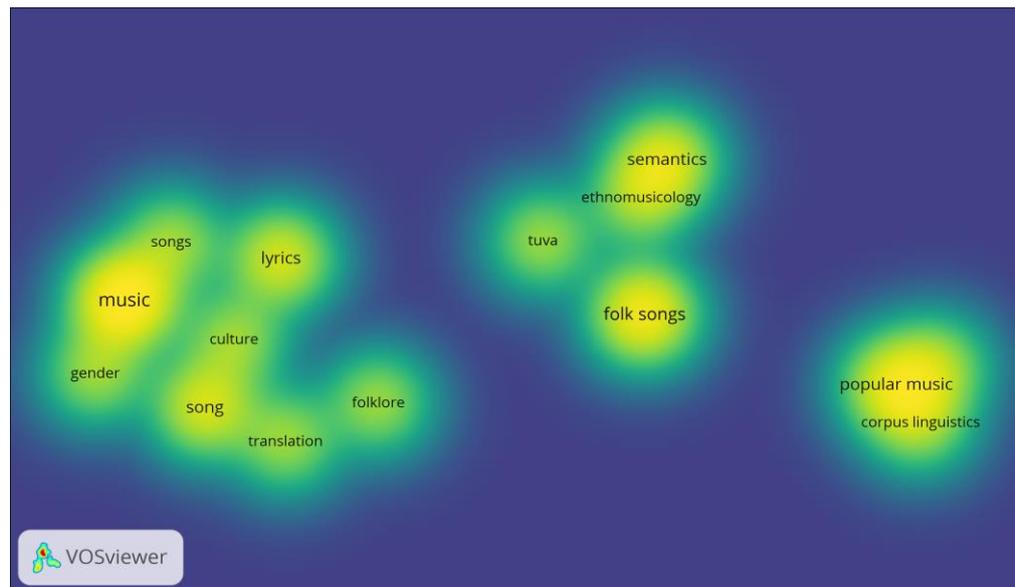
Cluster	Color	Number of Item	Author Keywords
1	Red	4	Culture; Folklore; Song; Translation
2	Green	4	Ethnomusicology; Folk Songs; Semantics; Tuva
3	Blue	4	Gender; Lyrics; Music; Songs
4	Yellow	3	Corpus Linguistics; Encoding; Popular Music



**Figure 3.** Network Visualization of Author Keywords



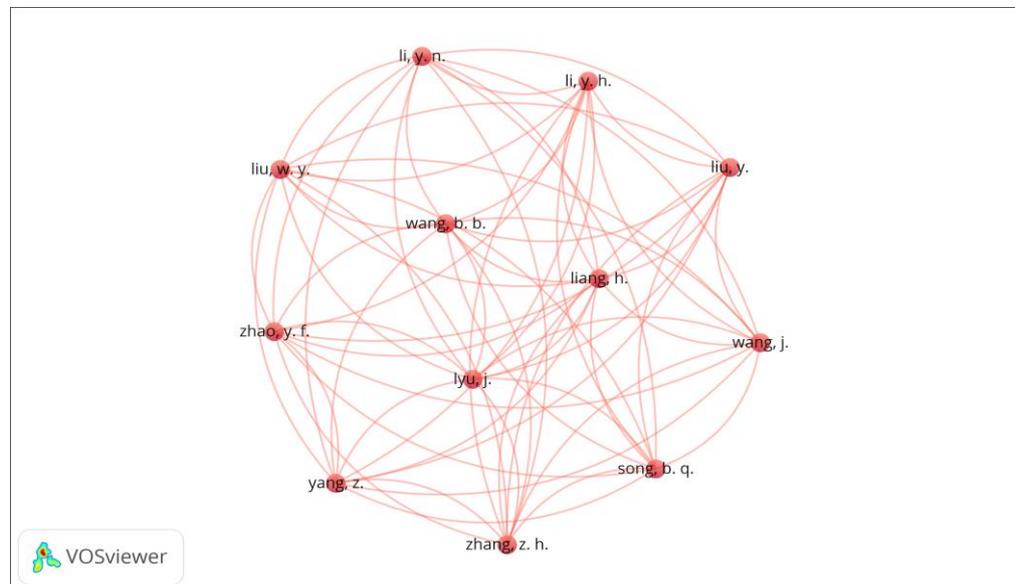
**Figure 4.** Overlay Visualization of Author Keywords



**Figure 5.** Density Visualization of Author Keywords

#### *Author collaboration analysis*

Out of 212 authors, 12 authors had strong links. As presented in Figure 6 and **Table 3**, the results of the VOSviewer analysis found only one cluster where there were 11 links between authors.



**Figure 6.** Network Visualization of Author Collaboration

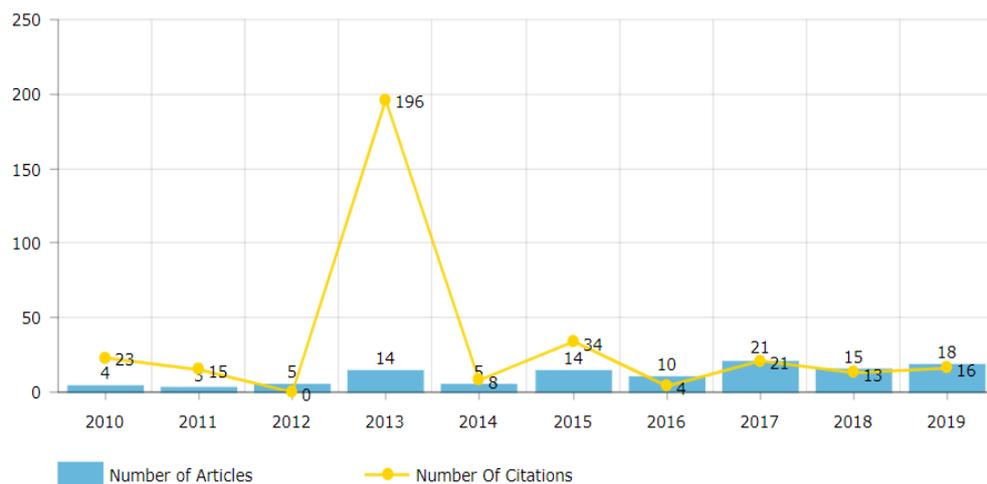
**Table 3.** Network Visualization of Author Collaboration

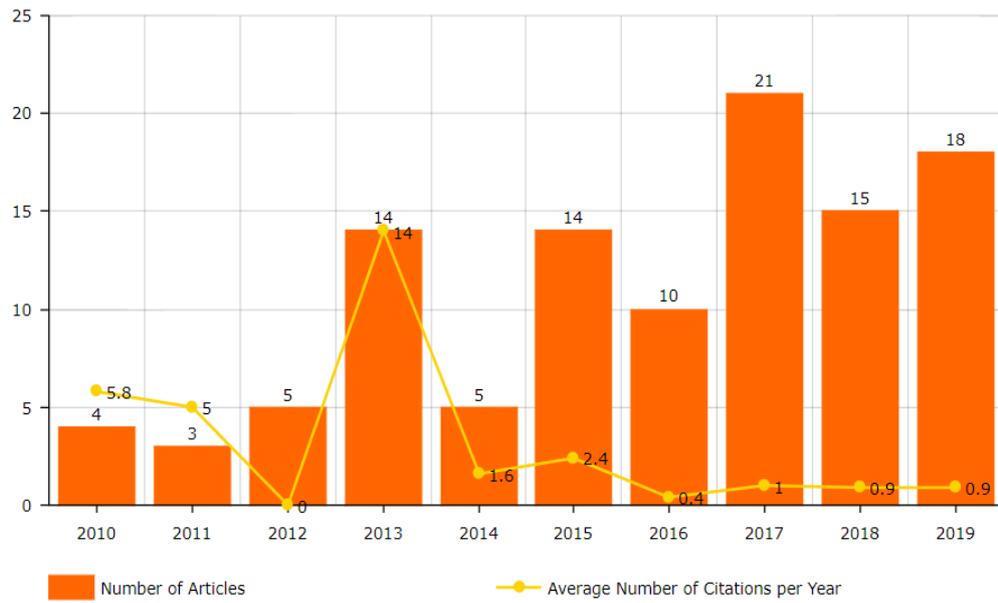
Author	Number of Document	Number of Link
Li, y.h.	1	11
Li, y.n.	1	11
Liang, h.	1	11
Liu, w.y.	1	11
Liu, y.	1	11
Lyu,j.	1	11
Song,b.q.	1	11
Wang,b.b.	1	11
Wang,j.	1	11
Yang,z.	1	11
Zhang,z.h.	1	11
Zhao,y.f.	1	11

### CitationTrend Analysis

#### *Citation Rate per Year*

Figure 7 depicts that there were 330 article citations on the topic of thematic songs from 2010-2019. The citation pattern shows 5 declines and 3 increases. The declines occurred in 2010-2011, 2011-2012, 2013-2014, 2015-2016, and 2017-2018. Meanwhile, the increases occurred in 2012-2013, 2014-2015, 2016-2017, and 2018-2019. The most citations were found in 2013 and the fewest, with no citation at all, were found in 2012. Overall, the citation pattern throughout 2010-2019 declines, as can be seen by the annual citation average shown in Figure 8.

**Figure 7.** Number of Citations per Year



**Figure 8.** Average Number of Citations per Year

**Top Ten Most-Cited Articles**

Table 4 shows 10 most cited articles. The first article with 23 citations was written by Baker & Ballantyne, which is entitled *"You've got to accentuate the positive": Group songwriting to promote a life of enjoyment, engagement and meaning in aging Australians*. Meanwhile, in the last article with three citations is article written by Atlas, which is entitled *Vaughan Williams's Songs of Travel: A Note on the Structural Role of the Thematic Recollections in Songs 4 and 9*.

**Table 4.** Top Ten Most-Cited Article

No	Author(s)	Article Title	Year of Publication	Number of Citation	Journal Name	Publisher
1	Baker, F.A., &Ballantyne, J.	<i>"You've got to accentuate the positive": Group songwriting to promote a life of enjoyment, engagement and meaning in aging Australia</i>	2013	23	Nordic Journal of Music Therapy	Taylor and Francis

		<i>ns</i>				
2	Meredith, D.	<i>Music Analysis and Point-Set Compression</i>	2015	17	Journal of New Music Research	Informa (UK) Limited
3	Cranwell, J., Britton, J., & Bains, M.	<i>“F*ck It! Let’s Get to Drinking—Poison our Livers!”: a Thematic Analysis of Alcohol Content in Contemporary YouTube Music Videos</i>	2017	10	International Journal of Behavioral Medicine	Springer Science and Business Media
4	Baker, F.A., Stretton-Smith, P., Clark, I.N., Tamplin, J., & Lee, Y.-E.C.	<i>A group therapeutic songwriting intervention for family caregivers of people living with dementia: A feasibility study with thematic analysis</i>	2018	8	Frontiers in Medicine	Frontiers Media S.A.
5	Clements-Cortes, A., Magill, L., & O’callaghan	<i>Portraits of Music Therapy in</i>	2011	8	Music & Medicine	Elsevier Ltd

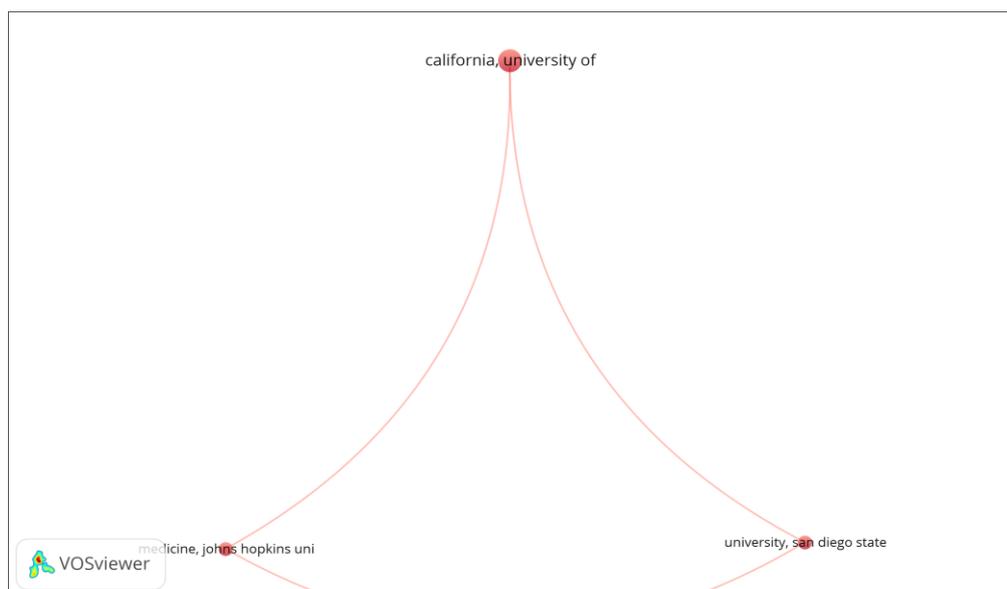
	han, C.	<i>Facilitating Relationships Completion at the End of Life</i>				
6	Wlodarczyk, N.	<i>The effect of a group music intervention for grief resolution on disenfranchised grief of hospice workers</i>	2013	7	Progress in Palliative Care	Elsevier Ltd
7	Amzallag, N.	<i>The cosmopolitan character of the Korahite musical congregation: Evidence from psalm 87</i>	2014	6	Vetus Testamentum	Frontiers Media S.A.
8	Bradt, J., Biondo, J., & Vaudreuil, R.	<i>Songs created by military service members in music therapy: A retrospective analysis</i>	2019	5	Arts in Psychotherapy	Elsevier Ltd
9	Ettenberger, M., Beltrán & Ardila, Y.M.	<i>Music therapy song writing with mothers of</i>	2018	5	Arts in Psychotherapy	Elsevier Ltd

		<i>preterm babies in the Neonatal Intensive Care Unit (NICU) – A mixed-methods pilot study</i>				
10	Atlas, A.W.	<i>Vaughan Williams's Songs of Travel: A Note on the Structural Role of the Thematic Recollections in Songs 4 and 9</i>	2010	3	Nineteenth-Century Music Review	Elsevier Ltd

The selection of these 10 articles was as a filtercarried out in the first search through PoP, which was developed based on the criteria set in the research procedure and in terms of the use of quotations. Even though there were a highest citations article written by J. Liu, J. Kang, T. Luo, H. Behm, T. Coppack entitled“*Spatiotemporal variability of soundscapes in a multiple functional urban area*” with 67 citations, however, it was not included in the 10 articles with the most citations, considering the substance the article that does not fit the context of the thematic song. Therefore, the journal was eliminated from the 10 articles with the most citations. Thus, the results of the 10 journals with the most citations are presented in **Table 4**.

#### ***Institution collaboration analysis***

Figure 9 shows that, of the 122 institutions studying the topic of thematic songs, only three institutions showed strong links, namely: the University of California, San Diego State University, and Johns Hopkins University School of Medicine. Each institution has 2 links with each other.



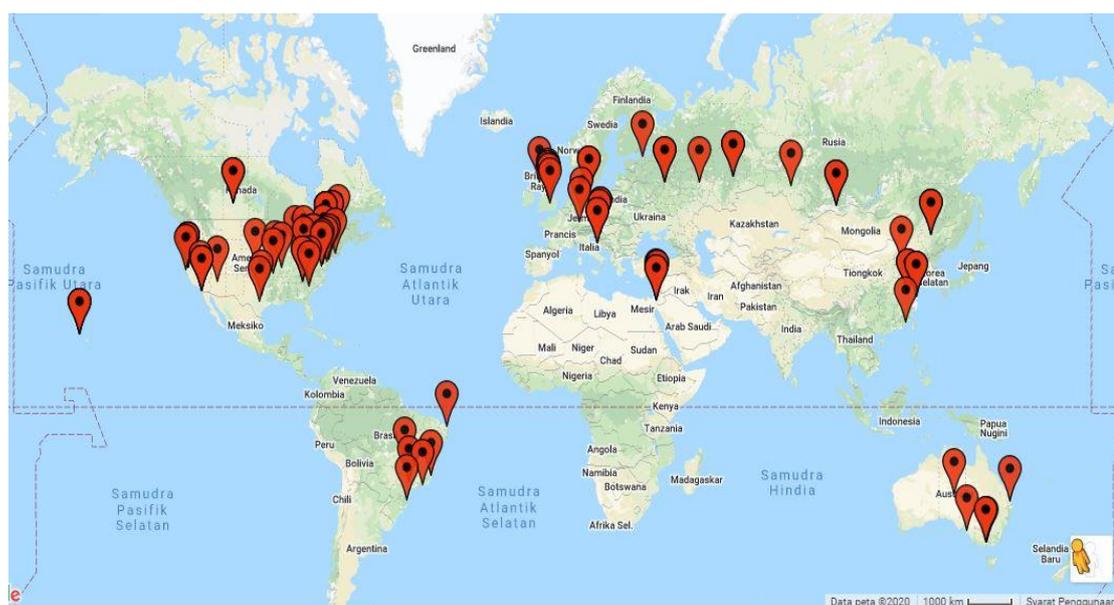
**Figure 9.** Collaboration of Institution

### *Country statistics analysis*

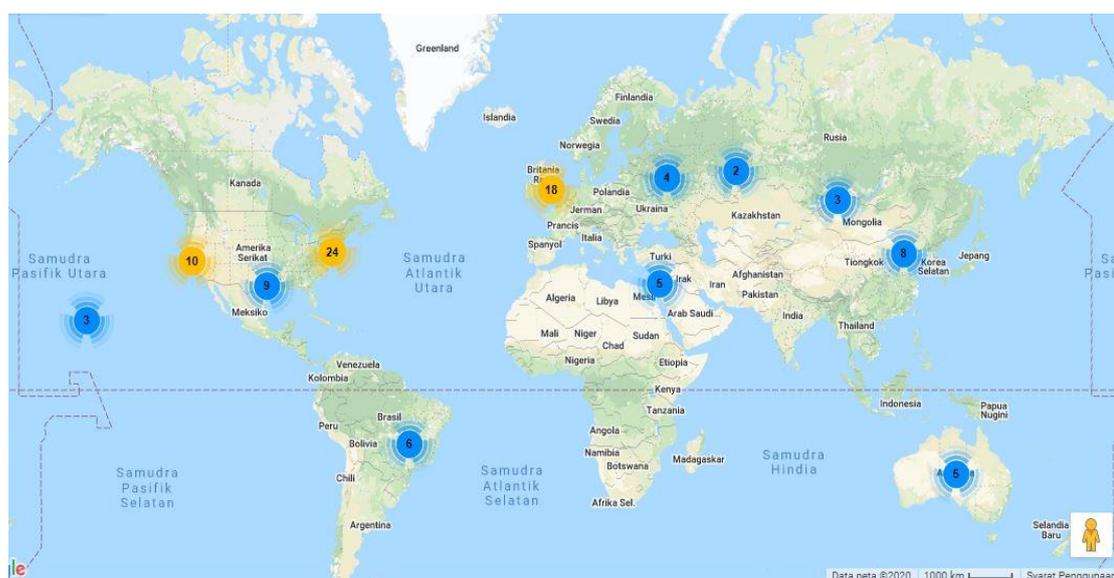
Table 5 shows the top ten countries that have published the most articles on thematic songs indexed by Scopus. The United States was in first place, followed by Canada and Russia. In addition, Figure 10 shows the author distribution by city/country coordinate that publish articles with thematic songs in journals indexed by Scopus. The location of the authors was obtained from their addresses written in the article. Addresses were converted to coordinates using GPS Visualizer ([gpsvisualizer.com](https://gpsvisualizer.com)) and coordinates were extracted using Map Maker ([maps.co](https://maps.co)). Figure 11 shows author distribution by regional clusters, which were also extracted from Map Maker.

**Table 5.** Top Ten Countries that Have Published the Most Articles on Thematic Songs

Country	Number of Author
United State	38
Canada	9
Russia	9
United Kingdom	8
People's Republic of China	8
Brazil	6
Australia	5
Israel	5
Croatia	4
Germany	4



**Figure 10.** Author Distribution by City/Country Coordinate



**Figure 11.** Author Distribution by Regional Clusters

## DISCUSSION

The bibliometrics analysis resulted in six themes. For the first theme, the publication trend of articles on thematic songs over the past 10 years had generally increased. This can be seen from the number of publications, which were 4 articles in 2010 and 18 articles in 2019. However, the increase in the number of articles from 2010-2019 did not show a constant increase, but there was a fluctuated pattern throughout the years. In 2017, the highest number of articles was published compared to the previous years and two years thereafter with 21 articles. This trend shows that the interest of researchers around the world on thematic songs tended to be high. The publication trends also show the development of authors' direction and interest in the areas in which they are involved (Halverson et al., 2012; McDonough et al., 2017; Northup et al., 1993; Reis & Stiller, 1992).

As the second theme, 555 author keywords were identified in the selected articles. In the VOSviewer analysis using two occurrences, 15 keywords that had strong connections were generated. The author keyword analysis was presented in three versions, namely network visualization, overlay visualization, and density visualization. Overlay visualization and density visualization were used to distinguish the main topics in each examination or level of information. The visualization was done by estimating the occurrences with the author keywords pair (Hudha et al., 2020; Liu et al., 2015; Van Eck & Waltman, 2014, 2017). The analysis of author keywords produced 4 clusters as follows: cluster 1 with 4 items, cluster 2 with 4 items, cluster 3 with 4 items, and cluster 4 with 3 items. The terms song, music, lyrics, ethno musicology, semantics, culture, tuva, corpus linguistics, popular music, translation, folklore, folksongs, and gender indicated that studies on thematic songs had a close relationship with cultural studies and science. In fact, some of the literatures werestudies of thematic songs used for therapy.

On the fourth theme, out of 212 authors, 12 writers had strong links, each of which had 11 links with other authors. However, the findings in this study show that the collaboration of authors on thematic songs was relatively small. The similar thing occurred in which there were only three out of 122 institutions that had collaborated in writing articles on thematic songs.

Hence, citation has important role in publication as it shows the impact of publication (Arbaugh & Hwang, 2015; Walter & Ribière, 2013). The related pattern on thematic songs shows up and down pattern. It started with 23 citations in 2010, but had 18 citations in 2019. The most citations occurred in 2013 with 196 citations, while the most cited article on thematic songs in 2013 was written by Baker & Ballantyne, which is entitled "*You've got to accentuate the positive": Group songwriting to promote a life of enjoyment, engagement and meaning in aging Australians*". This article presents group thematic songwriting to promote a fun, interesting and meaningful life. The contributors stated that the program could provide a stimulus to their enjoyment, emotional health and welfare. They believed that there was an increase in perceived relationships between and with others in the broader community. They also felt the sensation of a sense of meaningfulness, engagement, and accomplishment in creating and performing their own songs. This result indicates that research related to thematic songs has developed and attracted a lot of other researchers.

The sixth theme related to the country includes the extraction of the authors' addresses listed in the articles on thematic songs into coordinates using a GPS generator. From this, it was identified that the authors of the article on thematic songs spread in various countries and continents. The countries publishing the most articles on thematic songs were the United States (38 authors), Canada (9 authors), Russia (9 authors), United Kingdom (8 authors), and other countries (less than 8 authors), including China, Brazil, Australia, Israel, etc.

Based on regional clusters shown in Figure 11, the largest cluster were the United States and surrounding areas (24 cities/states), followed by United Kingdom (18 cities/states). Meanwhile, the cluster of author was located throughout California, which had authors in 13 cities/states.

## CONCLUSION

Based on the six research questions posed in this study, it can be concluded that: First, the publication trends of articles on thematic songs over the past 10 years (2010-2019) were fluctuating. The number of publications was higher in 2017, and it was generally increasing throughout the 10 years. Second, there were 555 author keywords in the article on thematic songs for the past 10 years. Of the 555 keywords used, strong links were found in 15 keywords, namely Culture, Folklore, Song, Translation Ethnomusicology, Folk Songs, Semantics, Tuva, Gender, Lyrics, Music, Songs, Corpus Linguistics, Encoding, and Popular Music. Third, the number of collaboration of authors in articles on thematic songs was low. There was only one collaboration cluster with a total of 12 authors in which each writer was involved with 11 other authors. Fourth, the pattern of citation in articles on thematic songs was fluctuating with most citations found in 2013 and had decreased significantly from 2014 to 2019. Fifth, there were 122 institutions studying the topic of thematic songs and only 3 institutions showed strong links, namely the University of California, San Diego State University, and Johns Hopkins University School of Medicine. Lastly, the countries that published the most articles on thematic songs were the United States, followed by the Russian Federation and Canada. This study reveals the result of mapping the studies on thematic songs in education field by identifying and analyzing studies of thematic songs in reputable international journals in the period of 2010-2019 through a bibliometrics study. Hence, it is expected that this study can provide direction to other researchers to conduct future studies on thematic songs and provide guideline for teachers in selecting thematic songs for teaching.

## RECOMMENDATION

Further studies are suggested to use other database and software to enrich and fill gaps in bibliometrics study on thematic songs. In addition, teachers are also expected to develop the research of this study to develop music learnings at schools.

## ACKNOWLEDGMENT

The authors would like to extend our appreciation to the Ministry of Education and Culture of Indonesia and Universitas Pendidikan Indonesia for funding this study. The funding reference number is the Decree of Rector of Universitas Pendidikan Indonesia No: 508/UN40.D/PT/2020.

## REFERENCES

- Arbaugh, J. B., & Hwang, A. (2015). What are the 100 most cited articles in business and management education research, and what do they tell us? *Organization Management Journal*, 12(3), 154-175. <https://doi.org/10.1080/15416518.2015.1073135>

- Azimah, N. A., & Utomo, U. U. (2018). Kreativitas Guru Dalam Menggunakan Lagu-Lagu Pada Pembelajaran Tematik Di Sekolah Dasar. *JURNAL SENI MUSIK*, 7(1), 25-33. <https://doi.org/10.15294/jsm.v7i1.24335>
- Beech, H. F. (2015). Songwriting and transformation: The subjective experience of sharing self through song. *International Journal of Transpersonal Studies*. <https://doi.org/10.24972/ijts.2015.34.1-2.187>
- Bilalovic Kulset, N., & Halle, K. (2020). Togetherness!: adult companionship—the key to music making in kindergarten. *Music Education Research*, 1-11. <https://doi.org/10.1080/14613808.2020.1765155>
- Bradt, J., Biondo, J., & Vaudreuil, R. (2019). Songs created by military service members in music therapy: A retrospective analysis. *The Arts in Psychotherapy*, 62, 19-27. <https://doi.org/10.1016/j.aip.2018.11.004>
- Calvert, S. L., & Billingsley, R. L. (1998). Young children's recitation and comprehension of information presented by songs. *Journal of Applied Developmental Psychology*, 19(1), 97-108. [https://doi.org/10.1016/S0193-3973\(99\)80030-6](https://doi.org/10.1016/S0193-3973(99)80030-6)
- Calvert, S. L., & Tart, M. (1993). Song versus verbal forms for very-long-term, long-term, and short-term verbatim recall. *Journal of Applied Developmental Psychology*, 14(2), 245-260. [https://doi.org/10.1016/0193-3973\(93\)90035-T](https://doi.org/10.1016/0193-3973(93)90035-T)
- Clarke, D., & Hollingsworth, H. (2002). Elaborating a model of teacher professional growth. *Teaching and teacher education*, 18(8), 947-967. [https://doi.org/10.1016/S0742-051X\(02\)00053-7](https://doi.org/10.1016/S0742-051X(02)00053-7)
- Culture, M. o. E. a. (2016 ). *Core Competencies and Basic Competencies* (Vol. 24). Ministry of Education and Culture of the Republic of Indonesia.
- Fiore, J. (2016). Analysis of lyrics from group songwriting with bereaved children and adolescents. *Journal of Music Therapy*, 53(3), 207-231. <https://doi.org/10.1093/jmt/thw005>
- Funabiki, Y., & Konishi, M. (2003). Long memory in song learning by zebra finches. *Journal of Neuroscience*, 23(17), 6928-6935. <https://doi.org/10.1523/JNEUROSCI.23-17-06928.2003>
- Gingold, H., & Abravanel, E. (1987). Music as a mnemonic: The effects of good-and bad-music settings on verbatim recall of short passages by young children. *Psychomusicology: A Journal of Research in Music Cognition*, 7(1), 25. <https://doi.org/10.1037/h0094188>
- Good, A. J., Russo, F. A., & Sullivan, J. (2015). The efficacy of singing in foreign-language learning. *Psychology of Music*, 43(5), 627-640. <https://doi.org/10.1177/0305735614528833>
- Governor, D., Hall, J., & Jackson, D. (2013). Teaching and learning science through song: exploring the experiences of students and teachers. *International Journal of Science Education*, 35(18), 3117-3140. <https://doi.org/10.1080/09500693.2012.690542>
- Halverson, L. R., Graham, C. R., Spring, K. J., & Drysdale, J. S. (2012). An analysis of high impact scholarship and publication trends in blended learning. *Distance Education*, 33(3), 381-413. <https://doi.org/10.1080/01587919.2012.723166>

- Harvey, S. A. (2010). Song and Memory: Biblical Women in Syriac Tradition. The Père Marquette Lecture in Theology Series, 41, 9-92. <https://doi.org/10.5840/pmlt2010412>
- Ho, Y.-C., Cheung, M.-C., & Chan, A. S. (2003). Music training improves verbal but not visual memory: cross-sectional and longitudinal explorations in children. *Neuropsychology*, 17(3), 439. <https://doi.org/10.1037/0894-4105.17.3.439>
- Hudha, M. N., Hamidah, I., Permanasari, A., Abdullah, A. G., Rachman, I., & Matsumoto, T. (2020). Low carbon education: a review and bibliometric analysis. *European Journal of Educational Research*, 9(1), 319-329. <https://doi.org/10.12973/eu-jer.9.1.319>
- Ilari, B., Chen-Hafteck, L., & Crawford, L. (2013). Singing and cultural understanding: A music education perspective. *International Journal of Music Education*, 31(2), 202-216. <https://doi.org/10.1177/0255761413487281>
- James, M., & McCormick, R. (2009). Teachers learning how to learn. *Teaching and teacher education*, 25(7), 973-982. <https://doi.org/10.1016/j.tate.2009.02.023Get>
- Jensen, E. (2000). *Music with the brain in mind*. Brain Store San Diego.
- Jensen, E. (2005). *Top tunes for teaching: 977 song titles & practical tools for choosing the right music every time*. Corwin Press.
- Jensen, E. (2008). *Brain-based learning: The new paradigm of teaching*. Corwin Press.
- Julia, J., Hakim, A., & Fadlilah, A. (2019). Shifting Primary School Teachers' Understanding of Songs Teaching Methods: An Action Research Study in Indonesia. *International Journal of Education and Practice*, 7(3), 158-167. <https://doi.org/10.18488/journal.61.2019.73.158.167>
- Julia, J., Supriatna, E., Isrokatun, I., Aisyah, I., Hakim, A., & Odebode, A. A. (2020). Moral education (2010-2019): a bibliometric study (part 2). *Universal Journal of Educational Research*, 8(7), 2954-2968. <https://doi.org/10.13189/ujer.2020.080724>
- Julia, J., Supriatna, E., Isrokatun, I., Aisyah, I., Nuryani, R., & Odebode, A. A. (2020). Moral Education (2020-2019) A Bibliometric Study (Part 1). *Universal Journal of Educational Research*, 8, 2554-2568. <https://doi.org/10.13189/ujer.2020.080639>
- Julia, J., Supriyadi, T., & Iswara, P. D. (2020). Training the Non-Specialist Music Teacher: Insights from an Indonesian Action Research Study. *Universal Journal of Educational Research*, 8(2), 547-558. <https://doi.org/10.13189/ujer.2020.080226>
- Kilgour, A. R., Jakobson, L. S., & Cuddy, L. L. (2000). Music training and rate of presentation as mediators of text and song recall. *Memory & cognition*, 28(5), 700-710. <https://doi.org/10.3758/BF03198404>
- Liu, Z., Yin, Y., Liu, W., & Dunford, M. (2015). Visualizing the intellectual structure and evolution of innovation systems research: a bibliometric analysis. *scientometrics*, 103(1), 135-158. <https://doi.org/10.1007/s11192-014-1517-y>
- López-Illescas, C., de Moya-Anegón, F., & Moed, H. F. (2008). Coverage and citation impact of oncological journals in the Web of Science and

- Scopus. *Journal of informetrics*, 2(4), 304-316.  
<https://doi.org/10.1016/j.joi.2008.08.001>
- Martínez-López, F. J., Merigó, J. M., Gázquez-Abad, J. C., & Ruiz-Real, J. L. (2020). Industrial marketing management: Bibliometric overview since its foundation. *Industrial Marketing Management*, 84, 19-38.  
<https://doi.org/10.1016/j.indmarman.2019.07.014>
- McDonough, K., Hutchinson, S., Moore, T., & Hutchinson, J. M. S. (2017). Analysis of publication trends in ecosystem services research. *Ecosystem Services*, 25, 82-88.  
<https://doi.org/10.1016/j.ecoser.2017.03.022>
- Meara, P. (2012). The bibliometrics of vocabulary acquisition: An exploratory study. *RELC Journal*, 43(1), 7-22.  
<https://doi.org/10.1177/0033688212439339>
- Moussard, A., Bigand, E., Belleville, S., & Peretz, I. (2012). Music as an aid to learn new verbal information in Alzheimer's disease. *Music Perception: An Interdisciplinary Journal*, 29(5), 521-531.  
<https://doi.org/10.1525/mp.2012.29.5.521>
- Moussard, A., Bigand, E., Belleville, S., & Peretz, I. (2014). Learning sung lyrics aids retention in normal ageing and Alzheimer's disease. *Neuropsychological Rehabilitation*, 24(6), 894-917.  
<https://doi.org/10.1080/09602011.2014.917982>
- Nisbet, J., & Shucksmith, J. (2017). *Learning strategies*. Routledge.
- Northup, J., Vollmer, T. R., & Serrett, K. (1993). Publication trends in 25 years of the *Journal of Applied Behavior Analysis*. *Journal of Applied Behavior Analysis*, 26(4), 527-537.  
<https://doi.org/10.1901/jaba.1993.26-527>
- Olson, M. R., & Craig, C. J. (2001). Opportunities and challenges in the development of teachers' knowledge: The development of narrative authority through knowledge communities. *Teaching and teacher education*, 17(6), 667-684. [https://doi.org/10.1016/S0742-051X\(01\)00023-3](https://doi.org/10.1016/S0742-051X(01)00023-3)
- Pattah, S. H. (2013). Pemanfaatan kajian bibliometrika sebagai metode evaluasi dan kajian dalam ilmu perpustakaan dan informasi [Utilization of bibliometric studies as a method of evaluation and study in library and information science]. *Khizanah al-Hikmah: Jurnal Ilmu Perpustakaan, Informasi, dan Kearsipan* [Khizanah al-Hikmah: Journal of Library, Information and Archives Science], 1(1), 47-57.
- Peynircioğlu, Z. F., Rabinovitz, B. E., & Thompson, J. L. W. (2008). Memory and metamemory for songs: The relative effectiveness of titles, lyrics, and melodies as cues for each other. *Psychology of Music*, 36(1), 47-61. <https://doi.org/10.1177/0305735607079722>
- Purnell-Webb, P., & Speelman, C. P. (2008). Effects of music on memory for text. *Perceptual and Motor Skills*, 106(3), 927-957.  
<https://doi.org/10.2466/pms.106.3.927-957>
- Racette, A., & Peretz, I. (2007). Learning lyrics: to sing or not to sing? *Memory & cognition*, 35(2), 242-253.  
<https://doi.org/10.3758/BF03193445>
- Rafols, I., Leydesdorff, L., O'Hare, A., Nightingale, P., & Stirling, A. (2012). How journal rankings can suppress interdisciplinary research: a

- comparison between innovation studies and business & management. *Research policy*, 41(7), 1262-1282. <https://doi.org/10.1016/j.respol.2012.03.015>
- Rainey, D. W., & Larsen, J. D. (2002). The effect of familiar melodies on initial learning and long-term memory for unconnected text. *Music Perception*, 20(2), 173-186. <https://doi.org/10.1525/mp.2002.20.2.173>
- Reis, H. T., & Stiller, J. (1992). Publication trends in JPSP: A three-decade review. *Personality and Social Psychology Bulletin*, 18(4), 465-472. <https://doi.org/10.1177/0146167292184011>
- Reiter, M. D. (2019). Theme Song for Change: Utilizing Music to Enhance Client Resources. *Journal of Family Psychotherapy*, 30(1), 40-59. <https://doi.org/10.1080/08975353.2018.1545102>
- Salisbury, L. (2009). Web of science and scopus: a comparative review of content and searching capabilities. *The Charleston Advisor*, 11(1), 5-18. <http://www.bio.unipd.it/seminari/SCOPUSversusWoS.pdf>
- Schellenberg, E. G., & Weiss, M. W. (2013). Music and cognitive abilities. <https://doi.org/10.1016/b978-0-12-381460-9.00012-2>
- Shareefa, M., & Moosa, V. (2020). The Most-Cited Educational Research Publications on Differentiated Instruction: A Bibliometric Analysis. *European Journal of Educational Research*, 9(1), 331-349. <https://doi.org/10.12973/eu-jer.9.1.331>
- Shukla, N., Merigó, J. M., Lammers, T., & Miranda, L. (2020). Half a century of computer methods and programs in biomedicine: A bibliometric analysis from 1970 to 2017. *Computer methods and programs in biomedicine*, 183, 105075. <https://doi.org/10.1016/j.cmpb.2019.105075>
- Sinaga, F. S. S., Maestro, E., Winangsit, E., & Yensharti, Y. (2018). Learning and Singing: Thematic Children Songs in Kindergarten. *International Conference on Languages and Arts*, 301. <https://doi.org/10.2991/icla-18.2019.23>
- Sinaga, S. S. (2010). Pemanfaatan dan pengembangan lagu anak-anak dalam pembelajaran tematik pada pendidikan anak usia dini/TK. *Harmonia: Journal of Arts Research and Education*, 10(1). <https://doi.org/10.15294/harmonia.v10i1.55>
- Singh, K., Sigroha, S., Singh, D., & Shokeen, B. (2017). Religious and spiritual messages in folk songs: a study of women from rural India. *Mental Health, Religion & Culture*, 20(5), 464-477. <https://doi.org/10.1080/13674676.2017.1356812>
- Supriyadi, T., & Julia, J. Religious Songs on Youtube: The Impact on Students. *Sekolah Dasar*, 5(3), 138-144. <https://doi.org/10.17509/mimbar-sd.v5i3.14499>
- Tamminen, J., Rastle, K., Darby, J., Lucas, R., & Williamson, V. J. (2017). The impact of music on learning and consolidation of novel words. *Memory*, 25(1), 107-121. <https://doi.org/10.1080/09658211.2015.1130843>
- Thym, J. (2012). Song as Memory, Memory as Song. *Archiv für Musikwissenschaft*, 263-273.

- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *scientometrics*, 84(2), 523-538. <https://doi.org/10.1007/s11192-009-0146-3>
- Van Eck, N. J., & Waltman, L. (2014). Visualizing bibliometric networks. In *Measuring scholarly impact* (pp. 285-320). Springer. [https://doi.org/10.1007/978-3-319-10377-8\\_13](https://doi.org/10.1007/978-3-319-10377-8_13)
- Van Eck, N. J., & Waltman, L. (2017). Citation-based clustering of publications using CitNetExplorer and VOSviewer. *scientometrics*, 111(2), 1053-1070. <https://doi.org/10.1007/s11192-017-2300-7>
- Wallace, W. T. (1994). Memory for music: Effect of melody on recall of text. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 20(6), 1471. <https://doi.org/10.1037/0278-7393.20.6.1471>
- Wallace, W. T., & Rubin, D. C. (1991). Characteristics and constraints in ballads and their effects on memory. *Discourse processes*, 14(2), 181-202. <https://doi.org/10.1080/01638539109544781>
- Walter, C., & Ribière, V. (2013). A citation and co-citation analysis of 10 years of KM theory and practices. *Knowledge Management Research & Practice*, 11(3), 221-229. <https://doi.org/10.1057/kmrp.2013.25>