

A BIBLIOMETRIC ANALYSIS OF READING STRATEGY (DATABASES SCOPUS AND GOOGLE SCHOLAR 2016-2021)

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ABSTRACT

Reading strategy is an essential skill required by the students to gain knowledge and information about certain reading texts. The purpose of this study is to provide an extensive literature review on reading strategy. Articles were located through publish or perish software, Google Scholar, and Scopus. We analyzed 92 articles from 2016 to 2021. Mendeley software was applied to manage and resume the references. The researchers reviewed this database and attempted to classify articles using VOSviewer software. Eight clusters have reviewed the words most frequently occurring in each group were achievement, examination, attitude, comprehension, evidence, case, contribution, and case study. This cluster represents the research streams of reading strategy.

Keywords: reading strategy, bibliometric analysis, publish or perish software, Scopus, and VOSviewer

INTRODUCTION

Reading is considered to be one of the most important skills needed in learning a language as it is regarded as a means of acquiring knowledge and gathering information (Azmuiddin et al., 2018), an important element for effective language learning (Ismail et al., 2020), as an active process of meaning-making that requires readers to use their linguistic information and background knowledge to understand the text read (Azmuiddin et al., 2018), and Al-Mekhlaf (2018) claims that Reading is of great importance to all educational systems. Even in tertiary education, many EFL learners have trouble reading academic texts in English, as they are often found to be using ineffective reading strategies.

Reading strategies are important for the solution of text-based tasks and the comprehension of the situation presented in the task (Schmitz & Karstens, 2021), an important part of effective learning during university studies (Gavora et al., 2020), show how somebody gets easier to study and develop the work, especially students who try hard to understand the written context (Amir et al., 2019). Reading strategies play even a greater role in online environments for students at the tertiary level compared to reading traditional texts because of the increased use of technology in teaching and learning (Azmuddin et al., 2018), reading strategy that includes specific questioning and responding techniques to children while reading together (Fettig et al., 2018),

Some studies (Fathi & Afzali, 2020; Par, 2020; Suraprajit, 2019; and Mawyer & Johnson, 2019) in reading strategy. Fathi & Afzali (2020) undertook a study on the effect of second language reading strategy instruction on young Iranian EFL learners' reading comprehension. They found that the learners in the experimental group outperformed those of the control group with regard to reading comprehension after receiving the strategy instruction intervention. Pedagogical implications on reading strategy instruction were also discussed. Par (2020) carried out the research entitled the relationship between reading strategies and reading achievement of the EFL students. The study found that (1) the EFL students are active strategies users; they prefer problem-solving strategies more than global and supporting strategies; (2) there is a significant correlation between the overall reading strategy use and the students' reading achievement; (3) the problem-solving strategies are the predictive factors of the students' reading achievement. Suraprajit (2019) performed research on the bottom-up vs top-down model: The perception of reading strategies among Thai university students. The findings were that top-down reading strategies were used the most for both academic and business reading, whereas bottom-up reading strategies were reported the least on both kinds of text. Mawyer & Johnson (2019) did a study entitled eliciting preservice teachers' reading strategies through structured literacy activities. These findings could be used by science teacher educators to inform the design of science methods and disciplinary literacy courses that scaffold the development of pedagogical content knowledge necessary to teach reading as a disciplinary practice.

The reading strategy has been widely discussed in many articles. However, a bibliometric analysis of reading strategy has never been performed so we are interested in carrying out research entitled "A bibliometric analysis of reading strategy".

METHODOLOGY

A bibliometric review was generally applied in scientific disciplines and concentrated in a quantitative study of journals paper. This study adapted to the five steps method of bibliometric analysis presented by Fahimnia et al (2015). These five steps are defining research keywords "reading strategy", initial search results, refinement of the search results, compiling statistics on the initial data, and data analysis.

RESULT AND DISCUSSION

1. Defining search keywords

A literature search was carried out in December 2021 by using the keyword “reading strategy”. Publish or Perish software with google scholar was used to obtain the data. To start, the researchers entered the keyword “Reading strategy” into the Publish or Perish software, arrange to publish names for ‘journal’, ‘title word’, and years ‘0-0’. The google scholar database was obtained 990 articles in the initial search for the period from 1973 to 2021 (48 years).

2. Initial search results

During this step, the researchers did not control the range of years, the oldest article about reading strategies were published in 1973. These top twenty articles were identified from Publish or Perish software.

Table 1. Top twenty articles identified from publish or perish (unrefined search)

Authors	Titles	Years of Publication
Pm Levi jr	The effects of the performance reading strategy on the reading achievement of fourth-grade, fifth-grade, and sixth-grade ...	1973
BV Smith	A descriptive study of the effectiveness of reading strategy lessons as indicated by the Reading miscue inventory profiles of selected below average readers	1974
RT Vacca	The development of a functional reading strategy: Implications for content area instruction	1975
CM Anderson	Analysis of an Alternative Reading Strategy for Elementary Students.	1976
J Logan	Reading Strategy Project, 1974-75 Evaluation.	1976
DT Hayes	The effect of the performance reading strategy on selected elementary pupils.	1977
TW Bean, R Pardi	A field test of a guided reading strategy	1979
JF Whaley	Readers' Expectations for Story Structures: Another Dimension in Reading Strategy?.	1979
CM Elliott	Reading strategy development in beginning readers.	1979
AN Luparelli	A functional reading strategy in an eighth grade industrial arts/graphic arts program.	1981
SJ Zafirau	Reading Strategy, ESEA Title I: 1980-81 Evaluation Report.	1981

AN Luparelli	A Functional Reading Strategy for Industrial Arts.	1982
KS Noe	Technical reading technique: A briefcase reading strategy	1983
MA Atwell, LK Rhodes	Strategy lessons as alternatives to skills lessons in reading	1984
JA Bowey	The interaction of strategy and context in children's oral reading performance	1984
PJ Rabinowitz	The turn of the glass key: Popular fiction as reading strategy	1985
AD Cohen	Mentalistic measures in reading strategy research: Some recent findings	1986
JT Aldridge, D Rust	A beginning reading strategy	1987
M Montague, ML Tanner	Reading strategy groups for content area instruction	1987
AD Cohen	Recent uses of mentalistic data in reading strategy research	1987

3. Refinement of the search results

To refinement the search results, the authors excluded articles that were not published in Scopus indexed journals. The total of articles that meet the requirements for five years is 92 articles. The total that appeared after the year limited (2016 to 2021) is 92 articles. The contrast of the result between the initial search and refinement search can be shown in table 2.

Table 2. Comparison metrics

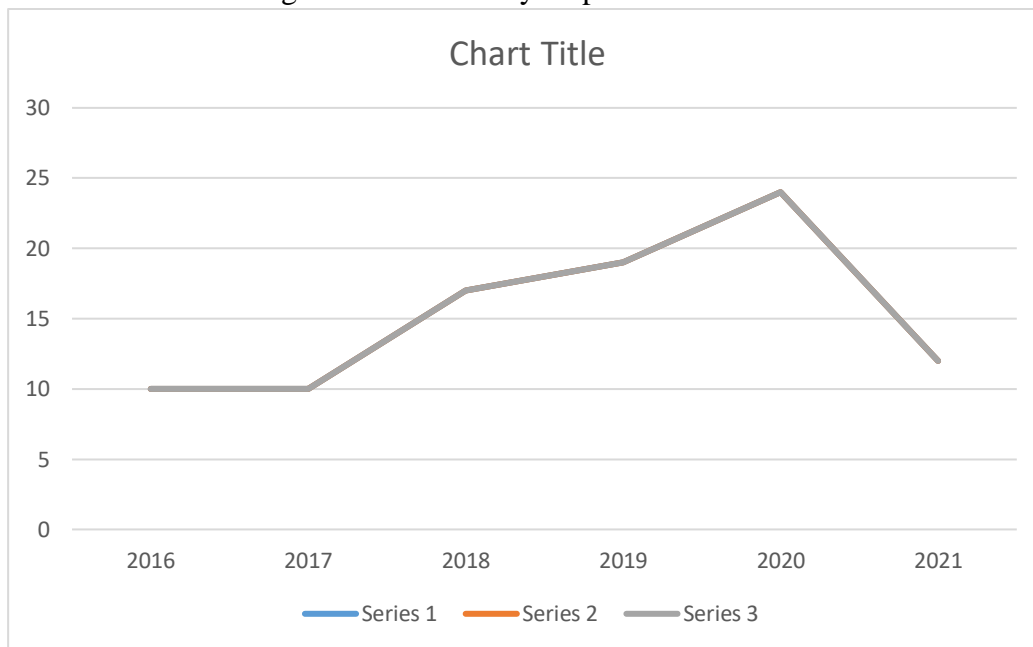
Metrics data	Initial search	Refinement search
Query	Journal, reading strategy	Journal, reading strategy from 2016 to 2021 (5 years)
Source	Google Scholar	Google Scholar
Paper	990	92
Citations	19270	279
Years	(1973-2021) 48 years	(2016-2021) 5 years
Cites/year	40146	55.80
Cites/paper	19.46	3.03
Authors/paper	1.65	1.00
h_index	66	9
g_index	123	13
hI_norm	55	9

hI_annual	1.15	1.80
hA_index	18	4

4. Compiling the initial data statistics

The result after refinement was downloaded, saved in the Mendeley software to the RIS format to include vital information related to the paper, including; title, authors' name, abstract, keywords, and journal specification (publication journal, year of publication, issue, and pages). Then, data were analyzed to classify the year publication trend.

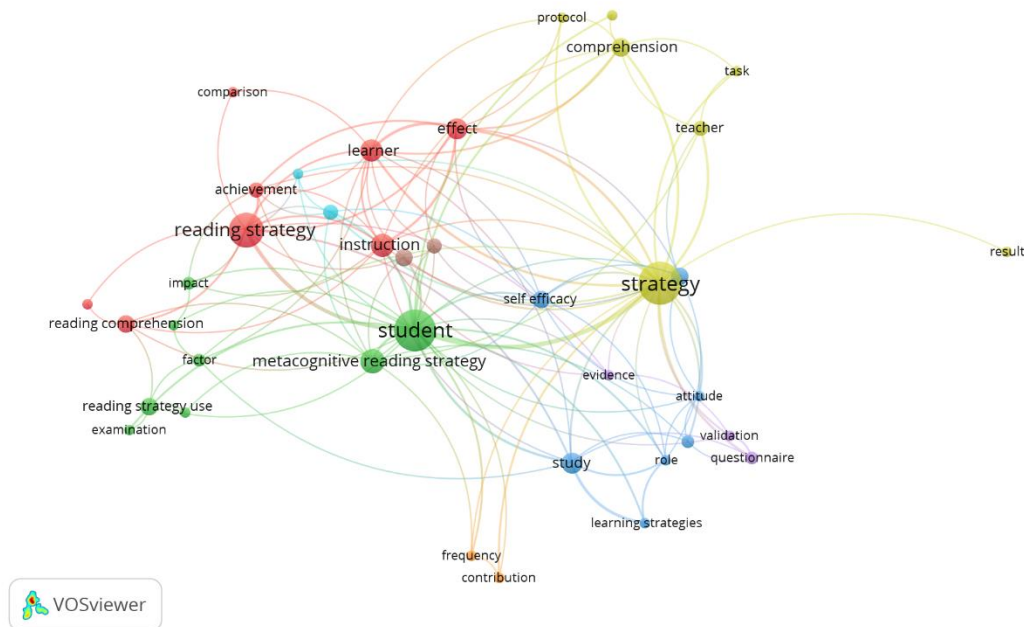
Figure 1. Year-over-year publication trend



5. Data Analysis

This paper presents the bibliometric analysis for the term “reading strategy” from the google scholar database. A bibliometric review in this paper was utilized to publish and parish software version 7.33.3388.7819. The author obtained 990 papers in the initial result and 92 in the refinement result. The data regarding citations changes with 279 citations and 55.80 citations/year.

Figure 2. Network visualization mapping



To visualization bibliometric maps used VOSviewer was developed by van Eck and Waltman in 2010. This software show three types of visualization. They are network visualization (figure 2), overlay visualization, and density visualization.

Extracting from the title field, full counting with the minimum number of occurrences set to 2, the researcher got 304 terms and 39 meet the threshold. Eight clusters are identified here. Cluster 1 consisted of 8 items (achievement, comparison, affect, instruction, and learner, meta-analysis, reading comprehension, and reading strategy). Cluster 2 consisted of 8 items (examination, factor, impact, interplay, metacognitive reading strategy, reading skill. Reading strategy use, and students). Cluster 3 consisted of 7 items (attitude, learning strategies, metacognitive awareness, role, self-efficacy, study, and university student). Cluster 4 consisted of 7 items (comprehension, protocol, result, strategy, task, teacher, visual reading strategy), Cluster consisted of 3 items (evidence, questionnaire, and validation). Cluster 6 consisted of 2 items (case and relationship). Cluster 7 consisted of 2 items (contribution and frequency). And, cluster 8 consisted of 2 items (case study and use).

CONCLUSION

This study reviewed 92 articles with a theme related to “reading strategy”. The articles were obtained from the google scholar (GS) database by using the Publish or Perish software version 7.33.3388.7819. These 92 articles were extracted from a larger original set of 990 articles gained from the initial result. The total of data citations is 279 citations and 55.80 citations/year. The most cited article on reading strategy is the article written by T.M. Chevalier entitled “the role of metacognitive reading strategies, metacognitive study and learning strategies, and behavioral Study and learning strategies in predicting academic success in students with and without a history of Reading Difficulties” was written 2017, published in the journal of published in the Journal of learning disabilities, and cited by 32 authors. The second is an article entitled “Metacognitive online reading strategy use: Readers' perceptions in L1 and L2” whose written by S Taki in 2016 that published journal of research in reading by total of citation is 20 authors.

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