THE INFLUENCE OF THE SURVEY, QUESTION, READ, RECITE REVIEW, AND REFLECT (SQ4R) METHOD TOWARD THE STUDENTS' READING COMPREHENSION (A STUDY OF META-ANALYSIS)

Muh. Ardianto Rumasera[1]
Siti Azisah[2]

[1,2]English Education Department of UIN Alauddin Makassar

e-mail: aldiansyahrumasera@gmail.com, siti.azisah@uin-alauddin.ac.id

ABSTRACT

This research aims to analyze the average level of influence of the SQ4R method on reading comprehension as a whole, based on education levels, and based on the regions. The research method used is a quantitative method with a meta-analysis design, namely by analyzing the results of research that have been published nationally related to the influence of the SQ4R method on reading comprehension. The document sources analyzed in this research were twenty articles and thesis obtained through Google Scholar search published in the 2015-2021 range covering the educational levels of Elementary School, Junior High School, Senior High School, and University. The instrument used coding sheet that summarizes the data and information of the articles and thesis. Based on the average level of influence of the SQ4R method on reading comprehension as a whole is 0.893 high category. The average level of influence of the SQ4R method on reading comprehension based on education levels, in Elementary School is 0.741 medium category, Junior High School is 0.961 high category, Senior High School is 0.988 high category, and University is 0.594 medium category and also the average level of influence of the SQ4R method on reading comprehension based on regions, Java Region 0.843 high category, Bali 0.922 high category, Lampung 0.339 small category, Kalimantan 0.406 small category, Sumatera 0.943 high category, Aceh 0.989 high category and Riau 0.571 medium category. The conclusion that the average level of influence SQ4R method reading comprehension as whole is 0.839 in high category. Based on educational levels, the SQ4R method on reading comprehension is suitable to conduct for all levels of education, and Based on regions, in high and medium category is Java, Bali, Sumatera, Aceh and Riau, it means that the SQ4R method on reading comprehension many gave contributions in five of regions.

KEY WORDS: SQ4R Method, Reading Comprehension, Meta-Analysis

1) INTRODUCTION

Reading is one of the most important language skills in addition to the other three language skills. Reading skill is necessary for students in acquiring knowledge and new information. According to Brown (2001), reading is the most essential skill in the educational context as it can be the assessment for students' general language abilities. Ferez (2010: 12) stated reading is a crucial element of learner study because, by reading every human can comprehend and learn something new that they do not know. Thus, it can be said that reading always comes along with

comprehension. Snow (2002: 38) argues that comprehension means an activity that extracting meaning or information in the brain through interaction with written language.

Reading comprehension is one aspect of language skill that must be mastered by the students. Richard and Reynanda (2002: 113) state that to be able to interpret and absorb information from reading material, students should have good reading comprehension skills.

There are still many problems in the teaching and learning process of reading comprehension. Sometimes students are only required to read the text in the heart, and then answer questions related to the content of the text. It is a way that does not involve the process of thinking students so that students are not involved in the active reading process. It can be seen from the students' reading comprehension which still far from the expectation. Based on a survey conducted by PISA (*Programmer for International Students Assessment, 2015*), found that Indonesia ranked about 62 of the 70 countries in reading comprehension.

Therefore, to solve the problems of reading comprehension need to revise through a learning method that can attract students and upgrade their reading comprehension. In this research, the researcher use SQ4R (Survey, Question, read, recite, review, and reflect) as one method to increase students' reading comprehension. According to Basar & Gurbuz (2017), SQ4R can be used to upgrade students' cognition by reading comprehension, full concentration, and practice to improve their skills in guessing and think critically.

There are experimental researchs about The Influence of SQ4R (Survey, Question, Read, Recite, Review, Reflect) Method on Students' Reading Comprehension has been conducted by the previous researcher. Based on the number of similar research, it is necessary to organize data and collecting the information as possible from previous research obtained. So, with the previous research, it is necessary for re-analysis in research to see how much The Influence of SQ4R (Survey, Question, Read, Recite, Review, Reflect) Method toward Students' Reading Comprehension by using meta-analysis.

A meta-analysis is a form of analysis that aims to re-perform the numerical analysis of statistical data obtained from different or similar studies by combining the findings of the studies in a balanced and harmonious manner and transforming these findings into a common unit of measurement (Glass & Smith, 1981).

Concerning the explanation above, the researcher is interested in conducting a researcher entitled **"A Meta-Analysis: The Influence of SQ4R (Survey, Question, Read, Recite, Review, and Reflect) Method toward Students' Reading Comprehension"**

2) METHODS

The type of research in this study was the quantitative method with a used meta-analysis design. It is a systematic review by analyzing research results related to use of the influence of the SQ4R methods toward reading comprehension.

Data Resources

The resource of data ini this research used Secondary Data Resources. Mills and Gay (2016) stated that, Secondary Data Resources are sources of research data ontained and collected by reserachers indirectly, because most of the data resources are in form of journals, articles, theses, or documents etc.

The document resources used in this research are articles and theses online published in range of 2015-2021. The meta-analysis research here used twenty national articles and thesis regarding the influence of the SQ4R method on students' reading comprehension.

Types of document analysis	Quantities
Thesis	6
Articles	14

Research Variables

This research consisted of two variables, dependent and independent variable. The independent variable (X) in this research is the SQ4R method. The dependent variable (Y) in this research is reading comprehension.

Research Instrument

The research instrument of this research is the coding sheet (coding data). According to Glass (1981), Coding data is one of the instruments in a meta-analysis that can make it easier for the researcher to collect and analyze data. As for variables used in coding data to capture information about the effect size of the research are:

a. Researcher's name

b. Research title

c. Year of research

d. Educational subject

e. Independent and dependent variables

f. Research design

g. Sample size

Data Collection Procedures

The procedure in this research will be adjusting to the steps of conducting a meta-analysis suggested by Bloom (2009:15), namely:

a. Determine and study summarized research topics. In this study, the topic of meta-analysis the influence of the SQ4R method on students' reading comprehension

b. Search for and collect several studies following the topic. The search for research results was carried out using the Goggle Scholar journal article indexing engine and selecting the results of the study was carried out to facilitatedata.

c. Perform the effect size calculation on the results of the predetermined research. The effect size calculation is done using the formula and criteria of Glass & Smith (1981).

d. Identify whether there is an effect size or not. By looking at the suitability of the results of the effect size calculation, which gives a small effect, medium effect, high effect, and very high effect or high effect.

e. Conclude the results of the meta-analysis research. Summarize every result of the meta-analysis that has been carried out and under the determining effect size.

Data Analysis Techniques

As for how to find out the results of effect size, the researcher was used the formula and category of effect size by Glass (1981) are:

Calculation of Mean Difference *(d)*

$$d = \frac{X_e - X_c}{S_C / S\text{within}}$$

$$S\text{within} = \sqrt{\frac{Sdi}{2\,(1-r)}}$$

Where:

d = Effect Size (Standardized)

Xe-Xc = Rerata skor pada *Post-test dan Pre-test*

Sc = Standar Deviasi Control

r = Corelation score *Post-test dan Pre-test*

Calculation Std. Error *(SEₐ)*

$$SE_d \sqrt{V_d}$$

Calculating the mean score of the *effect size* by this formula : $\bar{x} = \Sigma x N$

Note : $\bar{x}$ = Mean

Σx = The Sum of all Score

N = Number of Subject

(Gay, 1981)

$$ES = \frac{Xe - Xc}{Sc}$$

(Glass & Smith, 1981)

Where: Δ = (effect size)

$\overline{X_e}$ = eksperimental group average

$\overline{X_c}$ = control group average

S_e = control group/pooled standard deviation

T-test

$$ES = t \sqrt{\frac{2t}{n}}$$

Where: t = Score from t-test

n = all of sample

Categories of *Effect Size (level of influence)*

effect size ≤ 0.15 ignore effect

0.15 < *effect size* ≤ 0.49 small effect

0.50 < *effect size* ≤ 0.74 medium effect
0.75 < *effect size* ≤ 1.10 high effect
1.10 < *effect size* ≤ 1.45 very high effect

(Glass & Smith, 1981)

3) RESULTS

The Average level of Influence of the SQ4R Method on Students' Reading Comprehension as a Whole

The results of the analysis of articles and thesis listed are then calculated the level of influence, they are grouped into categories of very high effect, high effect, medium effect, and small effect. Recommended by Glass and Smith (1981), namely small effect (0.15 < effect size ≤ 0.49), medium effect (0.50 < effect size ≤ 0.74), high effect (0.75< effect size ≤ 1.9), very high effect (1.10 < effect size ≤ 1.45) .

Table 1. The Average level of Influence of the SQ4R Method on Students' Reading Comprehension as a Whole

No.	Researchers	Title of Articles And Thesis	Status	The score level of influence *(Effect Size d)*	Std. Error level of infl uence	Categories level of influence
1	Made Deni Gunarsa, Komang	Pengaruh Strategi SQ4R Berbantuan *Satua* Bali Terhadap Kemampuan Membaca Pemahaman Siswa Kelas V SD Gugus V Kintamani (2018)	Article	1.636	0.160	**Very High**
2	Ni Putu Venny, Ni Nyoman Ganing	Pengaruh model pembelajaran *SQ4R* berbantuan media teks cerita rakyat terhadap kompetensi membaca pemahaman mata pelajaran Bahasa Indonesia kelas V sekolah dasar Gugus Pattimura Denpasar Selatan	Article	0.791	0.056	**High**
3	Nur Afni Dewi Sari, Andi Sukri	Pengaruh Metode *Survey, Question, Read, Reflect, Recite And Review* (SQ4R) Terhadap Membaca Pemahaman siswa kelas V SD Inpres Tetebatu (2018)	Article	0.613	0.060	**Medium**
4	Hartati & Ilham Yuliawati	The Effectiveness Of SQ4R Method Toward Reading Comprehension at the Class III Students of Kalibanteng Kulon 01 Elementary School (2018)	Article	0.439	0.136	**Small**
5	Anggraeni Sintawati	Pengaruh Metode SQ4R (*Survey, Question, Read, Recite, Review, Reflect)* Terhadap Keterampilan Membaca Pemahaman Siswa Kelas IV SDN Gugus Jendral Sudirman (2016)	Thesis	0.227	0.064	**Small**

No	Author	Title	Type			
6	Dedah Jubaedah Efendi	Pengaruh Metode SQ4R Dalam Pembelajaran Membaca Pemahaman at the Class VIII Students of SMP Negeri 4 Bandung (2016)	Article	0.649	0.105	**Medium**
7	Tika Rahyana, Evi Kasyuti,	The Effect Of SQ4R Technique Toward Students' Reading Comprehension of Descriptive Text at Student Grade Seventh Students Of SMP Negeri 02 Pagarantapah Darussalam (2016)	Article	1.027	0.127	**High**
8	Fathiyyah El Rahma	The Influence Of Using Survey, Question, Read, Recite, Reflect, And Review (SQ4R) Strategy Towards Students' Reading Comprehension At The First Semester Of The Eighth Grade Of Mts Al Utrujiyyah Bandar Lampung	Thesis	0.418	0.097	**Small**
9	Adi Joko Saputra	The Influence Of Using Survey, Question, Read, Recite, Reflect, And Review (SQ4R) Strategy Towards Students' Reading Comprehension at the Second Semester Of The Eighth Grade Of MTs Negri 2 Bandar Lampung (2019)	Thesis	0.293	0.027	**Small**
10	Jenycha Fresy Ryandani	The Effect of Using SQ4R (Survey, Question, Read, Recite, Relate And Review) In Teaching Reading On Students'Reading Comprehension at Second Grade of SMPN 8 Kediri (2017)	Article	1.643	0.045	**Very High**
11	Fajar Ari Pratama	The Effectiveness of SQ4R Strategies on Reading Comprehension at Eight Grade Students of SMP Ma'arif 1 Ponorogo (2020)	Thesis	1.736	0.069	**Very High**
12	Qiqi Zakiya	The Effectiveness of Using SQ4R on Students' Reading Comprehension Ability of Tenth Grade in SMKN 1 Bandung at Tenth Grade In SMKN 1 Bandung (2018)	Thesis	0.571	0.058	**Medium**
13	Retty Sulviana Dewi	The Impact of Survey-Question-Read-Recite-Reflect -review SQ4R Method To The Students'Reading Comprehension at the Tenth Grade of SMKN 2 Kediri (2018)	Article	1.184	0.155	**Very High**
14	Jelita	The Impact of Survey-Question-Read-Recite-Reflect-review SQ4R Method to the Students' Reading Attitude toward Their Reading Comprehension at SMA N I Buay Madang OKU Timur	Article	0.684	0.086	**Medium**

(2018)

No	Author	Title	Type			Level
15	Maulizan ZA, Khatmi	The Effectiveness of The SQ4R Method in Learning to Reading Comprehension at SMAN 1 Darul Imarah (2020)	Article	1.229	0.060	**Very High**
16	Purlilaice, Akhmad Suherman	Pengaruh Teknik SQ4R Terhadap Kemampuan Membaca Pemahaman Siswa at the Class X Student Of Daar El Falaah Senior High School in Pandeglang Regency (2020)	Article	1.273	0.096	**Very High**
17	Evi Kasyulita	The Effect of SQ4R Technique toward Reading Comprehension at the Second Years of English Students in university of Pasir Pengaraian (2015)	Article	0.928	0.147	**High**
18	Megawati & Dini Fitriani	The Effect SQ4R Technique on Students' Reading Comprehension at the Second Semester on Students English Education Program of STKIP Kusuma Negara Jakarta (2020)	Article	0.415	0.102	**Small**
19	Gusnetti, M. Zaim, Syahrul R.	The Effect of SQ4R Reading Techniques on Students' Reading Comprehension University Bung Hatta Padang (2018)	Article	0.921	0.124	**High**
20	Maulana Iksan	The Effect Of SQ4R Toward Undergraduate Students' Critical Reading Comprehension at Students From Fifth Semester State Islamic Institute Of Palangka Raya (2017)	Thesis	0.114	0.171	**Small**

$$\overline{x_d} = \frac{\Sigma X}{N}$$

$$\overline{x_d} = \frac{16.791}{20}$$

$$\overline{x_d} = 0.839$$

The Average level of Influence of SQ4R Method on Students' Reading Comprehension Based on Education Levels

The articles and thesis analyzed whose research uses the SQ4R method oon reading comprehension. Based on the limitation, education levels analyzed are Elementary School, Junior High School, Senior High School, and University. Based on the limitation, education levels analyzed are Elementary School, Junior High School, Senior High School, and University. The results of the data summary calculation the level of influence (*effect size*) and standard error based on education level are presented in table 2.

Table 2. The Average level of Influence of SQ4R Method on Students' Reading Comprehension Based on Education Levels

Education Levels	Statistics		
	Average Score level of influence (effect Size d)	Average Score Std. Error	Categories level of influence
Elementary School	0.741	0.256	Medium
Junior High School	0.961	0.255	High
Senior High School	0.961	0.255	High
University	0.594	0.212	Medium
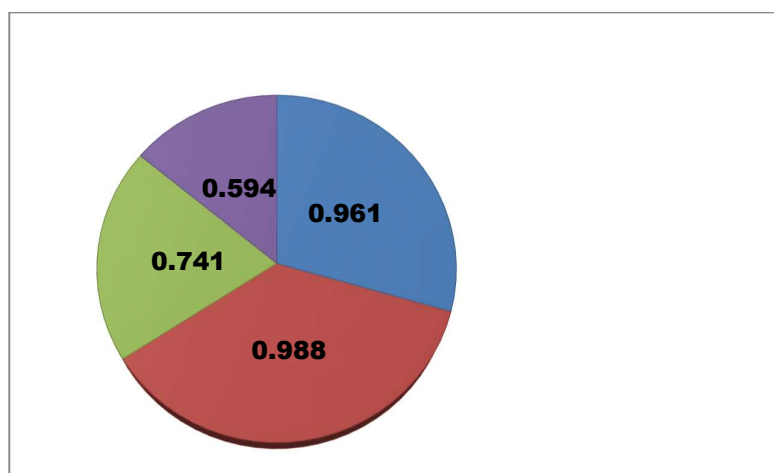
Figure 1. Average level of *Effect Size* the Influence of SQ4R Method on Students' Reading Comprehension Based on Education Levels

The Average level of Influence of SQ4R Method on Students' Reading Comprehension Based on Regions

The average level of influence of the SQ4R method based on the overall area from the largest to the smallest is Java Region, Sumatera Region, Lampung Region, Kalimantan Region, Aceh Region, Riau Region, Bali Region. When viewed from the distribution of the area that uses the SQ4R method on students' reading comprehension the most in the region of Java with the highest number of articles among other regions as many as 10 articles and thesis with the level of influence of 0.843.

Visually, the average size of influence based on archipelago area in Indonesia is presented in Figure 1
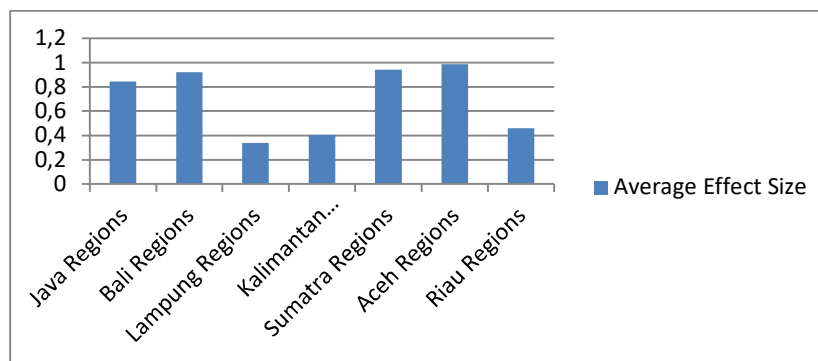
Figure. 2 Average level of Effect Size the Influence of SQ4R Method on Students' Reading Comprehension Based on Education Levels

4) DISCUSSION

1. The average level of influence of the SQ4R method on reading comprehension as a whole is 0.839 level of influence (*effect size*) and include in high category. It means that the SQ4R learning method is suitable to use in learning reading comprehension.

2. The average level of influence of the SQ4R method on reading comprehension based on education levels, in Elementary School is 0.741 medium category, Junior High School is 0.961 high category, Senior High School is 0.988 high category, and University is 0.594 medium category. it means that the SQ4R method on reading comprehension is suitable to be conducted in all levels of education.

3. The average level of influence of the SQ4R method on reading comprehension based on regions, Java Region 0.843 high category, Bali 0.922 high category, Sumatera 0.943 high category, Aceh 0.989 high category and Riau 0.571 medium category. it means that the SQ4R method on reading comprehension have many contributions in four levels of regions.

Even so, based on the research process and findings, the meta-analysis that has been carried out shows several shortcomings. So that the researchers put forward several suggestions as an effort to improve similar studies in the future as follows:

1. Meta-analysis research should be carried out carefully and in detail, to minimize the occurrence of data bias. The selection of research articles or thesis is also carried out carefully and the summarized research data must be complete so that the quality of the meta-analysis research carried out can be categorized as good.

2. For researchers, the researcher should be more detailed in including the completeness of research data for scientific articles both methods, sample data, and research data.

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