The Correlation Between Content Schemata and Reading Comprehension on Expository Text of The Second Year Students at MAN 2 Jombang

Noviatul Rochmah[1], Tutut Wahyuningsih [2]

Program Studi Pendidikan Bahasa Inggris, Universitas Muhammadiyah Gresik, Indonesia[1]
noviatul_rochmah@umg.ac.id
Program Studi Pendidikan Bahasa Inggris, Universitas Muhammadiyah Gresik, Indonesia[2]
tutut.wahyuningsih34@gmail.com

Abstrak
Bahasa Inggris memiliki empat keterampilan yang harus dikuasai. Dalam hal ini, membaca adalah salah satunya apakah pembelajar dapat memahami atau tidak simbol dari kata-kata yang tercetak. Di sisi lain, jika mereka memiliki kemampuan membaca yang baik, mereka akan memiliki kesempatan yang lebih baik untuk berhasil dalam studi mereka. Penelitian ini bersifat kuantitatif, difokuskan pada produk (hasil tes) bukan proses belajar-mengajar, dan bertujuan untuk mengetahui hubungan antara skemata siswa dengan pemahaman bacaannya. Korelasi ini adalah Korelasi Pearson karena jenis korelasi datanya adalah ordinal dan interval. Jumlah sampel 83 siswa dan taraf signifikansi 5% atau 0,05 r tabel untuk 83 siswa adalah 0,213. Ini lebih tinggi dari r tabel. Sehingga dapat dibandingkan bahwa rxy lebih besar dari rtabel 0,244 > 0,213. maka dapat disimpulkan bahwa Ha (Hipotesis alternatif) diterima dan H0 ditolak, sehingga datanya berkorelasi Positif. Guru bahasa Inggris harus membuka kelas dengan kegiatan pra-membaca untuk memperkuat skema siswa dan siswa harus memiliki pemikiran kritis yang baik untuk mengembangkan pemahaman membaca mereka dari beberapa jenis teks, terutama teks naratif.
Katakunci: *Korelasi, Skemata konten, Teks Ekspositori*

Abstract
The English language has four skills that must be mastered. In this case, reading is one of them whether the learner can understand the symbol of printed words or not. On the other hand, if they have a good ability in reading, they will have a better chance to succeed in their study. This research is quantitative, it is focused on the product (the result of the test) not the process of teaching-learning, and the objective is to find out the correlation between students' schemata and their reading comprehension. This correlation is Pearson Correlation because the kind of data correlation is ordinal and interval. The total sample is 83 students, and the significance level is 5% or 0,05 r table for 83 students is 0.213. It is higher than the r table. So, it can be compared that r_{xy} is higher than r_{table} 0.244 > 0.213. it can be concluded that Ha (Alternative hypothesis) is accepted and H0 is rejected, so the data is Positive correlation. The English teacher should open the class by pre-reading activities to reinforce students' schemata and the students should have good critical thinking to develop their reading comprehension of several types of text, especially narrative text.
Keywords: Correlation, Content Schemata, Expository Text

INTRODUCTION

The English language has four skills. There are listening, speaking, reading, and writing. In this case, reading is one of them whether the learner can understand the symbol of printed words or not. Reading is an active process that consists of recognition and comprehension skills. Reading is an essential activity in life that can update their knowledge. In other words, reading can help to improve knowledge, experience, and get much information from the written materials.

The failure of a reader in understanding the precise readings may be caused by several things. According to Rumelhart (1980: 47-48), failures to understand the reading text may be due to three things as follow: a. The readers do not have the appropriate schemata. When this happens, the reader will not grasp the concept conveyed by reading the text. b. The Readers have appropriate schemata but a clue there might not be enough. It also may cause the reader not to understand the recitations, except when given an additional clue. c. The Readers may be able to find the interpretation of the discourse consistently, but they may not find out what is desirable of a writer. In this case, the reader will understand the text reading, but the understanding is not the same as what the writer meant

Based on the issues above, the researcher intends to examine a significant correlation between content schemata and reading comprehension by students in the second grade of Senior High School. The researcher intends to examine a significant correlation between content schemata and reading comprehension by students in the second grade of Senior High School.

The research problem can be formulated into research questions below: Is there any significant correlation between content schemata and reading comprehension on the expository text of the second-year students at MAN 2 Jombang? Moreover, this research objective is to investigate the significant correlation between content schemata and reading comprehension on the expository text of the second-year students at MAN 2 Jombang.

This research can contribute insight to the English lesson (especially in reading comprehension), the teacher, the school, and the researcher himself. The finding can be current information, especially in terms of teaching and learning English as a foreign language

to the respondents of the research and institution where they conduct the research.

Another theory closely related to top-down processing is called schema theory. According to Hudson, the schema is sometimes used as a singular term with schemata as the plural noun form. However, the literature also often uses it in a generic or non-count sense as in terms such as "schema theoretic" or "type of schema".

Regarding reading comprehension, Adams and Collins, in Xiubo Yi"s journal, explained the goal of schema theory as "to specify the interface between the reader and the text –to specify how the reader's knowledge interacts with and shapes the information on the page and to specify how that knowledge organized to support the interaction". The given text does not carry meaning by itself. It only provides directions and clues for readers to retrieve or reconstruct meaning from their previous knowledge. It assumes that comprehension occurs 8 when readers successfully connect the new information from the text with the information in their memory. If the new information does not fit the readers" schemata, it could be misunderstood or

ignored, or the original schemata will be revised.

Content schemata deal with the knowledge related to the content domain of the text, which is the key to understanding texts. Weaver states content schemata is the background knowledge, "a reader brings to a text." it means that a reader needs to use schemata to bring the background knowledge to the text. Content schemata are all the chunks of information that a reader has gained through a lifetime of 9 direct and indirect experiences. Therefore, this experience and individual's content schemata will have been profoundly influenced by his mother's culture.6 Meanwhile, Brown in Al- Issa journal defines content schemata as what we know about people, the world, culture, and the universe. In other words, the readers need to use their background knowledge or content schemata regarding the topic of a text and to know the content area of a text to comprehend.

The expository text means a text that expresses the opinion, idea, or argument of the writer based on the phenomena or the topic. Syafi'i et al (2007) stated that exposition means the way to explain or analyzing to the text or paragraph that is supported by

controlling the idea with information, facts, and illustration. Besides, they also mention the methods to organize exposition text as follows: 21 a. Explaining processes and procedures; b. Giving comparison or pro and contra; c. Analyzing cause and effect relationship; d. Criticizing; etc. Furthermore, very common types of exposition text are divided into two types, namely, hortatory exposition text and analytical exposition text.

The basic organizational of expository text is the introduction, body, and conclusion. The expository has five types which are description, sequence, comparison, cause-effect, and problem-solving. They have the same purpose to give information to the reader.

Previous research has discussed content schemata and reading comprehension. For instance, the research by Ismi Mariati (2005) focused on Reading Comprehension in the first year of SMAN 1 Bangkinang. At the end of her research, she concluded that there were significant differences between the students' reading comprehension taught by activating schemata pre-reading plan and not activating schemata through pre-reading. Another study by Syafni Eliza (2011) researched the correlation between students' formal schemata and their reading comprehension of narrative text at science class of the second year of state senior high school 3 Pekanbaru. The result of this research was a positive significant correlation between students' formal schemata and their reading comprehension of narrative text in science class of the second year of state senior high school 3 Pekanbaru.

However, the research only focused on using the schemata technique to investigate reading comprehension. Therefore, the researcher focuses on expository text.

METHOD

This research is quantitative, it is focused on the product (the result of the test) not the process of teaching-learning, and the objective is to find out the correlation between students' schemata and their reading comprehension.

This correlation is Pearson Correlation because the data correlation is ordinal and interval. There were two variables in this research, independent and dependent variables. Hartono said that an independent variable is a variable that gives influence, and a

dependent variable is the one that is affected by an independent variable. The independent variable is students' content schemata (X), and the dependent variable is reading comprehension (Y).

The population of this 27 research was the second-year students of MAN 2 Jombang with a number of 104 students. They were divided into four classes, XI IPA1, XI IPA 2, XI IPS1, XI IPS 2.

After designing the research, the next step was to draw up the instrument. Research instrument occupies the most important position in the field to obtain the data. The research instrument was defined as a tool to measure the nature of social phenomena observed (Sugiyono, 2014:148). Here, the purpose is as a tool to get the data. There are two instruments to conduct this research namely, a questionnaire with the Likert Scale and a multiple-choice test. To check the validity and reliability of the instrument, the researcher utilized the test with the formula as this follows:

$$r_{11} = \frac{n}{n-1} \quad \frac{S^2 - \Sigma pq}{S^2}$$

$$r_{xy} = \frac{\Sigma xy}{\Sigma x^2 \quad \Sigma y^2}$$

Where:

r_{xy} = Correlation product moment x and y

Σxy = Total x and y

X^2 = X quadrant

Y^2 = Y quadrant

r_{11} = Reliability

P = Proportion the correct scores

q = Proportion the incorrect scores

Σpq = Total of p times q

n = Total items

S = Variance total of the test

For the technique of data analysis, the researcher applied quantitative analysis. According to David Nunan (2002), quantitative research describes a research problem through a description of trends or a need for an explanation of the relationship among variables by collecting numeric data from a large number of people using instruments with present questions and responses. Considering both variables as ordinal and interval data, thus, the writer used the Pearson Correlation formula in analyzing and calculating the data. The collective data were analyzed by using the following formula:

$$r_{ser} = \frac{\sum \ O_r - O_t \ M}{\sum \ \frac{O_r - O_t \ ^2}{p}}$$

Where:

r_{ser} : Serial Correlation Coefficient

SD_{tot} : Standard Deviation

O_r : The Lower Ordinate

O_t : The Higher Ordinate

M : Mean Score

p : Individual

Furthermore, to categorize how big strong of a correlation between content schemata and reading comprehension on the expository text of the second-year students at MAN 2 Jombang, the researcher used categories in Hartono's book.

Table 1. Interpretation of correlation coefficient

Coefficient Interval	Level of Correlation
0.00-0.200	Very Low
0.200-0.400	Low
0.400-0.700	Middle
0.700-0.900	Strong
0.900-1.00	Very Strong

(Hartono,2008)

The data of students' content schemata should be calculated by the formula below:

$$P = \frac{F \times 100\%}{N}$$

Where :

P : Percentage

F : Frequency

N : Number of items

Furthermore, the data of reading comprehension should be scored by the formula below:

$$S = \frac{R \times 100\%}{N}$$

Where:

S : Individual Score

R : Number of Correct Answer

N : Number of Items

Table 2. the coefficient of students' score

No	Classification	Score
1	Excellent	0,800-1,00
2	Good	0,600-0,800
3	Fair	0,400-0,600
4	Poor	0,200-0,400
5	Very Poor	0,00-0,200

(Arikunto,2010)

Meanwhile, in analyzing the data, the researcher used SPSS 17.0 program for Windows. The product-moment correlation coefficient was obtained by considering the degree of freedom (df) = N-nr; (N=number of sample, nr= number of variable). Statistically, the Hypotheses are

Ha: > r $_{table}$ Ho: r$_o$< r $_{table}$

Ha is accepted if r$_o$ > r $_{table}$ or there is a significant correlation between the students' content schemata and reading comprehension on expository text.

Ho, I s accepted if r$_o$< r $_{table}$ or there is a significant correlation between the students' content schemata and reading comprehension on expository text.

FINDING AND DISCUSSION

To get data on students' content schemata, the researcher gave them a questionnaire that consisted of 20 items. It was developed from five indicators of content schemata in operational concepts. Every indicator had four questions. The score was categorized based on the formula and the category presented at the end of the stage. The percentage of students' content schemata can be seen in the following table.

Table 3. Descriptive statistic

	N	Minimum	Maximum	Mean	Std. Deviation	Variance
Content Schemata	83	35.00	87.00	74.1446	14.48054	209.686
Expository Text	83	35.00	85.00	75.0843	9.27783	86.078
Valid N (listwise)	83					

The analysis of the scores on the Content Schemata revealed that the minimum score is 35, the maximum score is 87, and the mean score is 74.14. This score shows that the students MAN 2 Jombang from XI class learned best when they did the Content Schemata Test. The analysis of the scores on the Expository text test revealed that the minimum score is 35, the maximum score is 85, and the mean score is 75.08. It seems that the students reading comprehension to learn expository text was average.

To make clearer about the category of students' content schemata, the researcher provided the distributive frequency of students' content schemata as follows:

Table 4. Frequency of Students' Content Schemata Based on Questionnaire

The Score Level	Level	Frequency	Percentage
80-100	High	56	67%
66-79	Middle	10	12%
56-65	Low	6	7%
40-55	Very Low	8	10%
30-39	Bad	3	4%

To analyze the relationship between content schemata and reading comprehension on the expository text, the researcher uses the Pearson Product Moment Formula. The variables consist of ordinal and interval scales. The correlation will calculate by using SPSS 16.0 windows program. As follows:

Table 5. the relationship between content schemata and reading comprehension

Correlations

		VAR00027	VAR00005
VAR00027	Pearson Correlation	1	.244*
	Sig. (2-tailed)		.026
	N	83	83
VAR00005	Pearson Correlation	.244*	1
	Sig. (2-tailed)	.026	
	N	83	83

*. Correlation is significant at the 0.05 level (2-tailed).

Content Schemata has a Positive relationship with the students reading comprehension on expository text. We can see that the total sample is 83 students, and the significance level is 5% or 0,05, r_{table} for 83 students is 0.213. It is higher than r_{table}. So we can compare that r_{xy} is higher than r_{table}

0.244 > 0.213. In conclusion, Ha (Alternative hypothesis) is accepted, and H0 is rejected. Therefore, content schemata have a positive correlation with students' reading comprehension on expository text, with the categorization of "Low correlation".

The researcher found that there were two variables in this research. There are variable X and variable Y. To test these variables, the researcher gave the questionnaire to determine the students' content schemata (X) and multiple choices test (Y) to test the students' reading comprehension on expository text.

A test is valid if it measures the measurable object and is suitable for the criteria. The questionnaire items are valid if the value of the validity coefficient is higher than the r table or lower than 44 significant tolerance of 5% or 0.05. This validity test used 83 students as a population, so the R_{table} that the researcher used is 0.213.

To ensure that the questionnaire is reliable, the writer uses Cronbach's Alpha Coefficient between 0 and 1. The result of the Content Schemata questionnaire showed that the alpha is 0.922 ($\alpha > 0.7$). It can be concluded that the Content Schemata questionnaire was reliable.

Based on the result of the students' content schemata and their reading comprehension. The researcher found that students with good content schemata also have good reading comprehension ability.

However, the previous findings stated that the research result on content schemata and reading comprehension in the expository text were not correlated. Because the sample used previously was too small, namely 32. The less sample used will affect the calculation result of the correlation of a study. So the researcher used the Slovin method to determine the new sample and obtained the results of 83 samples. When the sample is changed, the previously not correlated results are now positively correlated. A unidirectional relationship is called a positive correlation, while a relationship is in the opposite direction is called a negative correlation. Called Positive Correlation, if two variables (or more) are correlated, running parallel; means that the relationship between two (or more) variables shows the same direction.

In the Previous study, Ismi Mariati (2005), in her research, focused on "The Effect of Activating Schemata on Reading Comprehension at the First Year of SMAN 1 Bangkinang".

Activating schemata was one of the good techniques, in which having schemata before reading activities is very important because it helped the readers to understand and improve their reading comprehension. A Schemata needs to diagnose students' prior knowledge and provide necessary background knowledge so they will be ready to understand what they will read. At the end of her research, she concluded that there were significant differences between the students' reading comprehension taught by activating schemata pre-reading plan and not activating schemata through pre-reading.

Research by Syafni Eliza (2011) focused on the Correlation between students' formal schemata and their reading Comprehension of Narrative Text at Science Class of the Second Year of State Senior High School 3 Pekanbaru. It showed that the strength of correlation was 0.565. It was categorized as middle. The result of this research was a positive significant correlation between students' formal schemata and their reading comprehension of narrative text in science class of the second year of state senior high school 3 Pekanbaru.

Based on some previous research above, The similarities some previous research that focused on using schemata technique to investigate reading comprehension. While for the differences, some previous research were focused on narrative text, at the same time the author focused on Expository text. Of all the similarities and differences above, it will be very useful to investigate students' abilities, especially in reading, and proven to have been widely applied to students.

CONCLUSION AND SUGGESTION
Conclusion

In conclusion, the students' content schemata were 0.244. It was categorized Low level. Furthermore, the researcher found that there was a significant correlation between content schemata and reading comprehension on the expository text of the second-year students at MAN 2 Jombang.

In conclusion, Ha (Alternative hypothesis) is accepted, and H0 is rejected. It can be concluded that content schemata have a positive correlation with students' reading comprehension on expository text, with the categorization of "Low correlation".

Suggestion

The students should have good critical thinking to develop their reading comprehension of several text types, especially narrative texts.

Teachers are encouraged to add more facilities and creative media to increase students' reading comprehension for more various types of text.

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