# The Correlation of Students' English Reading Interest at Library on Students' Vocabulary Achievement at the Teacher Training Faculty Of Nommensen University Pematangsiantar

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***Abstract:*** *This research is the influence of students' English reading interest at library on students' vocabulary achievement, where the purpose of this thesis is to observe the influence of students' English reading interest on their vocabulary achievement. The root of this research is about reading and vocabulary, so the problem that should be discussed is "is there any influence between students' English reading interest at library on students' vocabulary achievement at The third semester students of English department?" To answer the problem of the study, the writer uses some theories and uses them to analyze the data. Here are the relevant theories used in the influence of students' English reading interest at library on students' vocabulary achievement, they are : Patel and Jain (2008), Ary, Jacobs, Sorensen (2010), Linse (2005), Arikunto (2006), Sudjana (2002). The analysis of the data is significance. The writer tries to analyze the data and relate to the theories. The technique of analyzing data is experimental design where there are 2 groups such as control group and experimental group. After analyzing data, finally the writer finds out the answer of the main problem of this research. And here, the writer would like to interpret the findings of this research. Firstly, the value of correlation (r) = 0,749 and it's a high correlation. From the value of correlation (0,749), it's the acceptance of Ha (hypothesis alternative). Secondly the contribution of English reading interest at library on vocabulary achievement at the third semester students are 56% based on $r^2$ x 100%. Based on the statement above, it can answer the main problem that the students' English reading interest at library have an influence on students' vocabulary achievement. Finally, the writer concludes that the both of students' English reading interest at library and vocabulary achievement have high correlation. So the writer hopes for the readers who read this thesis will be more interested in reading English books at library to increase and develop their vocabulary achievement.*
***Keywords****: Reading, Vocabulary*

## I. Introduction

English has become an important device that takes important roles in communication. It is used as an international tool of communication in the world in general, every people who wants to get a work as a special of condition which needed that they must know about English because it's necessary for communication. English is a language that has a complete grammar and so easy to learn. There are 4 major skills of language in English, they are speaking, listening, reading and writing

The writer argues that students will know more English vocabulary if they more in reading English books. "One way to help students is to pre-teach vocabulary is the reading or listening to the text" (Harmer 1991: 203). Teacher Training Faculty of Nommensen University that was build at the year of 1954 have eight departments, one of them is English Department. That's why Teacher Training Faculty has many students, especially English department. It is about 1200 students read an English book in the library. So the writer thinks it's important to be researched. Why? Because when the writer was a teacher practice in the third semester students of English department, he observed that the students at library who have an interest in reading English have a good vocabulary achievement. It's the principle of this research that makes the writer interest in doing this research. The writer sees that there are some important influences of students' English reading interest at library on students' English vocabulary. The writer hopes the students will be interested in reading English book at library to add their English vocabulary.

Based on the explanation above, actually there are some influences between students' English reading interest at library on students' vocabulary achievement. So the writer will do an adequate analysis to prove and solve this problem. The writer writes this research by presenting a title "the influence of students' English reading interest at library on students' vocabulary achievement at The third semester students of English department "

# II. Theoretical Review

## 2.1 Definition of Reading

According to Anderson, quoted in Nunan (2003:68), there are two main definitions of reading. Those are strategic reading and fluent reading. Strategic reading is defined as the ability of the reader to use a wide variety of reading strategies to accomplish purpose for read. Fluent reading is defined as the ability to read an appropriate rate with adequate comprehension. Meaning does not rest in the reader nor does it rest in the text. The reader background knowledge integrates with the text to create the meaning. The act of reading be defined when the text, the reader, fluency and strategies combined together.

Reading is something crucial and has main role in human beings life. By reading, we can get information about science, technology, and other advancements of the world. Reading is like providing the mind with nourishment because through reading, we can get knowledge. According to Patel and Jain (2008: 113) Reading is an important activity in life with which one can update his / her knowledge. Reading skill is an important tool for academic success.. Reading consists of two related processes: word recognition and comprehension. Word recognition refers to the process of perceiving how written symbols correspond to one's spoken language. Comprehension is the process of making sense of words, sentences and connected text. Readers typically make use of background knowledge, vocabulary, grammatical knowledge, experience with text and other strategies to help them understand written text.

## 2.2 Definition of Vocabulary

According to Linse (2005:121), vocabulary is the collection of words that you use on a daily basic large. Vocabulary is very important to all the people because person's vocabulary is the set of words within a language that are familiar to that person. Palmer in Richards and Rodgers (2002:37) stated "Vocabulary was one of the most important aspect of foreign language" it means that, it is very important to be mastered first. We cannot speak well and understand written materials if we do not master it. No matter how successfully the sound of the foreign language is mastered, without words to express the wider range of meanings, communication in a foreign language just cannot happen in any meaningful way.

From some explanations given above, it seems that vocabulary is a total number of words used by a person, class, profession in communication. Vocabulary is a central of language and of critical importance of typical language. Without sufficient vocabulary, people cannot communicate effectively or express his ideas in both oral and written from. The people must analyze the words that they want to say when expressing their thinking. So communication will be happened by using vocabulary accurately and appropriate

## 2.3 Importance of Vocabulary

Wilkins in Thornburry (2002:13) states that "without grammar very little can be conveyed, without vocabulary nothing can be conveyed". It means that if you spend most of your time studying grammar, your English will not increase very much. But you will see most improvement if you learn more words and expression. These are some importance of vocabulary, they are
a) An extensive vocabulary aids expressions and communication
b) Vocabulary number has been directly linked to reading comprehension
c) Linguistic vocabulary is synonymous with thinking vocabulary
d) A person may be judged by others based on his or her vocabulary
.

# III. Research Method

In this research, the writer will follow the methodology in Experimental Design. An experimental design is the general plan for carrying out a study with an active independent variable (Ary, Jacobs, Sorensen 2010:301). Experimental design consists of 2 groups, they are experimental group and control group. The experimental group receives a specific treatment; the control group receives no treatment. Using a control group enables the researcher to discount many alternative explanations for the effect of treatment. It is intended to test and prove the hypothesis by giving instruments to the sample, it is applied to answer the problem in research problem. It will show whether the student's English reading interest has an influence on their vocabulary's achievement or not.

This part discusses about the result of the research, which consists of data analysis, findings and interpretation, to find out whether there is any influence of students' English reading interest at library on students' vocabulary achievement or not.

# IV. Data Analysis And Interpretation

**4.1 Data Analysis**

The data of this research are students' English reading interest at library and students' vocabulary achievement. It has been taken from $5^{th}$ – $20^{th}$ of January 2015 at the third semester student of English department which consists of 1200 students' English reading interest at library as the population and the writer has taken 60 students' English reading interest at library as the sample in this research to find out whether there is any influence of students' English reading interest at library on students' vocabulary achievement or not. Based on the sample of this research the writer has given the questionnaires to the sample to find out the students' English reading interest at library. After giving the questionnaire the writer has given the vocabulary test to the sample to find out the students' vocabulary achievement

**4.2 The Data of Students' English Reading Interest**

To find out the students' English reading interest the writer has given the questionnaire to the 60 students as the sample. The questionnaire consists of 20 questions. The writer uses Likert Scale as the guideline in scoring the questionnaire. The questionnaire consist of 4 points scale ranging from "Strongly agree", "Agree", "Disagree" and "Strongly disagree" or etc.
- Option A has 4 points
- Option B has 3 points
- Option C has 2 points
- Option D has 1 point
a. The highest point is 80, 4 X 20 = 80 points
b. The lowest point is 20, 1 X 20 = 20 Points

From the result of questionnaires score that is checked by the writer show that there are 60 students that have been given the questionnaire about English reading interest at library. The highest point is 72 by Aiga Tamara Hutapea, the lowest point is 40 by Jojor Banurea and the mean of the questionnaire is $\frac{3346}{60}$ = 55,77.

This research uses an experimental design which consists of 2 groups like control and experimental group. So from the data above, the writer has divided the data into 2 groups. The way that used by the writer to divide the class is by using median formula by Sudjana (2002):

$$Me = b + p \left(\frac{\frac{1}{2}n - F}{f}\right)$$    (Sudjana, 2002:79)

where:    b = Under Limiting of median class
          P = the distance of median class
          N = the amount of data
          F= The Sum of all frequency
             which is lower than median class
          f = The frequency of median class

$Me = 50,5 + 10 \left(\frac{30-15}{31}\right) = \textbf{55,338}$

| Score | $f_1$ |
|-------|-------|
| 41-50 | 15 |
| 51-60 | 31 |
| 61-70 | 13 |
| 71-80 | 1 |
| **Total** | **60** |

The respondents that have point less than 55,338 will be as a control group and the respondents that have point more than 55,338 will be as an experimental group. So there are 30 students will be a control and there are 30 students will be an experimental group
**Note:**
Score (X) = Students' English Reading Interest
Score (Y) = Students' Vocabulary Achievement

### Table 4.2.1 Controlling Group

| No | Name | Score (X) | Score (Y) | $(X)^2$ | $(Y)^2$ | XY |
|----|------|-----------|-----------|---------|---------|-----|
| 1 | Jojor Banurea | 40 | 50 | 1600 | 2500 | 2000 |
| 2 | Yusni Ramadita Silalahi | 41 | 40 | 1681 | 1600 | 1640 |
| 3 | Naufal | 43 | 20 | 1849 | 400 | 860 |
| 4 | Sundari Novita Sari | 43 | 30 | 1849 | 900 | 1290 |
| 5 | Floren | 45 | 35 | 2025 | 1225 | 1575 |
| 6 | Eliza Nur | 46 | 70 | 2116 | 4900 | 3220 |
| 7 | Setia Sianipar | 47 | 40 | 2209 | 1600 | 1880 |
| 8 | Andre Setiawan | 47 | 30 | 2209 | 900 | 1410 |
| 9 | Putri Dewi Lestari | 48 | 40 | 2304 | 1600 | 1920 |
| 10 | Dyah Ayu Safitri | 48 | 15 | 2304 | 225 | 720 |
| 11 | Elsa Malau | 48 | 25 | 2304 | 625 | 1200 |
| 12 | Efri Nainggolan | 49 | 50 | 2401 | 2500 | 2450 |
| 13 | Inka Natalia Saragih | 50 | 50 | 2500 | 2500 | 2500 |
| 14 | Try Marta Tambunan | 50 | 65 | 2500 | 4225 | 3250 |

| No | Name | Score (X) | Score (Y) | $(X)^2$ | $(Y)^2$ | XY |
|----|------|-----------|-----------|---------|---------|-----|
| 15 | Esti Yohana Siagian | 50 | 30 | 2500 | 900 | 1500 |
| 16 | Yudi Virgiawan Situmorang | 51 | 35 | 2601 | 1225 | 1785 |
| 17 | Delima Situmeang | 51 | 35 | 2601 | 1225 | 1785 |
| 18 | M. Bagus Setiawan | 52 | 30 | 2704 | 900 | 1560 |
| 19 | Frengki Silalahi | 53 | 25 | 2809 | 625 | 1325 |
| 20 | Ayu Windira Nasution | 53 | 50 | 2809 | 2500 | 2650 |
| 21 | Jan Krisna Sinuhaji | 53 | 35 | 2809 | 1225 | 1855 |
| 22 | Choirunnisa Utami | 53 | 60 | 2809 | 3600 | 3180 |
| 23 | Maranta M. Siburian | 54 | 35 | 2916 | 1225 | 1890 |
| 24 | Grace Angelina Silaban | 54 | 70 | 2916 | 4900 | 3780 |
| 25 | Devi Fransiska Saragih | 55 | 40 | 3025 | 1600 | 2200 |
| 26 | Diah Permata Sari | 55 | 35 | 3025 | 1225 | 1925 |
| 27 | Cahya Azni Azhari | 55 | 70 | 3025 | 4900 | 3850 |
| 28 | Hotnauli Gultom | 55 | 65 | 3025 | 4225 | 3575 |
| 29 | Widya Ningrum | 55 | 45 | 3025 | 2025 | 2475 |
| 30 | Abdul Malik | 55 | 45 | 3025 | 2025 | 2475 |
| ∑ |  | 1499 | 1265 | 75475 | 60025 | 63725 |

**Table 4.2.2 Experimental Group**

| No | Name | Score (X) | Score (Y) | $(X)^2$ | $(Y)^2$ | XY |
|----|------|-----------|-----------|---------|---------|-----|
| 1 | Melda Nadir Ambarita | 56 | 75 | 3136 | 5625 | 4200 |
| 2 | Hotmariah Purba | 56 | 80 | 3136 | 6400 | 4480 |
| 3 | Juliani Novitasari Simorangkir | 56 | 65 | 3136 | 4225 | 3640 |
| 4 | Fitriyani | 56 | 85 | 3136 | 7225 | 4760 |
| 5 | Zia Nur Fadhilah | 56 | 60 | 3136 | 3600 | 3360 |
| 6 | Maria Manullang | 56 | 80 | 3136 | 6400 | 4480 |
| 7 | M. Febrianda | 57 | 90 | 3249 | 8100 | 5130 |
| 8 | Feby Yurista Sinaga | 57 | 90 | 3249 | 8100 | 5130 |
| 9 | Hennika Sijabat | 58 | 65 | 3364 | 4225 | 3770 |
| 10 | Darma S. Tampubolon | 59 | 80 | 3481 | 6400 | 4720 |
| 11 | Maylany | 59 | 80 | 3481 | 6400 | 4720 |
| 12 | Imawaty | 59 | 80 | 3481 | 6400 | 4720 |
| 13 | Rodearni Dabukke | 60 | 70 | 3600 | 4900 | 4200 |
| 14 | Claudia Nainggolan | 60 | 85 | 3600 | 7225 | 5100 |
| 15 | Suandi H. Siagian | 60 | 65 | 3600 | 4225 | 3900 |
| 16 | Zon Frendi Siahaan | 60 | 70 | 3600 | 4900 | 4200 |
| 17 | Suryani Napitupulu | 61 | 90 | 3721 | 8100 | 5490 |
| 18 | Tomu Nurhayati Silaban | 61 | 60 | 3721 | 3600 | 3660 |
| 19 | Sarah Janiva Purba | 62 | 60 | 3844 | 3600 | 3720 |
| 20 | Imawati Sinaga | 63 | 90 | 3969 | 8100 | 5670 |
| 21 | Sindar Sijabat | 65 | 75 | 4225 | 5625 | 4875 |
| 22 | Fellix Rimba | 65 | 90 | 4225 | 8100 | 5850 |
| 23 | Agus Romantinus Sihombing | 66 | 90 | 4356 | 8100 | 5940 |
| 24 | Romauli Sitinjak | 66 | 80 | 4356 | 6400 | 5280 |
| 25 | M. Eka Abimanyu | 67 | 90 | 4489 | 8100 | 6030 |
| 26 | Ramadani Tanjung | 67 | 80 | 4489 | 6400 | 5360 |
| 27 | Lisna Damanik | 68 | 95 | 4624 | 9025 | 6460 |
| 28 | Dwi Eka Murni Purba | 69 | 85 | 4761 | 7225 | 5865 |
| 29 | Ade Aulia Fitri | 70 | 90 | 4900 | 8100 | 6300 |
| 30 | Aiga Tamara Hutapea | 72 | 80 | 5184 | 6400 | 5760 |
| ∑ |  | 1847 | 2375 | 114385 | 191225 | 146770 |

From the data above there are 30 students in control group and 30 students in experimental group. The total score of control group is 1499 and the total score of experimental group is 1847. The mean of score in control group is $\frac{1499}{30} = 49,966$ and the mean of score in experimental group is $\frac{1847}{30} = 61,566$.

After analyzing all the questionnaires, the writer found that the students' favourite books to be read at library are lesson book. So the writer has made the questions of vocabulary test is about English lesson

**4.3 The Data of Students' Vocabulary Achievement**

After giving the questionnaire to the students to get their interest in reading English in experimental and control group, the writer has given the vocabulary test to get their achievement in English vocabulary. The vocabulary test consists of 20 questions, which has 60% multiple choice, 20% matching and 20% writing sentence it the test techniques and has 20% word formation, 20% synonym, 20% completion, 20% definition and 20% rearrangement in the test types. (See the score (Y) above)

Based on the data above, the highest point in control group is 70 by Cahya Azni Azhari, Eliza Nur, and Grace Angelina Silaban. The lowest point is 15 by Dyah Ayu Safitri. The mean of score in control group is $\frac{1265}{30}$ = 42,116. It's the score as the representative of the students who don't have English reading interest at library in The third semester student of English department.

In experimental group, the highest point is 95 by Lisna Damanik. The lowest point is 60 by Sarah Janiva Purba, Tomu Nurhayati Silaban, and Zia Nur Fadhilah. The mean of score in experimental group is $\frac{2375}{30}$ = 79,166. It's the score as the representative of the students who have English reading interest at library in The third semester student of English department.

**4.4 The Correlation between English Reading Interest on Vocabulary Achievement**

To see the correlation between English reading interests on vocabulary achievement, the writer uses the Pearson Product Moment Formula by Arikunto (2006):

$$rxy = \frac{N\sum xy - (\sum X)(\sum Y)}{\sqrt{(N\sum X^2 - (\sum X)^2)(N\sum Y^2 - (\sum Y)^2)}}$$

The first step to find the correlation between English reading interest and vocabulary achievement is calculating the sum of score of questionnaire and vocabulary test. The calculating can be seen in the following table where X is students English reading interest and Y is vocabulary achievement:

After that the product moment formula is used to find out the correlation between students' English reading interest and vocabulary achievement in which:

$\sum x = 3346$          $\sum x^2 = 189860$    $\sum y = 3640$          $\sum y^2 = 251250$
$\sum xy = 210455$          $N = 60$

$$r_{xy} = \frac{N\sum xy - (\sum X)(\sum Y)}{\sqrt{(N\sum X^2 - (\sum X)^2)(N\sum Y^2 - (\sum Y)^2)}}$$

$$rxy = \frac{60 . 210455 - (3346))(3640)}{\sqrt{(60 . 189860 - (3346)^2(60 . 251250 - (3640)^2)}}$$

**= 0,749**

Based on the result, the writer finds that the coefficient of correlation (rxy) = 0,749. It's between the classification 0,60 – 0,80. It means that the correlations between these 2 variables are high level. The percentage of correlation between students' English reading interest at library and vocabulary achievement is $(0,749)^2$ X 100% = 56%.

**4.5 Hypothesis Testing**

After finishing in finding the correlation of the English reading interest and vocabulary achievement, now the writer has to test the hypothesis. As mentioned in the first chapter, the hypothesis of this research is:

Ho :          Students' English reading interest at library doesn't have an influence on students' vocabulary achievement

Ha :          Students' English reading interest at library has an influence on students' vocabulary achievement

So after finding the correlation, the writer has to test the hypothesis above by using formula:

$$t_h = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}} \qquad = \frac{0,749 \sqrt{58}}{\sqrt{1-(0,749)^2}}$$

**= 8,609**

After calculating the $t_h$ based on the formula above, the writer got $t_h = 8,609$. On the $t_{table}$ of hypothesis testing with α = 0,05 and df = 58 the value of $t_{table}$ is 1,671. Now we know that $t_h > t_{table}$ where 8,609 > 1,671 so it can be conclude that Ha (hypothesis alternative) is accepted and H0 is refused. It means that students' English reading interest at library has an influence on students' vocabulary achievement.

To make sure that students' English reading interest at library has an influence on students' vocabulary achievement, the writer also has compared the mean of the score vocabulary test in control group and the experimental group. As mentioned in the chapter before, that the control group is the group where the students who do not have English reading interest at library and the experimental group is the group where the students who have English reading interest at library.

a. Mean of the score in control group

$$M = \frac{\sum y1}{N} = \frac{1265}{30} = 42,116$$

b. Mean of the score in experimental group

$$M = \frac{\sum y2}{N} = \frac{2375}{30} = 79,166$$

Based on the calculation above we can see that the M control group < M experimental group. So Ha (hypothesis alternative) is accepted and H0 is refused. It can be conclude that students' English reading interest at library has an influence on students' vocabulary achievement.

**4.6 Research Finding**

After doing data analysis and data computation between students' English reading interest and vocabulary achievement through analyzing the correlation, hypothesis testing, and comparing the mean of vocabulary achievement in control group and experimental group so the writer has found that the questionnaire from all the sample about English reading interest the mean is 55,77 ; the mean of questionnaire in control group is 49,966 and the mean of questionnaire in experimental group is 61,566 ; the mean of vocabulary achievement from all the sample is 60,666 ; the mean of vocabulary achievement in control group is 42,116 and the mean of vocabulary achievement in experimental group is 79,166 ; all the questionnaire and the vocabulary test are valid. The validity of the questionnaire is 0,503 and it's fair. The validity of the vocabulary test is 0,487 and it's also fair, the coefficient of correlation is 0,749 and it's high level ; the hypothesis testing ($t_h$) is 8,609 ; the percentage of the correlation between English reading interest and vocabulary achievement is $(0,749)^2$ X 100% = 56%, and the acceptance of Ha (hypothesis alternative) that students' English reading interest at library has an influence on students' vocabulary achievement.

# V. Conclusion And Suggestion

This chapter is devoted to report the findings of the data analysis in which the procedures had been described in the part before. In order to know what the writer had done in his research "The Correlation of Students' English Reading Interest at Library on Students' Vocabulary Achievement at the Teacher Training Faculty of Nommensen University Pematangsiantar", the writer made out the conclusion and the suggestion as follows:

**5.1 Conclusions**

According to analysis and discussion in the previous chapter, the writer concludes that the contribution of English reading interest at library on vocabulary achievement at the third semester students of English department is 56%. It shows that there is an influence between students' English reading interest at library on students' vocabulary achievement at the third semester students of English department. It can be seen from the correlations between students' English reading interest at library and students' vocabulary achievement at the third semester students of English department is 0,749 and it's a high correlation. It also can be said that the students who have English reading interest at library is more competent in English vocabulary than the students who don't have English reading interest at library. From this research the writer concludes that English reading interest at library is one of many factors which cause the students have good vocabulary achievement

**5.2 Suggestions**

Based on the research finding and the conclusion, the writer suggests that the students must have English reading interest at library so that they have good vocabulary achievement in English. The teacher also should encourage their students to develop their English reading interest. But in other hand, the infrastructure of school especially library must have a special attention. As we know, library is a place where we can find and search many kinds of books to improve our knowledge and our vocabulary especially English.

And in the last for the next researcher who wants to make same research, it's suggested to choose another object so that the research about the influence between students' English reading interest at library on vocabulary achievement becomes better.

# Acknowledgement

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