THE CORRELATION BETWEEN INTENSITY OF READING ENGLISH BOOK OF THE SECOND YEAR STUDENTS OF ENGLISH DEPARTMENT OF BUNG HATTA UNIVERSITY AND THEIR READING ABILITY

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Abstract

The type of this study was correlational study. The purpose of this study was to find out the correlation between intensity of reading English book and reading comprehension ability. The population of this research was the second year students of English Department of Bung Hatta University. The members of sample in this research were 22 students. The data of this research were collected by using two kinds of instruments. The first is the questionnaire on intensity of reading English book, the second is the test on reading comprehension ability. It was found that reliability index of the test was 0.79, and reliability index of the questionnaire was 0.63. The result of this research revealed that $t$ counted (4.85) was bigger than $t$ table (2.086). Therefore, alternative hypothesis (Ha) was accepted, that say that there is a significant correlation between students’ intensity of reading English book and their reading comprehension ability of the second year students of English Department of Bung Hatta University with the level of significant 95% ($\alpha$ 0.05) and the degree of freedom (df) n-2. It can be concluded that there is connection between students’ interest in reading English book and their reading comprehension ability. It means the more intense of student in reading English book, the more comprehension they will be. Based on the conclusion, it is suggested for the lecturer to make student read English books as out classroom exercises in teaching reading comprehension. Besides, the college should be able to facilitate the students with sufficient reading English books in order to improve the students’ interest in reading.

Key words: Intensity of Reading English Book, Reading Comprehension Ability

INTRODUCTION

Reading is one of the important skills that students must master in learning English besides listening, speaking, and writing. The ability to read is essential to children’s success at school, as it is an integral part of virtually all subjects, including English, social studies, and mathematics (Kupzyk et al. 2011, p. 87). Reading gives so much benefit for our lives, and even it can affect every aspect of life such as knowledge, experience, have a stand, and etc. Reading can open our mind or firmament of world.

Intensity of reading is one part of the factors that have influence on reading. The proportion of adults who reported reading regularly rises with level of educational attainment. In all countries, adults who have completed lower secondary education or higher display a greater intensity of reading (medium and
high intensity) (OECD 2013, p. 235). Intensity of reading plays a significant role toward the students’ achievement. To get the best achievement in study, students should display a greater intensity of reading.

In fact, based on informal interview that researcher did with several second year students at English Department of Bung Hatta University from April 30, 2015 to May 20, 2015, it was found that their intensity in reading English book is low. Some of them sometimes read books just for doing the task, and some others read books frequently for their own enjoyment like novels. Therefore, the researcher wants to prove whether there is correlation between students’ intensity of reading English book and their reading comprehension ability of the second year students of English Department of Bung Hatta University.

Intensity of reading English book refers to amount of reading and time spent in reading. Reading amount applies to text of more than a page or reading large amount of text and widely, including professional article, essays, technical reports, short stories, and books reading. Based on Karlin’s idea et al. in Kirchoff (2013, p. 192) states that the amount of reading can be labeled as extensive. Time spent in reading is the frequently and amount of time the students do the reading activity.

Reading comprehension is a process to get information from texts that we read and comprehend about what the text tell about. The comprehension levels of reading are literal, interpretive or inferential, applied or evaluative, and appreciative.

Due to the broad scope of this study as already discussed above, the researcher limited her study only on the correlation between reading intensity of the second year students at English Department of Bung Hatta University and their reading comprehension ability. She limited the students’ comprehension to literal (finding topic, getting main idea) and interpretive (unstated/ implied main idea, meaning of word/ dealing with vocabulary, and catching the authors’ thought) level of comprehending the message of the text.

The main purpose of this research was to describe the correlation between intensity of reading English books of the second year students of English Department of Bung Hatta University and their reading comprehension ability. In addition, it was aimed to describe whether the hypothesis of this study was accepted or rejected.
RESEARCH METHOD

The type of this research was correlational in design. According to Creswell (2012, p. 338), in correlational research designs, investigators use the correlation statistical test to describe and measure the degree of association (or relationship) between two or more variables or sets of scores. The degree of relationship is expressed as a correlational coefficient.

A population is a group of individuals who have the same characteristic (Creswell 2012, p. 142). According to Lodico et al (2010, p. 25), population is the group to which the researcher would ultimately like to generalize or apply the results of the study. In this research, population was all second year students of English Department at Bung Hatta University in academic year 2014/2015. The number of the population members involved in this study was 54 students.

Table 3.1: The Distribution of Members of Population

<table>
<thead>
<tr>
<th>No.</th>
<th>Class</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Class A</td>
<td>26</td>
</tr>
<tr>
<td>2.</td>
<td>Class B</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>54</td>
</tr>
</tbody>
</table>

In this research, the researcher used cluster random sampling technique. According to Lodico et al. (2010, p. 216), cluster random sampling is a procedure through which entire groups and not individuals are randomly selected. In this research, the researcher used cluster random sampling technique to select the sample. It was used because all members of the population have the same characteristics; they had the same teacher, use the same syllabus, and teaching material in reading subject. It means that the members of population in each class were homogeneous.

In selecting the sample, the researcher wrote all the name of classes (Class A and Class B) on the small papers, and she put them into a box and mixed it. After mixing it, the researcher took out one piece of paper. The selected class became the class sample and all members of the class sample became the sample in this study, and the other class was decided as sample for try out. Class A was taken as sample which has 26 students. Only 22 students who attended in the class and 4 students were absent. Class B was taken as try out which has 28 students. Only 20 students who attended in the class and 7 students were absent.

The instruments of this research were test and questionnaire. The test was used to measure students’ ability to comprehend
text (25 items), and the questionnaire was used to measure their intensity of reading (32 items). The researcher allocated 60 minutes to do the test.

**Table 3.2: Questionnaire Indicators**

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicators</th>
<th>The Total Number of Items</th>
<th>Item Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Amount of reading</td>
<td>12</td>
<td>1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12</td>
</tr>
<tr>
<td>2.</td>
<td>Time Spent Reading</td>
<td>20</td>
<td>13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32</td>
</tr>
</tbody>
</table>

In addition, the questionnaire was constructed in the form of Likert Scale. It is a common system used to evaluate teachers, bosses, products, and so on, and typically ask you to respond to a question or statement using the phrases Strongly Disagree to Strongly Agree (Schreiber et al. 2011, p. 108). Sekaran cited in Haryanto (2014, p. 21) adds that there are five statements to score students’ response.

**Table 3.3: Grades of Questionnaire**

<table>
<thead>
<tr>
<th>Statement</th>
<th>Positive</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Always</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Often</th>
<th>4</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sometimes</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Seldom</td>
<td>2</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Never</td>
<td>1</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

To have valid questionnaire, the researcher followed several steps mentioned in Tuckman cited in Osman (2010, p. 21) as follow;
(1) Questionnaire deals with the significant topic,
(2) Questionnaire is attractive in appearance, neatly arranged, and clearly duplicated or printed.
(3) Direction are clear and complete,
(4) The questions are objective, with no leading suggestion as to response desired,
(5) Question or statement are presented in good physical order,
(6) It is easy to tabulate and interpret

To know the reliability index of the questionnaire, the researcher used interval alpha formula. Arikunto (2006) states that alpha formula is used to find out the reliability of instrument that scores are not 1–0,

$$r_{ii} = \frac{k}{k-1} \left( 1 - \frac{\sum \sigma_{bi}^2}{\sigma^2 t} \right)$$

Where:

$$r_{ii} = \text{Reliability of Instrumentation}$$
\[ k \] = Total Number of Question or Statement

\[ \sum \sigma_{bi}^2 \] = Calculation of Varians Score for Each Item

\[ \sigma_t^2 \] = The Total of Varians

Finally, the researcher uses the degree of coefficient correlation based on Arikuntos’ idea (2012, p. 89):

\[ 0.81 - 1.00 \] = very reliable
\[ 0.61 - 0.80 \] = reliable
\[ 0.41 - 0.60 \] = moderate reliable
\[ 0.21 - 0.40 \] = low reliable
\[ 0.0 - 0.20 \] = very low reliable

Based on the result of data analysis, the reliability index of the questionnaire was 0.63. It means that questionnaire was reliable.

The second instrument was reading test and it was used to collect the data on students’ reading comprehension. The form of the test that researcher used was multiple choice. The test consisted of 30 items and the time allocation was 60 minutes. Before giving the test to the sample of this research, the researcher tried it out to the students of out sample (Class B).

The characteristics of good instrument are valid and reliable. According to Brown (2010, p. 30), a valid test measures exactly what it proposes to measure. To know the validity of the test, the researcher used content validity in which the test materials were constructed based on curriculum, syllabus, and teaching materials used at English Department of Bung Hatta University.

**Table 3.4: The Specification of Instrumentation for Reading Test (Try Out)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Reading Comprehension</th>
<th>Sub Items</th>
<th>Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Finding topic</td>
<td></td>
<td>1, 12, 21</td>
</tr>
<tr>
<td>2.</td>
<td>Getting Main Ideas</td>
<td>a. The Main Idea as the First Sentence/Last Sentence/First and Last Sentences</td>
<td>2, 4, 3, 15, 29, 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Unstated Main Ideas</td>
<td>6, 8, 11, 22</td>
</tr>
<tr>
<td>3.</td>
<td>Finding Major and Minor Details</td>
<td>a. Finding Major Details</td>
<td>3, 14, 26</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b. Finding Minor Details</td>
<td>28</td>
</tr>
<tr>
<td>5.</td>
<td>Catching the Author’s Thought</td>
<td></td>
<td>10, 16, 18, 20, 25, 27</td>
</tr>
</tbody>
</table>
To analyze the reliability of the test, the researcher used split half method. Due to Creswell (2012, p. 161), split half reliability is a method used to engage the reliability of a test. This method divided the items of the test into odd items and evens item, and the scores of the two items were correlated by using Pearson Product Moment Formula as follow:

\[ r_{xy} = \frac{n\sum xy - (\sum x)(\sum y)}{\sqrt{n\sum x^2 - (\sum x)^2} \cdot n\sum y^2 - (\sum y)^2}} \]

where:
- \( r_{xy} \) = the coefficient of correlation between two variables of the test (even and odds items)
- \( n \) = the number of students who followed the test
- \( x \) = the even item score
- \( y \) = the odd item score
- \( \sum xy \) = the total scores of cross product xy
- \( \sum x \) = the sum of x
- \( \sum y \) = the sum of y
- \( \sum x^2 \) = the square of x
- \( \sum y^2 \) = the square of y

After that, to find out the degree of coefficient correlation of the total test, the researcher analyzed it by using Spearman-Brown formula (Arikunto 2012, p. 107) as follow:

\[ r_{ii} = \frac{2r_{xy} \sqrt{n}}{1+r_{xy}^2} \]

where:
- \( r_{ii} \) = The coefficient reliability for total test
- \( r_{xy} \) = The coefficient correlation between odd and even items

The degree of coefficient of test is categorized as follows (Arikunto 2012, p. 89):

<table>
<thead>
<tr>
<th>Coefficient Interval</th>
<th>Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.81 – 1.00</td>
<td>Very reliable</td>
</tr>
<tr>
<td>0.61 – 0.80</td>
<td>Reliable</td>
</tr>
<tr>
<td>0.41 – 0.60</td>
<td>Enough reliable</td>
</tr>
<tr>
<td>0.21 – 0.40</td>
<td>Low reliable</td>
</tr>
<tr>
<td>0.00 – 0.20</td>
<td>Very low reliable</td>
</tr>
</tbody>
</table>

Based on the result of data analysis, it was found that the reliability index of the test was 0.79. It means the test was reliable.

To have a good test, the researcher analyzed the item discrimination and item difficulty of the test. Item difficulty is the extent to which an item is easy or difficult for the proposed group of test-taker (Brown 2010, p. 71). The researcher used the following formula suggested by Arikunto (2012, p. 223):

\[ P = \frac{B}{\sqrt{S}} \]

Where:
- \( P \) = Item difficulty
B: Sum of students who answer correctly  
JS: Sum of students who follow the test.

The result of difficulty index was classified into the followings (Arikunto 2012, p. 225):
- $P : 0.00 – 0.30$ = difficult
- $P : 0.31 – 0.70$ = moderate
- $P : 0.71 – 1.00$ = easy

The researcher used the standard of item difficulties on $P = 0.20 – 0.80$.

Based on the result of data analysis, there were 7 difficult items (4, 6, 9, 18, 22, 23, and 24), 17 moderate items (1, 5, 8, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 25, 26, 27, and 28), and 6 easy items (2, 3, 7, 10, 29, and 30).

Item discrimination is the extent to which an item differentiates between high and low ability test-takers (Brown 2010, p. 71).

\[
D = \frac{BA}{JA} - \frac{BB}{JB}
\]

Where:
- $D$ = Item discrimination
- $BA$ = Sum of students in the high group who answer in the item correctly
- $BB$ = Sum of students in the low group who answer the item correctly
- $JA$ = Sum of students in the high group
- $JB$ = Sum of students in the low group

The result of item discrimination was classified into the followings Arikunto (2012, pp. 232):
- $D : 0.00 – 0.20$ = poor
- $D : 0.21 – 0.40$ = satisfactory
- $D : 0.41 – 0.70$ = good
- $D : 0.71 – 1.00$ = excellent

The researcher used the standard of item discrimination with $D = 0.21 - 1.00$.

Based on the result of data analysis, there were 5 poor items (10, 17, 22, 27, and 28), there were 25 satisfactory items (1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 23, 24, 25, 26, 29, and 30), there was no good and excellent item.

Based on the result of both item analyses, the researcher accepted 25 items (1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 23, 24, 25, 26, 29, and 30), and discarded 5 items (10, 17, 22, 27, 28). The specification of real test is as follows;

**Table 3.6: The Specification of Instrumentation for Reading Test (Real Test)**

<table>
<thead>
<tr>
<th>No.</th>
<th>Reading Comprehension</th>
<th>Sub Items</th>
<th>Item Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Finding topic</td>
<td></td>
<td>1, 12, 21</td>
</tr>
<tr>
<td>2.</td>
<td>Getting Main Ideas</td>
<td>c. The Main Idea as the First Sentence/Last Sentence/First and Last Sentences</td>
<td>2, 4, 3, 15, 29, 30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>d. Unstated</td>
<td>6, 8, 11</td>
</tr>
</tbody>
</table>
3. Finding Major and Minor Details
   c. Finding Major Details 3, 14, 26

4. Dealing with Vocabulary
   b. Understanding Difficult Word 5, 19, 23, 24

5. Catching the Author’s Thought 16, 18, 20, 25

To gather the data of students’ intensity in reading English book and their reading ability, the researcher gathered them by following several steps:

3.1.1 Techniques of Gathering data on intensity of reading

1. The researcher distributed the questionnaire sheet to the sample and asked them to give respond about the statement in the questionnaire.
2. The researcher read the students’ respond for the questionnaire.
3. The researcher gave score for the students’ respond using the following criteria; never (1), seldom (2), sometimes (3), often (4), always (5).
4. The researcher counted the total scores of each student for the questionnaire.

3.1.2 Techniques of Gathering data on Reading Comprehension

1. The researcher gave the reading comprehension test to the sample.
2. The researcher checked students’ answer sheet.
3. The researcher gave score 1 for correct answer and zero for wrong answer. The highest possible score is 25 and the lowest one is 0.
4. The researcher counted the total score of each student.

In analyzing the correlation between students’ reading intensity and reading comprehension, the researcher used Pearson Product Moment formula as follows:

\[ r_{xy} = \frac{n \sum xy - (\sum x)(\sum y)}{\sqrt{(n \sum x^2 - (\sum x)^2)(n \sum y^2 - (\sum y)^2)}} \]

where:

- \( r_{xy} \) = The coefficient of correlation between two variables of the test
- \( x \) = The total score of students on intensity of reading English book
- \( y \) = The average of students’ reading comprehension score
- \( n \) = the number of students
- \( \sum xy \) = the total scores of cross product xy
- \( \sum x \) = the sum of score on questionnaire
- \( \sum y \) = the sum of score on reading comprehension
- \( \sum x^2 \) = the square of score on questionnaire

\( \sum y^2 \) = the square of score on reading comprehension
\[ \Sigma y^2 = \text{the square of score on reading comprehension} \]

The researcher used the classification of coefficient correlation suggested by Arikunto (2012, p. 89) as follows:

- 0.00-0.20 = very low correlation
- 0.21-0.40 = low correlation
- 0.41-0.60 = moderate correlation
- 0.61-0.80 = high correlation
- 0.81 -1.00 = perfect correlation.

To test the hypothesis a statistical analysis was used. The statistical or null hypothesis (Ho): “there is no significant correlation between students’ intensity in reading English books and their reading comprehension of the second year student of English Department at Bung Hatta University” would be accepted if the value of \( r \)-calculated is the same as zero. Otherwise, alternative hypothesis (Ha): “there is a significant correlation between students’ intensity of reading English book and their reading comprehension of second year students of English Department at Bung Hatta University” would be accepted if the value of \( r \)-calculated is not the same as zero.

To find whether there is a significant correlation or not the researcher tried to compare t-table and t-counted. The researcher compares the value of t-counted with the value of t-table in the level of significance 0.05 and the degree of freedom (df = n - 2) (Gay; 1987, p. 367). If t-counted is bigger than t-table, the correlation is significant.

**FINDINGS AND DISCUSSIONS**

1. **Correlation between Intensity of Reading English Book and Reading Comprehension**

   Based on the result of data analysis, it was found that the coefficient correlation between intensity of reading English book and reading comprehension ability was 0.65. To test whether such a correlation coefficient is significant or not, the researcher used \( t \) test. It was classified as having high correlation for both variables. Besides, it was also a significant correlation, because \( t \) count (4.85) was bigger than \( t \) table (2.086). Accordingly, the coefficient determination \((r^2)\) was 42.25%.

2. **Discussions and Interpretation**

   Based on the result of testing hypothesis, Ho was rejected and Ha was accepted. The coefficient correlation between intensity of reading English book and reading ability was 0.65. It was categorized as having high correlation, significant and positive correlation. It means that reading ability was closely related with intensity of reading. In other words, an increased on intensity of reading is associated with an increase on reading
ability. Accordingly, the coefficient determination of this study was 0.4225. It indicates intensity of reading gives as much 42.25% toward reading ability of the second year students of English Department at Bung Hatta University. In other word, 57.75% of students’ reading ability is determined other factors such as condition surrounding the students or method and strategy in learning process.

CONCLUSION AND SUGGESTIONS

1. Conclusion

Based on the result of the research, it is concluded that there is significant correlation between intensity of reading English book and reading comprehension with coefficient correlation ($\rho = 0.65$) at the level of significant ($\alpha 0.05$) and the degree of freedom ($df= n-2$). It was categorized as high correlation. It means the increasing score on intensity of reading is connected with an increasing score in reading ability. In other word, the reading intensity is high, the students’ reading comprehension ability will be good.

2. Suggestions

In the line with the conclusions of this study, some suggestions can be presented as follows:

1. Since the result of this study showed that there is correlation between students’ reading intensity and reading comprehension, it is suggested to the teacher to give students reading practice in order that their reading comprehension can be improved.

2. The students are suggested to have intensity in reading to improve their reading comprehension ability.

REFERENCES


