# THE EFFECT OF GENDER DIFFERENCES AND READING STRATEGIES TOWARD STUDETS' READING COMPREHENSION

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#### Abstrak

The purpose of this research were to find out whether there is any significant difference result of reading comprehension between gender (male and female), whether there is any significant difference result of reading comprehension in the use of reading strategies (cognitive-metacognitive), and whether there is a significant interaction of gender differences and the use of reading strategies towards students' reading comprehension. A quantitative analysis that included descriptive statistics and inferential analysis (ANOVA) tests were conducted to answer the research questions of this study. The respondents of this study were the third semester students of the reading III program at English department of Sultan Ageng Tirtayasa University in Banten. Out of 94 students of the population, 50 (25 females and 25 males) were chosen as the samples. To collect data, the study used two kinds of instruments: a reading comprehension test, and questionnaires. The result of this study revealed that out of two independent variables, only the variables of gender affected students' reading comprehension (p - value < 0.05). However, the different use of reading strategies did not give significant effect on students' reading comprehension (p - value > 0.05). But the overall use of both reading strategies through different gender had not shown significant interaction on students' reading comprehension (p - value > 0.05). Therefore, lecture should teach not only reading lesson, but also how to make the students be acquainted with strategies in reading.

Keywords: Gender differences, reading strategies, reading comprehension

## Introduction

In English Foreign Language setting, reading is the most important channel that language learners need to learn. According to Richard and Renandya (2012), "Many foreign language students often have reading as one of their most important goal. They want to be able to read information, for pleasure, and for study purposes". By mastering the reading skill, students may be able to fulfill their educational needs as well as discharge their own pleasure.

In Indonesian educational context, students at schools and universities have limited exposures to real language use, so they need reading as a way for them to absorb the knowledge of English as well as understand various kinds of texts. University students majoring in any field of studies who are studying English usually face some serious problems relating to academic texts if they do not master reading as one of their English basic skills.

The fact that comprehension is very crucial in reading then leads the researcher to conduct her preliminary observation in English department of Sultan Ageng Tirtayasa University regarding to the male and female differences on their reading achievement and problems. She found out from the last semester result of reading III class that almost 34,5 percent bad scores came from female students while male students only account for 14,6 percent out of total classes population. This result was in the opposite with the theory of Dardjowidjojo (2003) who states that language learning is generally dominated by women. However, this result might be varies from one to another research.

There are two major reasons for the researcher's interest of studying language and gender; educational reason and social reason which both are interconnected. Firstly, the reason comes from educational background. Many of the beliefs reflected address notions of gender differences in cognitive abilities, proficiencies and achievements. Maulrine (2001) reports that the difference level achievements between gender where boys are often making failing grades and they were being labeled as having learning disabilities. Thus, as teacher, we can significantly improve a student's achievements in language learning and taking into account of her or his gender, approaches to learning, preferences to the certain type of tasks, difficulties, and their social-educational backgrounds.

Second reason is social reason. People need to be aware that if gender is a social phenomenon which one should be able to find linguistic evidence of it, since language is the primary means by which we create the categories which help our students to learn. Recent research of Pavlenko and Piller (2008) has also resulted in a more nuanced

picture of ways in which gender ideologies and practices shape learners' desires, investments, and actions with regard to what languages they choose to learn and speak.

Based on the educational and social reasons above, the researcher assumes that gender can account for variability on reading comprehension. Studying such social variables such as gender, class, age, and ethnicity, as explained by Milroy and Gordon (2003), are prominent in variationist research and have often been used to elucidate the global patterning of linguistics variation across broad population. So, we as local language practitioners need to find as many evidence to support the language learning of our students by explaining the accountability of these social variables in form of educational research.

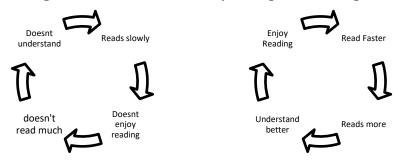
### **Theoretical Framework**

## **Reading Comprehension**

In the previous explanation, we agreed that comprehension is the result of reading process and in order to achieve that level of successfulness, we have to do a lot of practices and sharpen our comprehension by using specific strategies. As Brown (2001) explained, "Reading comprehension is primarily a matter of developing appropriate, efficient comprehension strategies". That is, the strong emphasize of reading comprehension is about the reader's effort.

The concept of the reader's effort in gaining comprehension is also supported by Nuttal (1982). He explained that besides sharing assumptions between reader and writer, comprehension involves the reader's willingness to make some efforts to get the meaning for himself. He also added that if the reader is passive or careless, there will be incomplete interpretation or unclear meaning and far from what the writer has expected from his text. This makes use of the effort will distinguish the readers generally into two types: the good readers and bad readers.

## Figure 1. Nuttal's virtuous cycle of poor versus good readers



The difference between poor and good readers relies on their greater endurance. Good readers often withstand in searching the difficult meaning even the text gets complicated; they are aware that decoding words itself is not enough, so they will have a purposive reading strategy and anticipate what they have not understood by asking questions ahead. If they successfully find the meaning, they will continue reading as part of their learning experience.

# **Gender and Language**

In order to find some possible answers about gender differences in language, one has to go back in time and look at the historical background of gender studies. One of the most well known theorist who much discussed about language and gender was Robin Lakoff (1973). She claimed that there is a difference between women's language and men's language while they are using it. Karlson (2007) listed several characteristics of male and female in written dialogue comments and actions, they are:

|    | The female character uses            |    | The male character uses              |
|----|--------------------------------------|----|--------------------------------------|
| 1. | Intensifiers: So, such               | 1. | No feed back on the female's         |
| 2. | Hedges: I think, you know, I really, |    | comment.                             |
|    | I mean, I'm sure, I suppose          | 2. | Minimal response in order to let the |
| З. | Tag questions: You didn't – did      |    | woman knows he is not interested     |
|    | you?                                 |    | in what she has to say.              |
| 4. | Minimal responses: Yeah, mhm,        | 3. | Taboo words: The man uses taboo      |
|    | right                                |    | words which are suppossed to be      |
| 5. | Words which are supposed to be       |    | more frequently used among males     |
|    | used more frequently by women        |    | than females. The words are: Shit!   |
|    | than men: Oh, my goodness            |    | God damn it!                         |
| 6. | Polite language: Please              | 4. | Commands: 'Give me some              |
| 7. | Formal language: I can not           |    | paper!', 'Hand me the Sport          |
|    |                                      |    | Magazine by the sofa!'               |

 Table 1. Male and Female Language Characters

Lakoff's reasons of the differences language between male and female was because of the social factors, not because the language that they acquired. She distinguished five reasons that cause this differences into: different social role, social discrimination exists, value of another elements, and psychological elements.

# **Cognitive-Metacognitive Reading Strategies**

The cognitive and metacognitive strategies were firstly introduced by O'Malley and Chamot (1990). They define:

Cognitive strategies operate directly on incoming information, manipulating in it ways that enhance learning. On the other hand, metacognitive strategies are higher order executive skills that may entail planning for, monitoring, or evaluating of the success of learning activity.

Based on the definition above, we can conclude that cognitive strategies are "learner based strategies" which operate directly while readers are reading while in the opposite, the metacognitive strategies work beyond the readers' mind which is more tactical rather than practical as in cognitive strategies.

O'Malley and Chamot (1990) mentioned several processes that might be included as part of the components of metacognitive strategies (works for receptive or productive skills). They are:

- Selective attention for special aspects of learning task, as in planning, listening for keywords or phrases;
- 2. Planning the organization of either written or spoken discourse;
- Monitoring or reviewing attention to a task, monitoring comprehension for information that should be remembered, or monitoring production while it is occurring; and
- 4. Evaluating or checking comprehension after completion of a receptive language activity, or evaluating language production after it has taken place.

In explaining the cognitive strategies, O'Malley and Chamot (1990) argued that it might be limited in application to the specific type of task in the learning activity. The key features include in cognitive strategies for only receptive skills (reading and listening) are:

- 1. Rehersal, or repeating the names of items or objects that have been heard;
- 2. Organization, or grouping and classfying words, terminology, or concepts according to their semantic or syntactic attributes;

- Inferencing, or using information in oral text to guess meanings of new linguistic items, predict outcomes, or complete missing parts;
- 4. Summarizing, or intermittently synthesizing what one has heard to ensure the information has been retained;
- 5. Deduction, or applying rules to understand language;
- 6. Imagery, or using visual images (either generated or actual) to understand and remember new verbal information;
- 7. Transfer, or using known linguistic information to facilitate a new learning task; and
- Elaboration linking ideas contained in new information or integrating new ideas with known information (elaboration may be a general category for other strategies, such as imagery, summarization, transfer, and deduction).

In summary, both of cognitive and metacognitive strategies are important which indicate that reading comprehension are active process to construct meaning by having real utilization practice of gaining meaning (as cognitive process), or by setting mental strategy to process meaning (as metacognitive process).

## Methodology

The research took place at Sultan Ageng Tirtayasa University. It is state university which is located on Jalan Raya Jakarta Km. 3,5 Serang – Banten. The researcher conducted her research on October – December 2013. The population of this research were 94 students from the two classes (class A and B), only 50 students were chosen as the samples. They consist of 25 male and 25 female students; they were chosen randomly by using SPSS version 21. In analysing the data, the researcher applied 2 x 2 factorial design (ANOVA), with two levels of gender (male and female) and two levels of reading strategies (cognitive and metacognitive reading strategies).

#### **Research Instruments**

In this research, the writer used two kinds of instruments. They are: reading comprehension test and questionnaires. The reading comprehension test consists of 30 questions. The blueprint of the test is listed as bellow:

| No. | Forms of<br>exercise | Indicators  | Items             |
|-----|----------------------|---|-------------------|
| 1.  | Completion           | Able to match the designated words                                      | 1, 2, 3, 4, 5     |
|     | Exercise             | with the passages   |                   |
| 2.  | Multiple             | a) Identify the stated main idea  | 6, 7, 9           |
|     | choice               | b) Identify the stated main idea and details                            | 11, 12,           |
|     |                      | c) Recall detail  | 13                |
|     |                      | d) Identify the stated cause and effect                                 | 28                |
|     |                      | e) Recognize the sequence of events                                     | 27, 29            |
|     |                      | f) Recognize fact and opinion   | 21, 22, 23, 2, 25 |
|     |                      | g) Recognize elements of a short<br>story (plot, character, setting and | 14, 15            |
|     |                      | theme)  | 26, 30            |
|     |                      | h) Compare and contrast   |                   |
| 3.  | Vocabularies         | Guessing meaning from the context                                       | 16, 17, 18, 19,   |
|     | Exercise             | clues   | 20                |
|     |                      | Total   | 30 Items          |

**Table 2. Reading Comprehension Test Blueprint** 

The second instrument were questionaires which were divided into two parts: first, students' age, gender, academic major, their background, and reasons of studying English and the second part was a part was the cognitive-metacognitive reading strategy items which were adopted from Phakiti (2006). The blueprint of the cognitivemetacognitive questionnaire was stated as follow:

| Strategies       | Strategies Sub-strategies |                        | Total<br>Items |
|------------------|---------------------------|------------------------|----------------|
| 1. Cognitive     | a) Comprehending          | 2, 3, 6, 7, 14         | 4              |
|                  | b) Memory                 | 1, 5, 8, 22            | 4              |
|                  | c) Retrieval              | 4, 9, 26, 29           | 5              |
| 2. Metacognitive | a) Planning               | 10, 11, 19, 20, 23, 27 | 6              |
|                  | b) Monitoring             | 12, 16, 17, 21, 24, 25 | 6              |
|                  | c) Evaluating             | 13, 15, 18, 28, 30     | 5              |
| Total            |                           | 30                     | 30             |

 Table 3. Questionnaire Blueprint

In this questionnaire, each item was accompanied with a 5-point, Likert-type scale. The higher the number that respondents indicate applies to them, the more frequent the use of the particular strategy is reflected.

# Findings

Table below showed the descriptive statistics of gender and their reading strategies preferences:

| Gender | Strategies    | Mean  | Std.<br>Deviation | Ν  |
|--------|---------------|-------|-------------------|----|
|        | Cognitive     | 60.53 | 12.276            | 15 |
| Male   | Metacognitive | 65.60 | 9.812             | 10 |
|        | Total         | 62.56 | 11.420            | 25 |
|        | Cognitive     | 76.90 | 10.170            | 10 |
| Female | Metacognitive | 79.80 | 6.742             | 15 |
|        | Total         | 78.64 | 8.210             | 25 |
|        | Cognitive     | 67.08 | 13.916            | 25 |
| Total  | Metacognitive | 74.12 | 10.631            | 25 |
|        | Total         | 70.60 | 12.762            | 50 |

**Table 4. Descriptive Statistics** 

For male students, there were 25 students. The students who used cognitive strategy there were 15 students with the mean 60.53 and the standard deviation of 12.276, however; the metacognitive only accounts for 10 students with the mean of 65.60and standard deviation of 9.812. The maximum score was 76, the minimum score was 36, and the range was 40. By seeing the male row above, we could see between two groups of strategies; the cognitive strategy was mostly favored by male students. Male students were supposed to use cognitive reading strategy to enhance their reading comprehension by operate comprehending the task, memorizing the words, and retrieving the names of items or objects.

For female students there were also 25 students. Students with cognitive strategy were 10 students with the mean 76.90 and standard deviation 8.210, whereas the metacognitive strategy has bigger amount of 15 students with the mean 79.80and standard deviation of 6.742. The maximum score was 93, the minimum score was 50, and the range was 43.By seeing the female row above, we could see between two groups of strategies; the metacognitive strategy was mostly favored by female students. Female students were supposed to use the metacognitive reading strategy to increase their comprehension rate by planning their written discourse, monitoring the attention to

the task and monitoring comprehension while conducting the test, and evaluating or checking the comprehension after finishing the task.

To conclude, the most favorable reading strategies that were used by male students were the cognitive reading strategies; whereas female students mostly used the metacognitive reading strategies. It can be interpreted that male and female students have different types of reading strategies in their way of achieving better comprehension result.

In inferential statistics, a Two-Way Analysis of Variances (ANOVA) was used to find the answer for related research questions and to test the three hypotheses.

| Source     | Type III<br>Sum of    | df Mean<br>Square |           | F        | Sig. | Partial<br>Eta |
|------------|-----------------------|-------------------|-----------|----------|------|----------------|
|            | Squares               |                   | Square    |          |      | Squared        |
| Corrected  | 3436.567 <sup>a</sup> | 3                 | 1145.522  | 11.598   | .000 | .431           |
| Model      |                       |                   |           |          |      |                |
| Interest   | 239984.08             | 1                 | 239984.08 | 2429.719 | .000 | .981           |
| Intercept  | 3                     |                   | 3         |          |      |                |
| Gender     | 2802.963              | 1                 | 2802.963  | 28.379   | .000 | .382           |
| Strategies | 190.403               | 1                 | 190.403   | 1.928    | .172 | .040           |
| Gender *   | 14.083                | 1                 | 14.083    | .143     | .707 | .003           |
| Strategies |                       |                   |           |          |      |                |
| Error      | 4543.433              | 46                | 98.770    |          |      |                |
| T ( 1      | 257198.00             | 50                |           |          |      |                |
| Total      | 0                     |                   |           |          |      |                |
| Corrected  | 7980.000              | 49                |           |          |      |                |
| Total      |                       |                   |           |          |      |                |

**Table 5. Test Between Subject Effect** 

Based on the table 4.6 for the first category of gender, the p-value  $(0,000) < \alpha$ (0,05) which means there was a significant difference of reading comprehension score between the two gender. The null hypothesis (H<sub>0</sub>) is rejected and we accept the alternate hypothesis (H<sub>1</sub>). Thus, we can conclude that there is a significant difference result between male and female students on their reading comprehension.

For second category which is reading strategy, the result showed that the p-value  $(0.526) > \alpha (0,05)$  which means that there is no significant difference between the use of the two reading strategies (cognitive and metacognitive) due to the students' reading comprehension score. The null hypothesis (H<sub>0</sub>) is accepted, and the alternate hypothesis (H<sub>1</sub>) is rejected. Thus, we can conclude that there is no significant difference between

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students who use cognitive reading strategy with the students who use metacognitive reading strategy.

For the last category which is interaction, the table showed that the p-value  $(0,707) > \alpha$  (0,05) which means that there is no significant interaction between gender and the reading strategies. The null hypothesis (H<sub>0</sub>) is accepted, and the alternate hypothesis (H<sub>1</sub>) is rejected. Thus, we can conclude that there is no interaction between gender differences and reading strategies on students' reading comprehension.

| Gender | Mean   | Std.  | 95% Confidence Interval |        |
|--------|--------|-------|-------------------------|--------|
|        |        | Error | Lower                   | Upper  |
|        |        |       | Bound                   | Bound  |
| Male   | 63.067 | 2.029 | 58.983                  | 67.150 |
| Female | 78.350 | 2.029 | 74.267                  | 82.433 |

| Table | 6. | Gender |
|-------|----|--------|
| Lanc  | υ. | Othuti |

Gender was the only category that showed a significant difference among the three hypotheses. As an illustration, the table above has showed which type of gender had better score in the reading comprehension that is female.

## Conclusions

Based on the result of the data analysis, the researcher drew several conclusions. First, the result of this research had shown that female has better reading comprehension scores than males. Secondly, the assumption that reading strategies will affect students reading comprehension is seemly to be rejected. Due to the result, the students' metacognitive and cognitive reading strategies preference does not significantly differ in their reading comprehension score. Thirdly, the interaction between two independent variables did not significantly happened in this research. The choice of using certain reading strategy was not determined by the category of gender. In other words, a certain type of gender using a certain type strategy did not give better result in reading comprehension at third semester students of English department in Sultan Ageng Tirtayasa University.

# Suggestions

Based on the result of this research, the researcher intended to give several suggestions to the following:

- 1. There are two things that need to be considered for the further researcher who is interested in conduction research with the same topic. The first is the amount of the population and samples should be adequate enough. The sufficient numbers of samples would give better representation of the overall population. Secondly, the consideration of the age and the language levels of the students itself. The samples should be chosen very carefully to get the better view of the research data.
- 2. For undergraduate students of Sultan Ageng Tirtayasa University, they should be introduced with the terms of reading strategies. They should be taught the awareness of using strategies in reading in order to make their reading comprehension better by their lectures since the earlier semester.
- 3. Teachers should not only teach the reading lesson which putting too much attention in grammatical and lexical aspects but also teach them to use text to convey meaning, to communicate, and to express something. So the students themselves can pass the reading lesson with better comprehension.

## BIBLIOGRAPHY

- Barnitz, John. G. 1985. *Reading Development of Nonnative Speakers of English*. Florida: Harcourt Brace Jovannovich, Inc.
- Brown, H. Douglas. 2001. *Teaching by Principle; An interactive Approach to Language Pedagogy. New York.* San Francisco State University.
- Darwowidjojo, Soejono. 2003. *Psikolinguistik: Pengantar Pemahaman Bahasa Manusia*. Jakarta: Yayasan Obor Indonesia
- Diamond, Milton. 2002. Sex and Gender Are Different: Sexual Identity and Gender Identity Are Different. Clinical Child Psychology & Psychiatry 7(3), p.320–334. Retrieved March 23, 2013 (http://www.hawaii.edu/PCSS/biblio/articles/2000to2 004/2002-sex-and-gender.html).
- Fraenkel, J.R and Wallen, N.E. 1993. *How to Design and Evaluate Research in Education*. New York: McGraw-Hill, 1996
- Karlsson, S. 1973. *Gender Related Differences in Language Use*. Master's Thesis. Lulea University of Technology Department of Language and Culture.
- Lakoff, Robin. 1973. Language and Women's Place. New York: Cambridge University Press.
- Maulrine, A. 2001. Are Boys the Weaker Sex? U.S. New & World Report.
- Milroy, Lesley and Gordon, Matthew. 2003. Sociolinguistics: Method and Interpretation. England: Blackwell Publishing.Ltd.
- Nuttal, Chirtine. 1982. 9 Teaching Reading Skills in Foreign Language. London: Heinennman.
- O'Malley, J.M and Chammot, A.U. 1990. *Learning Strategies in Second Language Acquisition*. New York: Cambridge University Press.
- Pavlenko, A. and Piller. I. 2008. Language Education and Gender. In Stephen May (Ed.), The Encyclopedia Of Language And Education (2nd Ed), Vol. 1 (Political Issues). New York: Springer.
- Phakiti, Aek. 2006. Modelling Cognitive-Metacognitive Strategies and Their relationship to EFL Reading Performance. Melbourne Papers in Language Testing. University of Sydney.

Richards, Jack. C., and Renandya, A. Willy. 2002. *Methodology in Language Teaching*. New York.: Cambridge University Press.