The Contribution of Reading Strategy and Self Efficacy to the Reading Comprehension of College Students

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Abstract

This research is aimed to know how strong the contribution of reading strategy and self-efficacy to students’ reading comprehension. Quantitative approach with correlational research design used in this research. Correlational research design is chosen to find out the contribution of independent to the dependent variable. The population of English Department of Faculty of Teacher Training and Education of UNISKA Kediri consisting of 240 students were chosen as the subject of research and 150 of them were selected as the sample. Simple random sampling using lottery was used as the method of taking sample. The data was gotten by applying three instruments, questionnaire for reading strategy and self-efficacy, especially for self-regulated learning of reading subject, and also reading comprehension test. Then regression formula was used to analyse the contribution of reading strategies and self-efficacy to reading comprehension of the students. The result states the reading strategy and self-efficacy significantly contribute to the students’ reading comprehension.

Keywords: Reading Strategy, Self-Efficacy, and Reading Comprehension

Introduction

Reading comprehension means a complex cognitive process of decoding symbols to construct or develop meaning. Alfassi (2004) states latest research on reading has shown that reading is a crucial cognitive activity for sufficient functioning and obtaining information in modern era. To enter the present literate society, students have to know how to comprehend reading text. According to
Caverly and Orlando (1991), university students often have poor English reading ability due to their level of reading strategy knowledge and a lack of confidence in their academic achievement. To improve learners’ reading comprehension in English for Foreign Language, lecturers or teachers need to provide more structure in students’ reading strategy instruction, so students can apply the specific strategies for the reading tasks and critically reflected about the language learning activities.

In addition to the ineffective and inefficient reading strategies, the other factor to influence students’ learning outcome is their perceived self-efficacy (Yang, 2004; Wong, 2005). Bandura (as cited in Fang Shang, 2010: p.19) said that perceived self-efficacy is defined as “people’s beliefs about their capabilities to produce designated levels of performance that exercise influence over events that affect their lives”. According to Bandura, students with a high level of self-efficacy perceive tough tasks as challenges. They also have higher motivation to overcome the difficulties and more confidence to accomplish demanding tasks. On the contrary, students with low self-efficacy regard things as harder than they really are; they do not perceive that their efforts can lead to better results, so they have less motivation to devote their time to demanding tasks. In other words, students’ learning attitudes, learning behaviors, and even learning performance are affected by their perceived self-efficacy (Yang, 2004).

Most of college students have a low self-efficacy and a lack of learning strategies to achieve better English language proficiency (Fang Sang: 2010). Those factors literally can damage their motivation to learn and their performance in English-related academic tasks because learning strategy and self-efficacy have
widely accepted by the society as essential factors to influence students’ reading performance. Alfassi (2004) suggests that it is crucial for teachers to train students to control actively of their own comprehension processes. Irwin and Baker (1989: 6) stated that the process is “conscious control of the process metacognition or strategies”. Literature suggests that the use of appropriate reading strategies may influence reading comprehension (Olsen and Gee, 1991). Using reading strategies and having high self-efficacy can be great support to non-native readers because they might be used as effective ways of overwhelming language lack and obtaining better reading achievement on language proficiency tests (Wong, 2005; Zhang, 1992). However, empirical research indicates that students have received inappropriate direction on reading skills and strategies in most reading class. (Miller and Perkins, 1989).

In addition, some studies in Taiwan also show the same result. It is still known that instructional practices in many EFL language classes are often teacher-centered and focus on direct knowledge transmission (Lau, 2006). Students can feel bored because of it. The main focus of traditional English language teaching in Taiwan is on prescribed text teaching. EFL instructors almost never use any strategy in class. In other words, teachers emphasize more on the production of comprehension than the processing skills (Anderson, 1999; Numrich, 1989). Due to finding the solution of this problem, the present study attempted to maximize the teachers’ assistance by training students how to learn and process information using various reading strategies, in order to improve students’ self-efficacy and reading comprehension in English. Therefore, three major reading strategies, namely cognitive, metacognitive, and compensation
strategies, are selected, and their contribution to reading comprehension simultaneously with self-efficacy is examined.

**Literature Review**

There are some previous studies that have the similar variable to this research, namely self-efficacy, reading strategies, and reading comprehension. The previous studies are from Fang Shang, Schunk, Shell and Murphy, and Chamot, Robbins and El Dinary.

Shang (2010) explores the finding that reading strategies were unrelated to reading achievement in this context, students’ comments after administration of a reading test may also provide insights for EFL educators. Many students report that they experienced difficulty in using background knowledge and vocabulary knowledge to comprehend given reading passages. Therefore, it is important for teachers to combine basic decoding skills training and background knowledge enhancement during direct strategy instruction for students with serious reading problems. EFL teachers should train students to guess unfamiliar English words based on suffixes, prefixes, or context clues.

Individuals who expect success in a particular enterprise anticipate successful outcomes. In other words, students who are confident in their academic skills expect high marks on exams and expect the quality of their work to reap benefits. The opposite is also true of those who lack such confidence. Low self-efficacy hinders learners’ participation in learning activities while lack of learning strategies prohibits them from solving problems they encounter in language learning (Schunk, 1991). In the area of English language teaching, Shell and
Murphy (1989) examined the relationship between students’ perceived competence and their English learning outcomes. Findings in the research indicate that students’ perceived self-efficacy is highly related to their reading achievement.

Compared to another factor of outcome expectance, self-efficacy could better predict school reading performance. The study conducted by Shell and Colvin (1995) also supported that self-efficacy rather than outcome expectance is the best variable to tell high achievers from average achievers. In addition, a study conducted by Chamot, Robbins, and El Dinary (1993) examined the effects of metacognitive, cognitive, and social strategy instruction received by learners of Japanese, Russian, and Spanish. Students completed learning strategy questionnaires (related to their frequency of strategy use) and self-efficacy questionnaires (related to their perceptions of their ability to complete the tasks). Findings of the study demonstrate that positive relationships between the frequent use of learning strategies and perceptions of self-efficacy are found in most groups.

Those previous studies have similarities in the variable being researched. They all are examined reading strategy, self-efficacy, and reading comprehension. Those studies confirmed that the result of reading comprehension is influenced by reading strategy used by the students and the higher self-efficacy perceived by the students. Students’ self-efficacy is highly supported students’ reading comprehension. The result confirms the theory of the variables being researched here.
Method

The research adopts correlational research design with regression analysis. The design is implemented to find the relationship of independent and dependent variable without manipulating the independent one (Latief, 2012:103). The independent variable is not manipulated because the researcher wants to see the result of contribution of all independent variables to the dependent variable without choosing one or two of them. The independent variable (usually called predictor) here is reading strategy and self-efficacy, while the dependent variable is reading comprehension. Reading strategy and self-efficacy are measured by using questionnaire, while reading comprehension is measured using test.

To know whether the variable of study is significant or not, the data must be collected. To collect the data, instruments of the research are given to the object of research to be answered. The target object of this research is the private college students. Then, the selected sample object is the students of English Department of Teacher Training and Education Faculty (FKIP) of Uniska Kediri as one of the best private university in Kediri. It has 12 classes with the 240 students for whole population. To simplify the number of population, the sample is calculated. Yet, 150 students were taken as the sample of this research using simple random sampling method. Lottery was used as the media to randomize the sample.

There were two kinds of instrument used in this research to collect the data. They are questionnaire and test. Questionnaire is used to collect data about reading strategy (X₁) and self-efficacy (X₂), while test is used to obtain the data about reading comprehension (Y).
The questionnaire of students’ self-efficacy in learning reading is taken from Bandura (2006: 302) part self-efficacy for self-regulated learning. There are 9 number of questions consisting of indicators related to self-efficacy, namely doing the task in time, learning every time, concentrating in learning, writing the lecturer’s explanation, finding the additional information in doing the task, planning the task, remembering information presented in the class, deciding the place to study independently, and doing the task independently. Every question has 5 options and scored based on Likert Scale (from 1 = never, 2=rare, 3=sometimes, 4=often, to 5 = always).

Then, the next questionnaire is about reading strategy used by the students. It is used for knowing the students’s reading strategy usually used when reading a text. The questionnaire is taken from Fang Sang (2010: 41). There are 30 questions divided into three reading strategies. Every reading strategy consists of 10 questions. Number 1-10 is for cognitive strategy, while number 11-20 is for meta-cognitive strategy, and 21-30 is for compensation strategy. Cognitive strategy is divided into three aspects, namely rehearsal, elaboration, and organizational; while meta-cognitive is divided into planning, monitoring, and regulating; for compensation strategy, there are two aspects, linguistics and semantic. The students were asked to give score in a scale 1-5 in every number at that time.

Reading comprehension test consists of 40 questions taken from TOEFL: reading section (pre-test Longman). The material tested includes main idea of text, word meaning, explicit and implicit information, and reference. Every question has four choices. The right answer is given 1 point and the wrong answer
is given 0. The time allocation is 55 minutes for all questions. TOEFL is chosen because it is one of standardized tests usually used for testing common English skill and recognized over the world.

The data are analyzed using regression linear to find the contribution of reading strategies and self-efficacy to the reading comprehension using SPSS ver. 11.0. There were some steps must be followed before computation, checking students’ response and coding the students’ identity, scoring students’ response, analyzing the data, establishing statistical hypothesis, and establishing the criteria of rejecting null hypothesis ($H_0$).

There are some assumptions which have to be fulfilled concerning on regression analysis. They are residual normality, multi co-linearity, \textit{heteroscedasticity}, and autocorrelation. If all assumptions are fulfilled, the data will be tested using Parametric Test, namely regression linear formula. If one or more than one of the assumptions are not fulfilled, the data will be tested using Non-Parametric Test.

\textbf{Results and Discussions}

Before testing the hypothesis, there are four assumptions that have to be fulfilled namely, (1) normality of residual data, (2) multi co-linearity, (3) \textit{heteroscedasticity}, and (4) autocorrelation

The first assumption is normality of residual to measure similarities between some data. It is computed using Kolmogorov-Smirnov formula in SPSS version 11.0. The data must be distributed normally to fulfill the first assumption. The result is stated in the Table 1.
Table 1. Normality of Residual Data

<table>
<thead>
<tr>
<th>Normal Parameters (a,b)</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>150</td>
</tr>
<tr>
<td>Normal Parameters (a,b) Mean</td>
<td>.0000000</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>15.20644027</td>
</tr>
<tr>
<td>Most Extreme Absolute</td>
<td>.090</td>
</tr>
<tr>
<td>Positive</td>
<td>.068</td>
</tr>
<tr>
<td>Negative</td>
<td>-.090</td>
</tr>
<tr>
<td>Kolmogorov-Smirnov Z</td>
<td>1.097</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.180</td>
</tr>
</tbody>
</table>

a  Test distribution is Normal.
b  Calculated from data.

The table shows the value Kolmogorov-Smirnov Z which is 1.097. Asymp. Sig. (2-tailed) is 0.180 (p>0.05). It means that the residual data are distributed normally. Based on the result, the first assumption is fulfilled.

The second assumption is multi co-linearity. Multi Co-Linearity means the linear correlation between independent variables taken in the research. It is symbolized using VIF. It must be no multi co-linearity to fulfill the second assumption. According to Santoso (2001), the variable has multi co-linearity problem if the VIF value is greater than 5. The computation is served in the SPSS standard table as follows:

Table 2. Multi Co-Linearity of Variable

<table>
<thead>
<tr>
<th>Coefficients (a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td>Model</td>
</tr>
</tbody>
</table>

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Based on the table 2, the VIF value of independent variable is 1.047. The value is lower than 5. It means that there is no multi co-linearity problem. Therefore, the second assumption is fulfilled.

The third assumption is heteroscedasceticity. It is the difference of variance between residual and the independent variable. It is computed using Spearman’s Rho correlation formula. The data has heteroscedasceticity problem if the significance of unstandardized residual is lower than 0.05. To fulfill the assumption of regression, the data should not have heteroscedasceticity problem.

The table is served at table 3 as follows:

Table 3. Heteroscedasticity Computation

<table>
<thead>
<tr>
<th>Correlations</th>
<th>READING STRATEGY</th>
<th>SELF-EFFICACY</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spearman's rho</td>
<td>READING STRATEGY</td>
<td>Correlation Coefficient</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>N</td>
<td>150</td>
</tr>
<tr>
<td>SELF-EFFICACY</td>
<td>Correlation Coefficient</td>
<td>.212(**</td>
<td>1.000</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.009</td>
<td>.</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>150</td>
<td>150</td>
</tr>
<tr>
<td>Unstandardized</td>
<td>Correlation</td>
<td>.000</td>
<td>.000</td>
</tr>
</tbody>
</table>
Based on the table, the Spearman’s rho correlation value of reading strategy, self-efficacy and unstandardized residual is .000 with the significance 1.000 (p>0.05). Because of the significance showing greater than 0.05, it means that there is no heterosdasceticity problem in this data, therefore the third assumption is fulfilled.

The fourth assumption is autocorrelation. It is to check whether there is correlation between the residual value in current period and in the previous one or not. It is computed by using Durbin-Watson formula.

Table 4. Autocorrelation Computation

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R</th>
<th>Std. Error of the Estimate</th>
<th>Durbin-Watson</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.404(a)</td>
<td>.163</td>
<td>.152</td>
<td>15.310</td>
<td>1.7265</td>
</tr>
</tbody>
</table>

a Predictors: (Constant), SELF-EFFICACY, READING STRATEGY
b Dependent Variable: READING COMPREHENSION

Based on the table 4, Durbin-Watson value is stated 1.7265. The value of DW table in 5% significance level, n=150, and k=1 is 1.7197 for dl and 1.7465 for du. It is located between dl and 4-du. It can be concluded that H0 stating there is no autocorrelation problem is accepted, so the last assumption is also fulfilled.

After all assumptions are fulfilled, the value of regression (F) is computed. The result is served as follows:

Table 5. The Model Summary of the Variable
The table consists of the result of simultaneous correlation of three variable symbolized by R. The value of R shows 0.404. The proportion of predictors’ contribution to the dependent variable is symbolized by R Square. The contribution of self-efficacy and reading strategy to the reading comprehension is 0.163 or 16.3%. The adjusted R square here is the square root of R square. It shows 0.155 or 15.5%.

Table 6. Anova Computation

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Regression</td>
<td>6</td>
<td>3360.868</td>
<td>14.339</td>
<td>.000(a)</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>141</td>
<td>234.382</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>149</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6 serves the result of multiple correlation computation symbolized by F. From the table, it can be seen that the result of F is 14.339. The significance shows 0.000 or 0%. It means that the degree of error is less than 1%, so it can be concluded that the result is significant in 1% significance level. The result can reject the null hypothesis and accept the alternative hypothesis. It means that
reading strategy and self-efficacy simultaneously and significantly contribute to the students’ reading comprehension.

Table 7. Coefficient of Regression

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Error</td>
<td>Beta</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>18.506</td>
<td>11.137</td>
<td>1.662</td>
<td>.099</td>
</tr>
<tr>
<td></td>
<td>READING STRATEGY</td>
<td>.461</td>
<td>.102</td>
<td>.350</td>
<td>4.528</td>
</tr>
<tr>
<td></td>
<td>SELF-EFFICACY</td>
<td>.392</td>
<td>.214</td>
<td>.142</td>
<td>1.836</td>
</tr>
</tbody>
</table>

a Dependent Variable: READING COMPREHENSION

The table shows the coefficient of regression. The dependent variable is reading comprehension. The predictors are reading strategy and self-efficacy. The constant is 18.506. It means if reading strategy and self-efficacy are not increase at all, the amount of reading comprehension is 23.707 point. If the reading strategy and self-efficacy are each increase 1 point above, the amount of reading comprehension will be also increase 0.461 and 0.392 point from each predictor. It can be seen that the self efficacy has lower point than the reading strategy, therefore, in this case self-efficacy has to be increased more to get the higher reading comprehension.

This research’s result is supported by the research’s result conducted by Shang (2010). The research purposes on finding the relationship between self-efficacy and reading comprehension. The result is self-efficacy and reading
comprehension correlate significantly. It means that self-efficacy is one of factors that influence reading comprehension. Shang (2010) finds that reading strategies are unrelated to reading achievement in this context. Students’ comments after administration of a reading test may also provide perceptions for EFL educators. Many students report that they experienced difficulty in using background knowledge and vocabulary knowledge to comprehend reading passages given by the teacher. Therefore, it is important for teachers to combine basic decoding skills training and background knowledge enhancement during direct strategy instruction for students with serious reading problems. EFL teachers should train students to guess unfamiliar English words based on suffixes, prefixes, or context clues.

The research supports this research in adding theory about reading strategy, self-efficacy, and reading comprehension. The subject of research is also similar, namely university students but the difference is this research used whole grade students and Fang Sang used freshmen of university students. Then, the Fang Sang’s research finding is also similar with the result of this research about the relationship between self-efficacy and students’ reading comprehension. For research methodology, it was little bit different with this research. Fang Sang used experimental design by treating the students using three reading strategies in the treatment, then testing the students’ reading comprehension after being treated using those three strategies. While this research used expost-facto research design purposed in finding the influence of three reading strategies on students reading comprehension without treating the students.
In the area of English language teaching, Shell and Murphy (1989) also examined the relationship between students’ perceived competence and their English learning outcomes. Findings in the research indicate that students’ perceived self-efficacy is highly related to their reading achievement, so the finding also supports the result of research.

The result of research is in line with the theory from Wong (2005) & Zhang (1992) stating using reading strategies and perceiving high self-efficacy can be of great help to non-native readers because they may serve as effective ways of overcoming language deficiency and obtaining better reading achievement on language proficiency tests. However, empirical research indicates that in most reading classrooms, students have received inadequate instruction on reading skills and strategies (Miller & Perkins, 1989). Those theories prove that there are many factors influencing reading comprehension including reading strategy and self-efficacy. This research also revealed that the reading strategy and self-efficacy significantly contribute to the students’ reading comprehension at Uniska Kediri. It can be concluded that the theory confirms the result of this research.

**Conclusion**

The conclusion drawn from the result of this research is reading strategy and self-efficacy simultaneously and significantly contribute to the students’ reading comprehension. Thus, to increase the students’ reading comprehension, the students’ reading strategy use and self-efficacy have to be increased. So far,
seeing from the result of regression, self-efficacy has to be increased more to get the higher reading comprehension.

After drawing the conclusion, some suggestions for the teachers, students, and further researchers are also stated. The teacher should train the students to use the appropriate reading strategy when teaching reading. By using appropriate strategy, the students will be able to catch the information from the text easily. The students should use the reading strategy and increase their self-efficacy for regulated learning. Reading strategy will help them to read the text correctly and find the information in the text quickly. Then, the teacher also has to motivate the students to increase their self-efficacy because high self-efficacy makes them learn confidently. The further researcher can use the result of this research as the reference to conduct the next research with the similar variable and design. They should complete and make the content of the next research better and decrease the limitation of the research, for example, the next researcher should explore the other factor that influence reading comprehension excluding self-efficacy and reading strategy. Then, for the technique of sampling, the next researcher should use better sampling technique and method such as stratified or clustered random sampling to know the preciseness of the contribution of the factors influencing reading comprehension.

About the writer

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References


