DIRECT READING THINKING ACTIVITY AND STUDENTS’ READING COMPREHENSION: AN EXPERIMENTAL RESEARCH

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Abstract

The aim of this research is to find out the role of DRTA and Reading Attitude in improving students’ reading comprehension. Quasi-experimental design was used to establish the effect of method and attitude on students’ reading comprehension. Four classes of management were selected and assigned as experimental and control group. The experimental group were taught using DRTA and control classes were taught using regular method. ANOVA was used to examine the influence of the main effects and interaction effects of method and attitude on students’ reading comprehension. The result indicated that there was a significant difference effect between DRTA and Regular Method on students’ reading comprehension. DRTA was more effective in improving reading comprehension. There was, however, no significant difference in students' reading comprehension based on their attitude. This study also found a significant difference effect on students’ reading comprehension based on the interaction between method and attitude. DRTA method was to be effective in students with low attitude, while the high attitude was more prone to conventional method.

Keywords: DRTA, Reading Attitude, Reading Comprehension

Sari

Tujuan dari penelitian ini adalah untuk mengetahui peran DRTA dan Sikap Membaca dalam meningkatkan pemahaman membaca siswa. Desain eksperimen semu digunakan untuk menetapkan pengaruh metode dan sikap terhadap pemahaman membaca siswa. Empat kelas manajemen dipilih dan ditetapkan sebagai kelas eksperimen dan kelas kontrol, kelas ekserimen diajar dengan metode DRTA dan kelas kontrol diajar dengan metode reguler. ANOVA digunakan untuk menguji pengaruh efek utama dan efek interaksi metode dan sikap terhadap pemahaman bacaan siswa. Hasil penelitian menunjukkan bahwa terdapat perbedaan pengaruh yang signifikan antara Metode DRTA dan Metode Reguler terhadap pemahaman membaca siswa. DRTA terbukti lebih efektif dalam meningkatkan pemahaman membaca. Namun, tidak ada perbedaan yang signifikan dalam pemahaman membaca siswa berdasarkan sikap mereka. Artinya sikap
secara statistik tidak mempengaruhi pemahaman membaca siswa. Penelitian ini juga menemukan interaksi antara metode dan sikap berpengaruh yang signifikan terhadap pemahaman membaca siswa. Metode DRTA lebih efektif pada siswa dengan sikap rendah, sedangkan sikap tinggi lebih cenderung pada metode konvensional.

**kata kunci**: Direct Reading Thinking Activity (DRTA), Reading Attitude, Reading Comprehension.

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**Introduction**

Reading is a necessary skill, and it is likely the most important skill for students to master in academic settings (Ahmadi, 2012; Ahmadi et al., 2013; Gilakjani & Ahmadi, 2011; Hermida, 2011). Indeed, students have to read a large volume of course texts, references, and internet material. If students can comprehend ideas, know most of the words in the texts, and extract the meaning from the writing, they are going to be considered as good readers. Good reader students are more likely to do well in school. Therefore students in language learning must master reading. Reading ability will assist students in understanding the text structure, locating the main idea in the text, learning new vocabulary, and learning effective reading strategies to improve their reading comprehension (Duke & Pearson, 2009). Students of ESL/EFL will make more progress and develop further in all academic subjects through strengthening reading skills (Anderson, 2003; Habók et al., 2019; Klimova & Zamborova, 2020).

However, many students have insufficient reading skills and consequently, their reading achievement is poor. Even in college or university level, the researcher has noticed many students are not capable enough know how to read and to understand English materials. They cannot find a way to improve the way they read, especially in relation to studying. They tend to spend a lot of time to read and understand the materials.

Students can have an attempt to improve their reading by recognizing the importance of good reading skills and strategies to their academic access. By recognizing these,
students are expectedly able to encounter some problems in comprehending reading. The problems may be relating to several causes that might influence students’ reading comprehension. The most important factor is the reading strategy used in the reading class (Ahmadi, 2012; Marinaccio, 2012). In educational contexts, students have very limited exposure to real language use; the teaching methods are mostly focused on grammar and the students have little or no contact with native speakers or native teachers of English. Many students enter higher education unprepared for reading skills due to their low level of reading strategy knowledge. It is necessary to raise students’ awareness of reading strategies which has a strong positive relationship with students’ academic achievement (see DeFoe, 1999; Tercanlioqlu, 2004) and (El-Koumy, 2013; H, Turhan, 2017; Par, 2020). One of the reading strategies that is often used is DRTA. DRTA is a comprehension strategy that guides students in asking questions about a text and making predictions while reading. This strategy encourages students to read actively and thoughtfully in order to improve their comprehension (El-Koumy, 2013). Several previous studies on the relationship between DRTA and student reading comprehension have been conducted (Dougherty Stahl, 2008; El-Koumy, 2013; Nerim, 2020; Utomo & Syamsi, 2019; Yazdani & Mohammadi, 2015).

Another important factor which can have a highly significant impact upon students’ success in reading is their attitudes toward reading (Ahmadi et al., 2013; Akbari et al., 2017; Nootens et al., 2019; Shelley, 2012). Attitudes and motivation toward reading will lead students to a greater possibility for success (Akkaya & Kirmizi, 2010). The relationship between students’ attitudes toward reading and their reading and comprehension achievement has been extensively researched in the literature (ARICAK., 2008; Azizi et al., 2020; Baki, 2018; Hashemi & Na, 2020; McKenna & Kear, 1990; Roomy & Alhawsawi, 2019; Rosales, 2020; Zaccoletti et al., 2020).

These researches have shown that DRTA and students' attitudes toward reading comprehension have a significant effect. Furthermore, the literature emphasizes the importance of DRTA and reading attitudes in academic success. However, when studies on the same topic are analyzed, there appear to be fewer studies that show a one-way relationship between variables, particularly at the university level in Indonesia. The
majority of the studies are comparative studies with two or more variables, and it is difficult to determine the relationship in depth. Therefore, this study is very necessary to be carried out in order to fill the gap.

**Literature Review**

**Direct Reading Thinking Activity (DRTA)**

There are several strategies for reading. One of them is DRTA. This is a strategy that guides learners when they ask questions about a text, make forecasts and then read to confirm or refute their forecasts. DRTA encourages students to be active and thoughtful readers, which improves their comprehension (Rizk Samy Wilson, 2020). It is intended to develop students’ ability to read critically and reflectively.

Stauffer developed DRTA in 1969 to provide readers with a basis for thinking, learning, and testing. Stauffer suggests that these readers will learn to deal with their convictions and their courage. They are not fearful but brave. They are not blind; they are discerning, they are not hurrying, they are deliberate. They're not deceived, they are honest; they're not muddy, they're articulate. Further, he believes that the reading is indeed a thought process (Oppenheim, 1960), in which readers are involved in reconstructing the ideas of the author using their own experience. The researcher may say that DRTA is a reading strategy for building independence readers. DRTA engages readers, in active process that needs their reasoning abilities and ideas (Abd & Al Odwan, 2012). They are not forced to read and to think.

DRTA is designed to guide readers by informational text step by step (Dougherty Stahl, 2008). Reading is divided into three stages (pre-reading, during reading, and post-reading). DRTA also emphasizes prediction (foresight), verification (confirmation), and purposeful reading (resolution). DRTA helps students to understand that prediction and verifications are essential parts of the reading. In the prediction process, Students consider what they believe will be covered in the text. This activity will motivate them to read by setting a purpose for what they are about to read. Then, the teacher facilitates a brief discussion during the confirmation process, allowing students to compare their predictions to what was actually presented in the text. Finally, in resolution process,
students are able to summarize and evaluate the relevance of the predictions before reading and the information given in text they read. Good readers predict and confirm what will happen in the text automatically and merge their knowledge and ideas with those of the author. Poor readers don't predict or check when they read (Clark & Ganschow, 1995). DRTA helps readers to make predictions before reading and checking predictions (Dougherty Stahl, 2008; Marina et al., 2010).

In addition, DRTA not only promotes active comprehension, but also assists students in developing their reading and thinking processes as well as acquiring and activating their own reading purposes. In DRTA, for example, readers are encouraged to review what they know about a topic, predict what they will learn, and evaluate what they learned and read. DRTA is useful for processing all types of text and extends learning to higher-order thought processes. High order thinking processes means to know how to make connection between interrelated elements of text, justify though processes, and infer meaning from the text (Tankersley, 2005).

**Reading Attitude**

Another important factor that can have a significant impact on students' reading success is their attitudes toward reading (Bastug, 2014; Kaniuka, 2010). Attitude is defined as a proclivity to react specifically to an object, situation, or value (which is usually accompanied by feelings and emotion). Because reading is an exigent activity that often involves choice, motivation is crucial to reading engagement (Good, 1973). The attitudes of an individual are learned autonomic trends that guide the thinking and feeling of an individual and that appear to or from an abstract concept or object. Attitudes are certain guidelines that cannot be observed but are supposed to lead to certain observable actions. Attitudes are known to be made up of cognitive, emotional, and behavioral components that change and develop over time. The investigator can conclude from these explanations that the attitudes are ways to feel, think or behave towards an abstract object or concept (Akkaya & Kirmizi, 2010).

Students must have both the ability and the readiness (Seitz, 2010). An important aspect of literacy is a person's reading attitude. Reading is a mindset, with feelings and
emotions that make reading more or less likely (Cecil Smith, 1990). Motivation is the activation of behaviour. Student reading behavior is a key factor in performance reading. Many researchers assume that positive reading attitudes contribute to greater readability. Student interest will affect their English reading proficiency, as it is reflected in their reading comprehension test scores. This will give students with a positive reading attitude more chance to build vocabulary and understanding (Seitz, 2010).

In addition, students who like to read tend to be more attentive and focused when they complete lecture tasks. Students who do not want to read, on the contrary, will likely only read if necessary or refuse to read. This negative reading attitude can have significant effects on the development and progress of students’ reading and on their overall academic success. Students with negative attitudes may be less careful and may experience behavioral problems when reading is involved (Joann Mullen, 2003). Since reading attitude can be defined as a willingness to respond positively or adversely to reading, good readers are more positive than poor readers. Both in L1 and L2, the positive sense of reading makes learners easier to read. Just thinking that reading is beneficial is not sufficiently motivating (Yamashita, 2004). In addition, the importance of understanding the attitudes of learners to reading in both L1 and L2 encourages L2 participation in reading.

**Reading Comprehension**

Many experts have defined “reading” in several ideas. To begin with, Reading can be defined to understand a written text through the most efficient extraction of the required information from it (Grellet, 1981). Reading comprehension is a technique for improving student’s success in extracting useful knowledge from text. It is clear that reading means a reader's activity, to obtain information and useful knowledge from the text. (Mayer, 2003). Nuttal (1996) defines reading as the meaningful interpretation of a printed or written symbol (Qanwal & Karim, 2014). Reading entails recognizing letters in order to recognize words in order to derive meaning from what is read, as well as making connections between the words and ideas presented in the text and the readers’ own prior knowledge (Cecil Smith, 1990). Reading is a process of encoding and
decoding thought and language by identifying letters to obtain meanings and reading is also a two-way interaction between the text and the reader (Tierney, 2005).

As a result, reading entails not only constructing meaning from the message in print, but also comprehending or understanding what readers read. Reading is an active, fluent process that involves the reader's ability to extract meaning from printed text and relate it to the reader's prior knowledge in order to perform well in understanding reading. (Anderson, 2003; Day & Anderson, 2000). Based on the definitions, It could be summarized that reading comprehension actually is a psychological process between a writer and a reader in understanding printed symbols in a written text in order to get meaning. It is important to understand that when a writer writes written messages, it requires the readers to be able to properly comprehend the written messages by decoding the words, holding the information in working memory, interpreting the messages, and processing the messages through their knowledge and experiences.

In short, the researcher may conclude that in order to comprehend a reading text and be an effective reader, a reader needs to know the way how to read a text, the models of reading techniques, and the most important thing is the purpose of reading. It entails a reader having general knowledge, obtaining specific details, locating the main idea or theme, learning, remembering, summarizing, and comprehending. Garcia, Jimenez, and Pearson (1998) discovered that unsuccessful students lacked awareness and monitoring strategies for the comprehension process in their studies.

Unfortunately, not everyone can read effectively even in their own language. Sometimes comprehension failure happens and the reader is unable to achieve his/her purpose. When comprehension fails, the reader is unable to achieve his or her goal. This comprehension failure could be as simple as not knowing the meaning of a word, but it could also be due to a lack of one or more of a number of specific reading skills (Swan, 1986). Similarly, Nuttal (1996) says the source of comprehension failure happened because the limitation of reader's vocabulary or general knowledge. There are some factors involved in comprehending a text; (1) lack or poor using of strategies, (2) difficulties in relating to prior knowledge, and (3) lack of reading engagement (Duke &
Purwandari, D. (2009). He also concludes that in order to prevent and addressing those reading difficulties, a reader should improve their word recognition, decoding, and fluency, as well as their content knowledge, strategies, and reading engagement. From these explanations, the researcher underlines that reading difficulties can be caused by several problems which prevent the reader to comprehend the text. One factor that has been mentioned above is reading strategies. The researcher believes that teaching strategy to understand a text will help students to understand the text eventually.

Methods
Research design
In this study, a quasi-experimental design was used to determine the effect of independent variables on dependent variables when the researcher was unable to randomly assign subjects to groups. As an experimental study, this study discovered the effects of various treatments. Because there were two groups – an experimental group that received the special treatment and a control group that did not – the Posttest Control Group Design was chosen. The experimental group was taught using direct reading thinking activity (DRTA), while the control group was taught using the traditional method. By the end of the ten sessions, those students were required to take a Reading Comprehension Test and complete an ASRA questionnaire. The decision as to which group to join was made at random by the flip of a coin.

In this study, the researcher employs two values for each independent variable: Method (X1), which includes DRTA =1 and Conventional Method =2. Meanwhile, reading attitude (X2) is divided into High = 1 and Low = 2, with High Attitude having an ASRA score greater than 140 and Low Attitude having an ASRA score less than 120.

Population and Sample
This study included 121 management students, 52 of whom were male and 69 of whom were female. Given the limited number of samples, this study uses the entire population as a sample. As a result, the sampling technique employed is census sampling. By tossing a coin, the researcher divided the class into two groups: 61 students in the
experimental group and 60 students in the control group. This method was used by researchers because it was the simplest and most efficient way to determine the groups.

Data collection and Analysis

The data of the study were gathered during the second semester of the 2017-2018 academic year. The reading test was used to assess students' comprehension, while the Adult Survey of Reading Attitudes (ASRA) Questionnaire was utilized to determine students' attitudes. The researcher uses two values for each independent variable: Method (X1), which includes DRTA =1 and Conventional Method =2. Meanwhile, reading attitude (X2) is divided into High = 1 and Low = 2, with High Attitude having an ASRA score of 140 or higher and Low Attitude having an ASRA score of less than 120.

This study used two-way ANOVA because it involves two categorical independent variables, method (DRTA and Conventional) and reading attitude (high and low), and the dependent variable is Reading comprehension. ANOVA was used to determine the influence of the main role and interaction effects of categorical independent variable on the dependent variable. The main effect is the direct effect of the independent variable on the dependent variable. While the influence of the interaction or interaction effect is the effect of collective effect of two or more independent variables on the dependent variable. The two-way ANOVA model \( Y_{i,j,k} = \mu + \alpha_i + \beta_j + (\alpha\beta)_{i,j} + e_{i,j,k} \) is used.

Results and Discussion

The data were gathered during the first and the second week of the last semester. However, there were some students who did not provide their response to the questioners. There were also a few missing answers found in the reading test. Therefore, the number of the cases used for this study were 95 students, 48 for control group and 47 for experiment group. Since the reading attitude was grouped into high and low attitude, the participants reduced into 51 participants.

Table 1. Participants Between-Subjects Factors
Table 1 showed that there were 51 students participated in this research consisting of 30 students from experiment group (DRTA) and 21 from control group (conventional method). Whereas 29 students had high attitude and 22 participants had low attitude toward reading.

<table>
<thead>
<tr>
<th>Value Label</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td></td>
</tr>
<tr>
<td>DRTA</td>
<td>30</td>
</tr>
<tr>
<td>Conventional</td>
<td>21</td>
</tr>
<tr>
<td>Reading Attitude</td>
<td></td>
</tr>
<tr>
<td>High</td>
<td>29</td>
</tr>
<tr>
<td>Low</td>
<td>22</td>
</tr>
</tbody>
</table>

**Source: Data processing**

The table showed that the mean of reading score for students in conventional method who had high attitude was 71.67 and the low was 62.50. The total mean score for the conventional method group was 66.43. While the mean score of high attitude students in DRTA group was 75.25 and the low was 80.00. The total mean of this group was 76.83. The table also showed that the mean of both groups for those who had high attitude was 74.14 and the low was 70.45.

**Table 3. The mean of Experimental Group and Control Group toward Reading Comprehension**

<table>
<thead>
<tr>
<th>Method</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>DRTA</td>
<td>77.625</td>
<td>1.819</td>
<td>73.965</td>
</tr>
<tr>
<td>Conventional Method</td>
<td>67.083</td>
<td>2.071</td>
<td>62.916</td>
</tr>
</tbody>
</table>

**Source: Data processing**

Table 3 indicated that experimental group (DRTA) earned the lowest score of 73.965, the highest score of 81.285, the average value of 77.625 and a standard error 1.819.
While the control group (conventional method) earned the lowest score of 62.916, the highest score of 71.251, the mean score of 67.083 with standard error of 2.071. It showed that those who taught by DRTA had better score than conventional method.

Table 4. The mean of Students’ Reading Attitude toward Reading Comprehension

<table>
<thead>
<tr>
<th>Reading Attitude</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>High</td>
<td>76.371</td>
<td>1.473</td>
<td>73.409 - 79.333</td>
</tr>
<tr>
<td>Low</td>
<td>71.411</td>
<td>1.799</td>
<td>67.791 - 75.030</td>
</tr>
</tbody>
</table>

Source: Data processing

Based on the table, we could see that those who had high attitude toward reading earned the lower score of 73.409, the upper score of 79.333 and the score mean of 76.371 with 1.473 standard error. And those who had low attitude toward reading earned the lower score of 67.791, the upper of 75.030 and the mean of 71.411 with the standard error of 1.799. It indicated that the students with high attitude toward reading had better score than those in low attitude.

Table 5. The mean score of Interaction between Attitude and Method toward Reading Comprehension

<table>
<thead>
<tr>
<th>Method</th>
<th>Reading Attitude</th>
<th>Mean</th>
<th>Std. Error</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRTA</td>
<td>High</td>
<td>75.250</td>
<td>2.101</td>
<td>71.024 - 79.476</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>80.000</td>
<td>2.971</td>
<td>74.023 - 85.977</td>
</tr>
<tr>
<td>Conventional Method</td>
<td>High</td>
<td>71.667</td>
<td>3.132</td>
<td>65.366 - 77.967</td>
</tr>
<tr>
<td></td>
<td>Low</td>
<td>62.500</td>
<td>2.712</td>
<td>57.044 - 67.956</td>
</tr>
</tbody>
</table>

Source: Data processing

In the case of interaction between method and reading attitude toward reading comprehension, the students in experiment group (DRTA) with high attitude got the lower score of 71.024, the upper of 79.476 with the mean of 75.250 and the low attitude earned got the lower score of 74.023, the upper of 85.977 with the mean of 80.00. Whereas the students in control group with high attitude earned the lower of 65.366, the upper of 77.967, while low attitude earned the lower of 57.044, the upper of 67.956 with mean of 62.500.

Table 6. Hypothesis testing Between-Subjects Effects
Table 6 showed that there was a positive, linear relationship between the three variables. The R square value of 0.316 represented the percentage of variation in the dependent variable explained by the independent variables. This meant that methods (DRTA and conventional) and reading attitude explained 31.6 percent of the variance of reading comprehension, while other factors explained 68.4 percent.

Based on the hypothesis testing found that there was significant differences effect on students’ reading comprehension based on the method of teaching with p-value of 0.000 less than 0.05. It meant that there was a significant different effect between DRTA and conventional Method on students’ reading comprehension. Table 6 also indicated that those who taught by DRTA had better score than conventional method. The result supported the first hypothesis that there was significant difference effect between DRTA and conventional Method on students’ reading comprehension.

This study also found that there was no significant difference in students' reading comprehension based on their attitude with p-value of 0.427 greater than 0.05 (0.427 > 0.05). It was discovered that students with a positive attitude toward reading had equal reading comprehension as those with a negative attitude toward reading. It meant that students' reading comprehension was unaffected by their attitude. The findings did not support the second hypothesis, which claimed that there was a significant difference in the effect of high and low attitude toward reading on students' reading comprehension. This study also found a significant difference effect on students' reading comprehension
based on the interaction between method and attitude, with a p-value less than 0.05 (0.0150.05). The findings were supported by figures demonstrating that their lines are not parallel. The line between method type and read attitude does not intersect. The figure also demonstrated that students with a low attitude performed better in the DRTA group, while students with a high attitude performed better in the conventional group. It meant that the interaction between method and students' attitude influenced their reading comprehension in different ways.

Figure 1: Interaction between Method and Attitude

Because there was an interaction between method and attitude, and we couldn't read the treatment effect directly, we had to reanalyze the data using post hoc analysis, creating a new variable that combined method and attitude. For the new variable, the researcher used four values: DRTA-High = 1, DRTA-Low = 2, Conventional-High = 3, and Conventional-Low = 4. The following were the results of the retest and Tukey test.

Table 7. Tukey Tests of Between-Subjects Effects

<table>
<thead>
<tr>
<th>Source</th>
<th>Type III Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Corrected Model</td>
<td>1919.877</td>
<td>3</td>
<td>639.959</td>
<td>7.250</td>
<td>.000</td>
</tr>
<tr>
<td>Intercept</td>
<td>243180.020</td>
<td>1</td>
<td>243180.020</td>
<td>2754.917</td>
<td>.000</td>
</tr>
<tr>
<td>Interaction</td>
<td>1919.877</td>
<td>3</td>
<td>639.959</td>
<td>7.250</td>
<td>.000</td>
</tr>
</tbody>
</table>
Table 7 indicated that among the four combinations of the interaction variables value was significant (F = 7.250; p <0.05). So that it could then be proceeded to see the multiple comparisons or post hoc. If the analysis of variance above could only see the difference in terms of a combination of method and attitude, then in the post hoc we could see it in detail.

**Table 8. Post Hoc Multiple Comparisons**

<table>
<thead>
<tr>
<th>Dependent Variable: Reading Comprehension</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tukey HSD</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>(I) Interaction</th>
<th>(J) Interaction</th>
<th>Mean Difference (I-J)</th>
<th>Std. Error</th>
<th>Sig.</th>
<th>95% Confidence Interval</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>DRTA-high</td>
<td>DRTA-low</td>
<td>-4.75</td>
<td>3.639</td>
<td>.564</td>
<td>-14.44</td>
</tr>
<tr>
<td></td>
<td>Conventional-high</td>
<td>3.58</td>
<td>3.771</td>
<td>.778</td>
<td>-6.46</td>
</tr>
<tr>
<td></td>
<td>Conventional-low</td>
<td>12.75</td>
<td>3.431</td>
<td>.003</td>
<td>3.61</td>
</tr>
<tr>
<td>DRTA-low</td>
<td>DRTA-high</td>
<td>4.75</td>
<td>3.639</td>
<td>.564</td>
<td>-4.94</td>
</tr>
<tr>
<td></td>
<td>Conventional-high</td>
<td>8.33</td>
<td>4.317</td>
<td>.229</td>
<td>-3.16</td>
</tr>
<tr>
<td></td>
<td>Conventional-low</td>
<td>17.50</td>
<td>4.023</td>
<td>.000</td>
<td>6.79</td>
</tr>
<tr>
<td>Conventional-high</td>
<td>DRTA-high</td>
<td>-3.58</td>
<td>3.771</td>
<td>.778</td>
<td>-13.63</td>
</tr>
<tr>
<td></td>
<td>DRTA-low</td>
<td>-8.33</td>
<td>4.317</td>
<td>.229</td>
<td>-19.83</td>
</tr>
<tr>
<td></td>
<td>Conventional-low</td>
<td>9.17</td>
<td>4.143</td>
<td>.135</td>
<td>-1.87</td>
</tr>
<tr>
<td>Conventional-low</td>
<td>DRTA-high</td>
<td>-12.75</td>
<td>3.431</td>
<td>.003</td>
<td>-21.89</td>
</tr>
<tr>
<td></td>
<td>DRTA-low</td>
<td>-17.50</td>
<td>4.023</td>
<td>.000</td>
<td>-28.21</td>
</tr>
<tr>
<td></td>
<td>Conventional-high</td>
<td>-9.17</td>
<td>4.143</td>
<td>.135</td>
<td>-20.20</td>
</tr>
</tbody>
</table>

Based on observed means.
The error term is Mean Square(Error) = 88.271.
* The mean difference is significant at the 0.05 level.

**Source: Data processing**

The post hoc test in table 8 showed that there was no significant difference between students' reading comprehension using the DRTA method on high and low attitudes (MD = -4.75; p>0.05). In addition, there was also no significant difference between students' reading comprehension using the DRTA method on high attitudes and the conventional method on high attitudes (MD = 3.58; p > 0.05). The test also revealed that there was no significant difference in reading comprehension between students who used DRTA with low attitudes and those who used DRTA with high attitudes (MD =
4.75; p > 0.05). On the other hand, there was a considerable difference in reading comprehension between students who use DRTA on low attitudes and students who use traditional on low attitudes. (p = 0.05; MD = 17.50).

Overall, the results of this test showed that the method's success was dependent on the attitude of the students being treated. We cannot simply conclude from these interactions that DRTA was more effective than traditional methods; it was dependent on the attitude of the students being treated. The DRTA method was thought to be effective on students with low attitudes, whereas conventional method was more likely to be effective on students with high attitudes.

![Graph showing interaction of DRTA and conventional method on reading comprehension](image)

**Figure 2: Interaction**

This study showed there was some significant difference effect between DRTA and conventional Method on students’ reading comprehension. It meant that DRTA as a strategy in reading activity has statistically showed positive effect in improving reading comprehension. DRTA is a comprehension strategy that helps students be active and thoughtful readers. DRTA encourages active reading in improving understanding. Students are able to focus their attention on the reading text which triggers their curiosity in reading. This supports the findings of previous researches which also found that there is a significant correlation between strategy use and reading comprehension.
is interesting to note that DRTA not only improving students’ ability to understand the
text, but also increasing students’ reading ability.

In the case of Reading attitude, this study concluded that there was not statistically
significant difference effect between high and low attitude on students’ reading
comprehension. It was contrast with the result of previous researches, (Mihandoost et
al., 2011; Yamashita, 2004). On the study related to students’ attitude toward reading,
Yamashita mentioned the importance to understand learners’ attitudes toward reading
for encouraging learners’ involvement in reading. This contradictory result might have
happened because the sample in this study involved 121 students but some of them did
not provide their response to the questionnaires given. This means that the results of this
study cannot be generalized to other students who experience academic failure in
reading.

Related to some theories supported the idea that reading strategy and attitude toward
reading will influence the performance in reading, the result of the study showed a
positive effect to reading comprehension. It meant that the interaction between method
and students’ attitude influenced differently to the students’ reading comprehension.
This research showed that students with low attitude performed better in DRTA,
meanwhile students with high attitude performed better in conventional method
(Elizabeth, 2013.) DRTA is a comprehensive strategy which guides and helps students
to be active and thoughtful readers. DRTA strengthens and enhances students’ reading
comprehension. Low attitude students were guided and helped in improving their
reading activities after using DRTA.

On the other hand, students with high attitude performed better in Conventional method.
This was happened because the conventional method places mainly teachers in charge
of teaching and learning (Boumová, 2008). Students only hear the explanations and
examples of the teacher. Students should memorize and practice the grammatical rules
in English text traduction/transaltion and analysis. These results supported the third
hypothesis that the interaction of methods and reading attitudes among students’ reading
comprehension was significant (Becker & McElvany, 2018; Erik De Corte, 2001; Park,
Both DRTA and reading attitude give positive effect on students’ reading comprehension. Here the researcher wants to say that students will be motivated to read based on various personal reasons. If they do not have any intentions in reading, they refuse to read. To understand students’ attitudes towards reading means to understand their feelings and thought which lead them to enjoy reading.

Conclusion & Recommendation
The Direct Reading Thinking Activity (DRTA) is a comprehensive strategy that helps students be active and thoughtful reader. DRTA promotes active reading as a means of improving comprehension. Students can focus their attention on the reading text, which triggers their interest in reading. The statement supported the study's findings that DRTA as a reading strategy has a statistically significant positive effect on improving reading comprehension. The perception of reading is influenced by one's attitudes toward reading. Feelings and emotions, for example, may play a role in motivating students to read. Because reading is a psycholinguistic process that involves the interaction of language and thought, a reader must be able to read with skill and will. It means that a reader's mind, feelings, and emotions influence how enjoyable the reading is. However, this theory was contradicted by the study's findings, which revealed that there was no statistically significant difference in the effect of high and low attitude on students' reading comprehension.

The interaction of method (DRTA and Conventional) and reading attitude had a significant impact on students' reading comprehension. When a reader cannot relate his or her thoughts and feelings to the text, he or she tends to avoid reading. When a reader is not in the mood to read, he or she will not have any intentions of doing so. If a reader enjoys reading, it will influence his or her reading habits. Some difficulties in comprehending reading will have a negative impact on reading's attractiveness. The two-way ANOVA test result revealed a positive, linear relationship between the three variables. The method (DRTA and conventional) and reading attitude could explain 31.6 percent of the variance in reading comprehension. DRTA was to be effective in students with a low attitude, whereas students with a high attitude were more likely to use the conventional method.
Reading comprehension is essential for all academic subject areas, according to the conclusions. It is especially important for university students because many books and research papers are written in English. In this study, DRTA significantly improved students' reading comprehension. DRTA assists students in becoming critical readers by allowing them to examine their own thoughts in order to ask questions and seek solutions. Along with the research findings, it is suggested that students be introduced to appropriate and applicable reading strategies that will assist them in understanding the text and developing their reading comprehension.

Despite the fact that the findings of this study revealed no significant difference between high and low reading attitude and reading comprehension, it is suggested that more research on reading attitude and reading comprehension be conducted with larger samples and sampling techniques that can represent the population. As a result, the data obtained will be more reliable. A positive attitude toward reading is thought to be a foundation for reading comprehension and, of course, other language skills needed for academic success. It is suggested that teachers try to understand their students' reading attitudes as well as their reading performance. Teachers must be aware of their students' beliefs and attitudes in order to deal with them appropriately. Providing strategies and activities in meaningful contexts will assist students in incorporating reading attitudes.

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Conflict of Interest

No potential conflict of interest is reported.

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