The Effect of Auditory, Intellectually and Repetition (AIR) Model on Students’ Reading Comprehension

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ABSTRACT

This study set out to find out whether the Auditory, Intellectual, and Repetition (Air) Model had any effect on how well readers understood the explanation text when they were reading. The research approach used in this study was quasi-experimental. The purposive sampling sample for this study at SMAN 8 South Bengkulu included 48 students, 24 in the experimental class (XI IPS 2) and 24 in the control class (XI IPS 1). The therapy was delivered using the Auditory, Intellectual, and Repetition (AIR) Model in the experimental group but not in the control group. The researchers employ the pre-test and post-test to collect data from individuals. During the post-test of each class, experiment, and control class, the researchers administered four treatments. The study's instrument consisted of 20 trustworthy multiple-choice questions. The t-test is used to compare pre- and post-test results. The result of this research is first, in control class has a mean score of 40.83 and the experiment class has 37.29. Based on the post-test, The mean score for the experiment class is 81.25, whereas the
score for the control class is 70.42. Second, the significant value (2-tailed) for the independent T-test sample score is 0.000 0.05. Or, to put it another way, Ho was turned away while Ha was welcomed. In a nutshell, teaching reading to 11th graders the Auditory, Intellectual, and Repetition (AIR) Model can be extremely beneficial.

Keywords: Reading Comprehension, AIR Model, Explanation Text

INTRODUCTION

Reading is a language skill that everyone should be able to use, and it has a big impact on people who want to learn new things. Reading can offer a wealth of information, knowledge, and skill in addition to a clearer explanation. Reading is a process that helps people comprehend what is written, and it requires focusing on important issues that are related to the reading's information because not all of the words are significant enough to be recalled and comprehended (Fitri & Gani, 2020). Reading is the process of getting information from written texts, from the author to the reader. Reading includes more than simply being able to read words properly, pronounce written words correctly, and grasp the meaning of single words. Reading, according to Harmer (2007), requires both thought and emotion. Reading is more than just looking at and uttering words; it also entails understanding all aspects of the text (Muslaini, 2017).

In senior high school, there are several required English texts, one of which is an explanation text in the eleventh grade. According to Aprianti, et al (2018), explanation text is a kind of text which explain the phenomenon in the world. So, the explanation text objective is to tell how and why a phenomenon behaves in a particular manner or why a particular event occurs. To encourage students to learn reading comprehension in explanation texts, a motivating and effective teaching strategy is necessary. Teachers must improve the learning process to raise educational standards. To design and execute learning activities that improve student learning outcomes, the benefits and drawbacks of students should be analyzed using learning outcome evaluations. One of the learning models that may be employed is the AIR Model. AIR is a learning strategy that focuses on three key areas: repetition learning,
which involves learning to succeed, auditory learning, which involves listening, and intellectual learning, which involves thinking.

There are some previous studies regarding the Auditory, Intellectual, and Repetition (AIR) Models. First, Fitri & Gani (2020) with the title "Differences in Reading Comprehension Text Reading Skills by Using Auditory, Intellectually, Repetition (AIR) and Brainstorming Learning Models in Terms of Students' Reading Interest, there was a significant interaction between the learning model and students' interest in reading and their reading ability on comprehension text as a result". Second, Sagita (2018) “The Effectiveness of Applying Auditory, Intellectually, And Repetition (Air) Learning Model in Improving the Students' Learning Outcomes on Listening Procedural Text”, As a result, teaching employing the auditory, intellectual, and repetition (AIR) learning paradigm can improve students' listening learning results. The last, there is Pramaisheila (2020), with the title “The Implementation of Auditory - Intellectually - Repetition in Listening Activities in Eighth Grade Students of SMPN 1 Jumantono”, with this approach, students experience greater happiness, enthusiasm, and interest in listening activities. Additionally, psychological factors such as anxiety, attitude, aptitude, and motivation have an impact on how engaged the students are in listening activities.

As mentioned above, researchers are interested in learning more about how the Auditory, Intellectual, and Repetition (AIR) model affects students’ reading comprehension in SMAN 8 South Bengkulu’s eleventh grade. The researchers chose to conduct this study because the previous study just used the AIR Model in teaching listening and trying to compare AIR Model to the Brainstorming model so the researchers wanted to make sure whether AIR Model has any effect on reading comprehension.

LITERATURE REVIEW
Reading Comprehension

Reading comprehension is an intriguing process in which both the reader and the author interact with the text. Furthermore, comprehension is not a by-product of reading. In reality, evaluation
happens before, during, and after reading. The act of reading is affected by the reader’s skills, knowledge, experiences, and abilities. According to Febriani (2015), the core of the reading process is reading comprehension. The reader uses existing information, skills, and tactics to comprehend the meaning. Reading becomes a talent that must be mastered to catch the author’s message while reading a text. According to Pang et al. (2003), comprehension is the act of deriving meaning from a body of related text. As well as reasoning and thinking skills, it also includes vocabulary knowledge. Since it is not passive, comprehension is an active process. The use of prior knowledge is another aspect of this engaged participation. To convey ideas, concepts, and opinions, it is necessary to infer meaning from the expressions and words of the writer. Nurdiana & Amelia (2017) described that reading comprehension skill is in extracting meaning and generating it into interaction. The concepts of "extracting" and "constructing" are used to highlight both the importance of the text and how little it reveals about a reader’s reading proficiency.

Furthermore, reading comprehension skills is that has to be achieved by the reader to improve their level of reading. So that, the readers can extract and generate the meaning of the text.

**Skills in Reading Comprehension**

For students to improve their reading skills, they must read frequently and employ specialized techniques. Scanning, reading carefully, and reading extensively are the four fundamental reading styles. Skimming. According to Beale (2013), skimming entails looking for the key points. When a person is more concerned with finding the most important ideas and details than with fully understanding the text, they use skimming. Scanning. Scanning is a skill that reads a text quickly and directly focuses on what the reader search for. For example, place, name, number, colors, and the sign of words (Beale, 2013).

Intensive reading. By carefully examining reading texts, students can develop a better understanding of linguistic features and command over their reading strategies. It is best to read intensively with students
and teachers to fully understand the content. Extensive Reading. Day and Bamford (2004) stated that Extensive reading is a method of reading instruction in which students read a variety of texts in a foreign language at their reading level; they read for broad, all-encompassing meaning and information as well as for enjoyment.

**Explanation Text**

SMAN 8 South Bengkulu has begun using the 2013 Curriculum. Writing and understanding an explanation text are two skills that students need to have mastered by the time they reach grade XI. A text that explains how a natural phenomenon, social phenomenon, or cultural phenomenon occurs or is created. This text serves as an explanation for a procedure or a natural occurrence. Examples include the precipitation cycle, floods occurrence, landslides cycle, and others. Explaining "why" and "how" events happen is the purpose of the explanation text. History, geography, and science textbooks are typically where you can find the communicative intent, rhetorical organization, and grammatical patterns of the explanation text. Students may benefit from its assistance when writing explanatory texts (Aritonang, 2018).

**Reading Comprehension in Explanation Text**

According to Tanskerley (2003), three factors influence reading comprehension. The reader's comprehension of the text's linguistic structures comes first. The second component is the reader's ability to exercise metacognitive control over the stuff they are reading. This implies that while reading the content, the reader may keep track of and analyze his or her level of comprehension. The reader's familiarity with the subject and language is the third and most important component of comprehension. According to Brown (2004), “some reading-related elements are also used to evaluate students' understanding of the texts they are reading. The main idea, the expression/idiom/in context, the inference, the grammatical elements, the detail, the exclusion of unwritten facts, the supporting idea, and the language used within the context of the essay are some of these elements”.

According to Aprianti, et al (2018), an explanation text is a kind of text which explain a phenomenon in the world. So, the explanation text objective is to tell how and why a phenomenon behaves in a
particular manner or why a particular event occurs. The process of comprehending explanatory writings that teach readers about the existence or evolution of natural, social, or cultural events is known as reading comprehension. This knowledge includes the main idea, any supplementary ideas, expressions, idioms, inferences, and grammatical elements. Details, unwritten information, and context-specific vocabulary are not included.

**Auditory, Intellectual, Repetition (Air) Learning Model**

Three aspects become the focus of the AIR Model, namely auditory (listening), intellectual (thinking), and repetition learning. Three components make up the training model known as AIR (Auditory, Intellectual, and Repetition). Before expressing their opinions, students must develop their listening skills (auditory). Students are next taught to think critically about issues (intellectual), and ultimately to recall what they have already learned (repetition), making them more engaged and inventive.

The teaching and learning processes benefit more from AIR. It will inspire students to think creatively, get learners involved, and create productive learning environments. To sum up, the AIR model is a method of instruction that prioritizes the needs of each student. It promotes problem-solving skills, creativity, risk-taking, and critical thinking, as well as the ability to apply knowledge to novel situations. It aims to support students in developing their understanding of the material they need to learn, their capacity for group work, their communication skills, their ability to assert and defend opinions with reasoned arguments, and their ability to process information more quickly.

On the other hand, AIR Model, according to Sitohang et al. (2018), is a learning model which focuses on student’s activity in a group or alone to create their knowledge. Teachers must first create a conducive and enjoyable learning environment for students to increase their capacity for creative thought. The AIR model is one of the teaching paradigms that can be applied to help students develop their capacity for original thought. According to Hobri et al (2021), the AIR Model
concentrated on three elements: auditory, intellectual, and repetition. Auditory learning refers to the activities that students engage in such as speaking, listening, presenting, debating, expressing ideas, and responding. The ability to think critically, and to develop and apply ideas, is taught to students. Repetition is repetition, but when it comes to teaching children through homework or tests, it's intensified repetition. Giving homework and assessments to students will improve their problem-solving abilities and sense of accountability.

**Procedures of Air Model**

Huda M. (2017) lists the following procedures as part of the AIR learning model: (a) Groups of four to five students each are formed from the class, (b) Students can listen and focus more on what the teacher is saying, (3) Following a discussion, each group records their agreement and presents their findings to the class (auditory), (4) students point out issues or problems with the topic as the discussion progresses, (5) Following the lecture, students are assigned a task or exam to complete to review the material.

**RESEARCH METHODOLOGY**

Quasi-experimental is used in this research. The researchers used a non-equivalent control group design. Two groups that were not randomly chosen for this study were given a pre-test to determine whether the experimental group and control group had different starting conditions (Ibrahim et al., 2018). In contrast to the control group, which employed a traditional technique for educating and learning, the experimental group uses the Auditory, Intellectual, and Repetition (Air) Model. Before the therapy began, the researchers offered a pre-test to each group to establish how prepared the students were. Following the intervention, both groups of students were given a post-test to assess their reading comprehension skills. The focus of this study's investigation will depend on two factors. While the other two are independent, one of them is dependent. Reading comprehension served as the study's dependent variable, while the Auditory, Intellectual, and Repetition (AIR) Model served as its independent variable.
All of the SMAN 8 South Bengkulu students in the eleventh grade made up the population of this study, which was selected through purposive sampling. Purposive sampling, according to Winarni (2018), is a sampling technique that takes particular factors into account. There were 124 students in the eleventh grade overall, split among 5 classes. In this study, XI IPS 2 was used as the experiment class and XI IPS 1 was used as the control class. There were 24 students in each class. This study's data is gathered via pre- and post-tests. The researchers used multiple-choice assessments to measure students' understanding of explanatory materials. A multiple-choice exam with 20 items was administered. Each question item had five answers (a, b, c, d, and e). Students were told to pick the appropriate replies to the questions on their answer papers. It assesses kids' reading comprehension. The process of doing data analysis includes locating and gathering information from the Test (Pre-test and Post-test). The data is analyzed and computed once it has been collected. Clear, concise information reduction is the goal of data analysis. Data analysis for this study was done using the T-test. Data from the pre- and post-tests were gathered, and SPSS Statistics 26 was used to analyze the results.

RESULTS AND DISCUSSION

Before proceeding with further analysis, the data should be subjected to a normality test to determine if they are normal, the data may be normally distributed if the probability is larger than 0.05. The Kolmogorov-Smirnov test was employed to determine normality in this study. Both the experimental and control pre-test classes showed significant probability values (sig) of p>0.05 after the test. In contrast to the control class, which had a sig of 0.200>0,05, the experimental class had a sig of 0.186. However, both the experimental and control classes had significant probability (sig) p>0,05 in the post-test findings. The sig for the control class was 0.200>0,05, whereas the sig for the experiment class was 0.159>0,05. As a result, the results of pre- and post-tests for the control and experimental classes were distributed consistently. Statistical analysis was used to put the notion to the test. The t-test was
used for both the paired sample t-test and the independent sample t-test. The experimental and control groups' increases in reading comprehension were compared before and after the intervention to identify any statistically significant differences. The independent sample t-test was used to compare the improvement in students' reading comprehension between the experimental and control groups to see if there were any statistically significant differences.

**Paired Sample T-test in control Class**

The researcher compared the mean scores of pre-test and post-test students in both courses using a sample T-test in pairs. This is done to compare or do research on the average values of two related groups. Here are the outcomes:

<table>
<thead>
<tr>
<th></th>
<th>Students Reading Comprehension (Control- Posttest)</th>
<th>Students' Reading Comprehension (Control-Pretest)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>0.42</td>
<td>0.83</td>
</tr>
<tr>
<td>Std. Error</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Mean deviation</td>
<td>8.9</td>
<td>23.063</td>
</tr>
<tr>
<td></td>
<td>1.829</td>
<td>4.708</td>
</tr>
</tbody>
</table>

The researchers could explain the before and post-test of students' reading comprehension from the table. Students' reading comprehension averaged 70.42 on the Control-post-test and an 8.958 standard deviation, compared to 40.83 on the Control-pre-test and a standard deviation of 23.063. Given all of the data, it was able to
determine that the mean scores for the pre-test and post-test were both noticeably higher than the pre-test. The following table is another:

**Table 2.**

**Paired Samples Test in the control class**

<table>
<thead>
<tr>
<th>Pair 1</th>
<th>Students Reading Comprehension (Control- Posttest) - Students Reading Comprehension (Control- Pretest)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Paired Differences</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Paired Differences</strong></td>
</tr>
<tr>
<td></td>
<td><strong>95% Confidence Interval of the Difference</strong></td>
</tr>
<tr>
<td></td>
<td><strong>T</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Df</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Sig. (2-tailed)</strong></td>
</tr>
</tbody>
</table>

When comparing the reading comprehension scores of students on the Control-Pre and Post-tests, Paired Samples T-Difference Tests are used to measure the results. A paired sample t-test was used to analyze the results of the reading comprehension tests administered to the experimental and control groups.

The p-value is 0.000, the t-table is 2.069, and the t-count is 8.558, which the researchers could use to explain the results of the paired sample t-test from the table above. As a result, these findings show the mean difference in reading comprehension scores between the control-posttest and control-pretest for the experiment class.

**Table 3.**

**Paired Samples Statistics in Experiment class**

<table>
<thead>
<tr>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>d. Error Mean</th>
</tr>
</thead>
</table>


The pre-test mean for the experiment, as shown in the table above, was 37.29, and the post-test result was 81.25. Additionally, the pre-standard test's deviation was 17166, and the post-war test was 7.409. Given all of the data, it was reasonable to conclude that both the pre-test and post-test mean scores were considerably higher than the pre-test. The following table is another:

**Table 4. Paired Samples Test in experiment class**

<table>
<thead>
<tr>
<th>Paired Differences</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>95% Confidence Interval of the Difference</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Reading Comprehension (Experiment-Posttest) - Students Reading Comprehension (Experiment-Pretest)</td>
<td>43.958</td>
<td>16.745</td>
<td>3.418</td>
<td>36.888</td>
<td>51.029</td>
<td>12.861</td>
<td>23</td>
</tr>
</tbody>
</table>

T-difference for paired samples When comparing student reading comprehension on the experiment's pre-and post-tests, tests are used to measure the results of the mean test. The results of the experiment group's reading comprehension test were handled using a paired sample t-test.
The paired samples t-test (t-count) test has a value of 12.861 and the t-table has a value of 2.069 with a p-value of 0.000, according to the table. Because t-count > t-table or p0.05 was discovered, students' reading comprehension on the experiment-posttest varied from students' reading comprehension on the student test by an average amount.

**Independent Sample Test**

**Table 5.**

**Group Statistics control and experiment class**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students Reading Comprehension Experiment</td>
<td>24</td>
<td>81.25</td>
<td>7.409</td>
<td>1.512</td>
</tr>
<tr>
<td>Students Reading Comprehension Control</td>
<td>24</td>
<td>70.42</td>
<td>8.958</td>
<td>1.829</td>
</tr>
</tbody>
</table>

From the table above the researchers describe that the score of students' reading comprehension in the experiment class has 81.29 in mean and 7.409 in standard deviation score. Meanwhile, the control class has a 70.42 mean and 8.598 standard deviation score.

**Table 6.**

**Independent Samples Test control and experiment class**

<table>
<thead>
<tr>
<th></th>
<th>Equal variances assumed</th>
<th>Equal variances not assumed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levene's Test for Equality of Variances</td>
<td>.844</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>.363</td>
<td></td>
</tr>
<tr>
<td>t-test for Equality of Means</td>
<td>4.565</td>
<td>4.565</td>
</tr>
<tr>
<td>Df</td>
<td>46</td>
<td>44.435</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
<td>.000</td>
</tr>
<tr>
<td>Mean Difference</td>
<td>10.833</td>
<td>10.833</td>
</tr>
</tbody>
</table>
The information in the table above demonstrates how the experimental and control groups, the reading comprehension of kids varied. The t-Test for Independent Samples was used, which resulted in normally distributed reading comprehension data for both the experiment and the control group.

The Independent Samples t-Test table indicates that the p-value is 0.000 and the t-table and t-count scores are 2.014 and 4.565, respectively. The score of p0.05 revealed the difference in reading comprehension between students in the experiment and control groups. As a result, the AIR Model has a considerable influence on pupils' reading comprehension in SMAN 8 South Bengkulu. It denotes that H0 is disapproved while H1 is accepted.

**Discussion**

The purpose of this study is to find out how the Air Model (Auditory, Intellectual, and Repetition) affects students' reading comprehension. The research was done with SMAN 8 South Bengkulu students in the eleventh grade. The study's findings revealed that there were 24 students enrolled in the eleventh grade. The study used 24 samples from an experimental group class of SMAN 8 South Bengkulu students who were in the eleventh grade. The experimental group's students took pre-tests to measure their starting points in learning, after which they were treated using the Air Model. The student's performance on the post-test was evaluated. There are two tests to check students' reading comprehension, the first is a pre-test conducted before the AIR Model applying. The second is the post-test, post-test conducted after the AIR Model application.
The findings from the control group's pre- and post-tests before and after using the conventional strategy were presented. Pre-test results for the control group showed an average score (Mean) of 40.83 for reading comprehension, while post-test results showed an average score (Mean) of 70.42 for reading comprehension. Besides, the students' average reading score or Mean on the post-test of the experiment group is 81.25. But in the pre-test students got 37.29. These scores are collected before and after conducting the AIR Model in reading comprehension class.

Based on the Independent sample test, AIR Model learning significantly enhances reading proficiency. From the sample test, the researchers got the average score of each class, namely the pre-test score of the experimental class was 37.29 and the control class was 40.83, it can be said that the two classes have roughly equal levels of learning aptitude. In contrast, the score of the control class changed after the treatment from 40.83 to 70.42, and the score experimental class was 37.29 to 81.25. According to the findings, the AIR Model has a considerable influence on students' reading comprehension in Junior High School 8 South Bengkulu's eleventh-grade class. It signifies that the researchers' hypothesis H0 has been rejected, but H1 has been accepted.

The findings of this study are consistent with Rati Sagita's (2018) study titled “The Effectiveness Of Applying Auditory, Intellectually, And Repetition (Air) Learning Model In Improving The Students' Learning Outcomes On Listening Procedural Text”. The researcher came to the conclusion in her study for SMA PAB 4 SAMPALI that the auditory, intellectual, and repetition (AIR) learning model can aid students in learning listening skills more effectively. Students' scores improved between Cycle I and Cycle II, between Meetings 1 and 2, and between Meetings 3 and 4. The typical score for students in Cycle II was 86.34, which was higher than the typical score for students in Cycle I (72.68) and Cycle I students (48.04). Students may learn procedural text more efficiently by utilizing AIR Model Learning.

Another study was conducted by Galuh Pramaisheila (2020) namely entitled, "The Implementation Of Auditory - Intellectually -
Riswanto, et.al: The Effect of Auditory, Intellectually and Repetition (AIR) Model on Students' Reading Comprehension 443

Repetition in Listening Activities in Eighth Grade Students of SMPN 1 Jumantono in The Academic Year Of 2020/2021.” Four different claims made by the researcher serve as evidence. The sixth proposition is supported by 58 percent of the student body. This shows that they believe auditory, intellectual, and repetitive methods are effective for teaching and listening. Furthermore, regarding claim 7, 43.8% of the student body agrees with it. This leads to the conclusion that when listening exercises are conducted using the Auditory-Intelligent-Repetition approach, students are exposed to a learning environment that is conducive to active learning. For statement number 9, the remaining respondents (45.3%) chose the neutral option. This shows that students do not understand the differences between learning using strategies like 68 Auditory - Intellectual - Repetition, and learning using other methods. In answer to the eleventh claim, 42.2 percent of students say the Auditory-Intelligent-Repetition approach helps them focus while learning to listen. The Auditory-Intellectual-Repetition paradigm was shown to be successful for both in-person and online listening activities, according to the study. Furthermore, the Auditory - Intellectual - Repetition approach is extremely beneficial to teachers when it comes to listening activities; teachers benefit greatly from using the model.

The researcher found that by applying the Auditory, Intellectual, and Repetition (Air) Students’ reading comprehension improved significantly as a result of the model. The act of reading involves a dialogue between the reader and the text. To extract the most crucial information, readers automatically engage with the text. It may be simpler for readers to comprehend what they are reading if they read with focus. Students must use a learning model that interests them to fully learn text reading comprehension and form the habit of reading. Understanding the author’s meaning as it is expressed in the text is the goal of reading.

CONCLUSION

Based on the research conducted by the researchers, showed that the experiment class has a significant impact in applying AIR Model to reading comprehension. Students learning outcomes improved in the
experimental class significantly more frequently than they did in the control group. 37.29 pre-test score to 81.25 post-test. Pre-test scores for the control class ranged from 40.83 to 70.82 on average. The table indicates that, with a p-value of 0.000, the Independent Samples t-Test value (t-count) is 4.565 and the T-Table value is 2.014. Reading comprehension among students (in the experiment) and students generally are said to differ significantly when the average difference between the two is 0.05. (Control). According to the researcher's accepted hypothesis H1 and rejected hypothesis H0, the Auditory, Intellectual, and Repetition (Air) Model appears to have had a significant effect on students' reading comprehension at the eleventh-grade level of SMAN 8 South Bengkulu.

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