

Correlation Of *Auditory, Intellectually, Repetition (Air)* Learning Models on Student Achievement

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ABSTRACT

The purpose of this study was to determine the correlation between the auditory, intellectual, and repetition learning models on the learning achievement of Santri at LPBA (PP Mambaul Ulum Bata-Bata), while the method used was a quantitative research method with analysis using *product moment correlation*. The results of the research after the manual analysis showed that the *r* count was 0.676, higher than the *r* table value of 0.235, so that the *r* count was in the range of 0.600 to 0.800 with a high interpretation. The conclusion from this study is that *auditory, intellectual, and repetition (AIR)* learning have a high relationship with the learning achievement of students at the Arabic Language Development Institute (LPBA) in PP. Mambaul Ulum Bata-Bata is accepted because the work "*r*" value is 0.676 in the range of numbers between 0.600 and 0.800 with a high interpretation. This is supported by observational data, interviews, and documentation.

Keywords: Correlation, AIR learning, students

INTRODUCTION

Language is a system of sound symbols used by certain groups of people to communicate and interact. Because of language, humans can know what they want and what others don't want (Wahab, 2015). interact. Because of language, humans can know what they want and what others don't want (Wahab, 2015). Meanwhile, according to Abd al-Majid, language is a set of signs used by people to express thoughts, feelings, emotions, and desires. In another sense, language is a tool used to describe ideas, thoughts, or goals through sentence structures that others can understand (Syaifullah & Izzah, 2019). Language is a *reality* that grows and develops according to the growth and development of humans who use it (Syaifullah & Izzah, 2019). The reality of language in this life further strengthens human existence as a cultured and religious creature, which is shown, among other things, by its ability to produce works in the form of science, technology, and art that cannot be separated from the roles of the language it uses (Hararap & Lubis, 2022). There are various kinds of languages in this world, one of which is Arabic, which is also included as an international language.

In PP. Mambaul Ulum Bata-Bata, Arabic is applied in the form of a teaching and learning process. This is proven by the existence of an institution that is specifically a place for students who are interested in Arabic and is known as the LPBA (Arabic Language Development Institute). This institution always emphasizes the advancement of language skills, especially speaking skills (Al-Maharotul Kalam) and how to compose them, because what is most visible in a language is its pronunciation. However, there are still many shortcomings that need to be addressed, such as students who are less active in participating, which causes low student achievement.

Meanwhile in education, the main measure of the success of all educational activities is student achievement in the academic and personality fields because it is learning achievement that can increase human dignity and worth (Suparmanto & Hudatullah, 2021). Students are unique individuals, meaning that no two students are exactly the same. Each student is distinct from the others. Not all students are able to concentrate for a relatively long time. Students' absorption of the material provided also varies; some are fast, medium, or slow. This difference affects the way students learn and their academic achievement. Therefore, individual differences need to be considered by educators in learning efforts (HS, 2020).

Therefore, a strategy is needed to improve student learning achievement, namely, by using the right learning model. In choosing a learning model, it must be in accordance with reality and the existing situation, as well as the outlook on life that will result from the process of collaboration between educators and students. The learning model that is suitable for these problems is the AIR Learning Model. The Auditory, Intellectually, Repetition (AIR) Learning Model is a learning model that is similar to the Somatic, Auditory, Visualization, Intellectually (SAVI) and Visualization, Auditory, Kinesthetic (VAK) learning models. The difference lies only in repetition, which means deepening, expanding, and strengthening by giving assignments and quizzes. (Susanti, 2021)

Auditory means the sense of hearing is used in the learning process by listening, speaking, presenting, arguing, and responding. *intellectually* in the form of thinking skills that need to be trained through reasoning, creating, solving problems, and implementing exercises. Repetition *is* needed in learning so that understanding is deeper and broader. This learning model provides more opportunities for groups to work together and understand the concepts that have been given.

METHOD

The research method used in this study is quantitative, using statistical analysis, and its nature is correlation, namely looking for relationships between one variable and another. Because it is a quantitative correlation study, there are two kinds of variables involved in this study, namely variable (X) and variable (Y).

Variable (X) is the *auditory, intellectual, and repetition* (AIR) learning model.

Variable (Y) is learning achievement (students).

In this study, data was collected using questionnaires, observations, interviews, and documentation. The data analysis technique used is *product moment correlation statistical analysis*, where the formula is as follows:

$$r_{xy} = \frac{n \sum XY - (\sum X)(\sum Y)}{\sqrt{\{n \sum X^2 - (\sum X)^2\} \{n \sum Y^2 - (\sum Y)^2\}}}$$

KET:

product moment correlation coefficient

n = Number of Respondents

$\sum X$ = Total score of big x.

$\sum Y$ = Sum of scores from big y

$\sum XY$ = the sum of the big x scores times the number of big y scores

$\sum X^2$ = Total score of the coordinated large x

$\sum Y^2$ = The number of coordinated large y scores

Then, to give meaning to the research results, the authors use the following guidelines:

1. The hypothesis is accepted if the r count is greater than the product moment r table value, both at 1% and 5% significance.
2. The hypothesis is rejected if the r count is smaller than the product moment r table value, both at 1% and 5% significance.

To determine the influence of the auditory, intellectual, and repetition (AIR) learning model on student achievement, the guidelines used are as follows:

- a. Value between 0.800 - 1.000 with a high interpretation
- b. Value between 0.600 - 0.800 with sufficient interpretation
- c. Value between 0.400 - 0.600 with a rather low interpretation
- d. Value between 0.200 - 0.400 with a low interpretation
- e. Value between 0.000 - 0.200 with very low interpretation.

AIR Learning Model (*Auditory, Intellectually, Repetition*)

The *Auditory, Intellectually, Repetition* (AIR) learning style is a learning style that is similar to the *Somatic, Auditory, Visualization, Intellectually* (SAVI) and *Visualization, Auditory, Kinesthetic* (VAK) learning models. The difference lies only in repetition, which means deepening (internalization), expansion, and consolidation by giving assignments and quizzes (Multazam et al., 2022).

This learning model is said to be similar to the *somatic, auditory, visual, intellectual* (SAVI) learning model and the *visualization, auditory, kinesthetic* (VAK) learning model because these three learning models utilize the senses, which are the central point in absorbing learning. The only difference is in the *auditory learning model. Intellectually*, repetition has a meaning of internalization (deepening), expansion, and consolidation by giving assignments and quizzes (Sumliyah et al., 2020).

There are several criteria that determine the effectiveness of applying the *somatic, auditory, visual, and intellectual* (SAVI) and *visual, auditory, and kinesthetic* (VAK) learning models. *First*, "auditory" means the sense of hearing is used in learning by listening, speaking, arguing, and presenting.

Intellectually, learning is defined as learning to think and solve problems (Problem Solving) in the context of learning as learning by listening, talking to oneself, and discussing ideas and thoughts with others (Maghfuroh, 2022). Thinking skills need to be trained through reasoning, creating, solving problems, constructing, and applying; *third*, repetition means repetition. Repetition has the aim of deepening and broadening the understanding (internalization of understanding) of students who need to be trained through working on questions, giving assignments, and taking quizzes. Repetition does not mean it is done in the form of the same question or information, but in the form of modified information (Widianti, 2020).

Learning achievement, according to some experts, is the assessment of the results of learning activities that are expressed in the form of symbols, numbers, letters, or sentences that can reflect the results that have been achieved by children in a certain period. We can determine the position of students by knowing their learning achievement, whether they are smart, moderate, or lacking. A person's learning achievement is determined by their level of success in studying subject matter, which is expressed in the form of grades or report cards (Lina, 2021).

RESULTS AND DISCUSSION

To analyze the data from the questionnaire results, researchers used the *correlation formula Product Moment*. However, before analyzing the data, considering that the data from the questionnaire results is still raw, it needs to be processed first by entering the data into the product moment correlation table with the following formula:

Table 1.1

AIR Learning Model Result Data

NO.	X	Y	XY	X ²	Y ²	NO.	X	Y	XY	X ²	Y ²
1.	30	28	840	900	784	36.	30	28	840	900	784
2.	29	27	783	841	729	37.	18	18	324	324	324
3.	30	30	900	900	900	38.	18	19	342	324	361
4.	29	27	783	841	729	39.	18	17	306	324	289
5.	29	28	812	841	784	40.	16	20	320	256	400
6.	29	30	870	841	900	41.	18	28	504	324	784
7.	30	26	780	900	676	42.	19	30	570	361	900
8.	30	29	870	900	841	43.	20	18	360	400	324
9.	29	30	870	841	900	44.	20	30	600	400	900
10.	30	28	840	900	784	45.	27	22	594	729	484
11.	30	27	810	900	729	46.	19	29	551	361	841
12.	29	28	812	841	784	47.	20	29	580	400	841
13.	29	27	783	841	729	48.	18	18	324	324	324

14.	30	28	840	900	784	49.	20	20	400	400	400
15.	30	29	870	900	841	50.	20	17	340	400	289
16.	29	30	870	841	900	51.	29	28	812	841	784
17.	29	30	870	841	900	52.	19	19	361	361	361
18.	30	30	900	900	900	53.	18	19	342	324	361
19.	30	37	1110	900	1369	54.	17	19	323	289	361
20.	29	39	1131	841	1521	55.	19	19	361	361	361
21.	29	29	841	841	841	56.	19	19	361	361	361
22.	29	30	870	841	900	57.	30	29	870	900	841
23.	29	29	841	841	841	58.	29	29	841	841	841
24.	30	28	840	900	784	59.	29	39	1131	841	1521
25.	30	26	780	900	676	60.	29	30	870	841	900
26.	29	30	870	841	900	61.	29	29	841	841	841
27.	30	26	780	900	676	62.	30	28	840	900	784
28.	30	27	810	900	729	63.	30	26	780	900	676
29.	29	30	870	841	900	64.	29	30	870	841	900
30.	30	27	810	900	729	65.	30	26	780	900	676
31.	29	30	870	841	900	66.	29	30	870	841	900
32.	30	29	870	900	841	67.	30	26	780	900	676
33.	29	30	870	841	900	68.	30	27	810	900	729
34.	30	27	810	900	729	69.	29	30	870	841	900
35.	29	27	783	841	729	70.	30	27	810	900	729
Amount							1867	1885	51337	51389	52307

From the helper table in above, we can find the data of each variable l . The details are as following:

$$\sum X = 1867 \quad \sum Y = 1885$$

$$\sum X^2 = 51337 \quad \sum Y^2 = 51389$$

$$\sum XY = 52307$$

From the helper table above, the variable data is entered into the product moment correlation formula as follows:

$$r_{xy} = \frac{n\sum XY - (\sum X)(\sum Y)}{\sqrt{\{n\sum X^2 - (\sum X)^2\}\{n\sum Y^2 - (\sum Y)^2\}}}$$

$$r_{xy} = \frac{(70 \times 51337) - (1867 \times 1885)}{\sqrt{(70 \times 51389) - (1867)^2} \sqrt{(70 \times 52307) - (1885)^2}}$$

$$r_{xy} = \frac{3593590 - 3519295}{\sqrt{\{3597230 - 3485689\}\{3661490 - 3553225\}}}$$

$$r_{xy} = \frac{74295}{\sqrt{\{3597230 - 3485689\}\{3661490 - 3553225\}}}$$

$$r_{xy} = \frac{\sqrt{\{111541\}\{108265\}}}{\sqrt{12075986365}}$$

$$r_{xy} = \frac{74295}{109890}$$

$$r_{xy} = 0.676$$

Based on the calculation of the formula above, the correlation coefficient "r" found is 0.676. To prove the hypothesis that has been proposed, the "r" of work must be consulted with the "r" table of product moment correlation with the following conditions:

1. The working hypothesis is accepted if the "r" value is greater than or equal to the "r" table. The working hypothesis is rejected if the work "r" is smaller than the "r" table.
2. To find out the value of the "r" product moment criticism from this study, the researcher needs to cite the "r" product moment table.

Table 1.2
Price Criticism Product Moment

N	Significant Level	
	5% intervals	1% intervals
70	0.235	0.306

From the results of the analysis above, the "r" value is 0.676, and it can be proven that based on the critical price "r" product moment, N = 70 is calculated with a confidence level of 5% = 0.235 and 1% = 0.306. It turns out that "r" work = 0.676 compared to "r" product moment table in both 5% and 1% confidence intervals, so the "r" work value is greater than the product moment table "r" value, meaning the work "r" value is **significant**.

Thus, the first hypothesis proposed reads, "There is an influence of the auditory, intellectual, and repeated learning model (AIR) on the learning achievement of the participants in the Arabic Language Development Institute (LPBA) in PP. Mambaul Ulum Bata-Bata."

Then, to find out how high the relationship of the AIR Learning Model is to the learning achievement of LPBA participants, the results of work "r" are matched with the following table:

Table 4.8
Value Interpretation

The value of r	Interpretation
0.800 – 1000	Very high
0.600 – 0.800	High
0.400 – 0.600	High enough
0.200 – 0.400	Low
0.000 – 0.200	very low (uncorrelated)

Based on the interpretation table for the "r" value above, it is known that the value "r" of 0.676 is in the range of numbers between 0.60 and 0.800 with a **high interpretation**.

CONCLUSION

Based on the results of the data analysis, the following conclusions can be drawn: *First, the Auditory, Intellectual, and Repetition (AIR) Learning Model* has an impact on the learning achievement of students at the Arabic Language Development Institute (LPBA) in PP. Mambaul Ulum Bata-Bata. This is evident from the results of data analysis, where the "r" value of **0.676** is greater than the "r" value of the product moment table, where the 5% confidence interval obtains the "r" table product moment value of 0.235 and in the 1% confidence interval the value is 0.676. The "r" product moment table is 0.306 because the "r" work is greater than the 5% level, and 1% means the value of "r" work is **significant**.

Second, the Auditory, Intellectual, and Repetition (AIR) Learning Model has a high relationship with the learning achievement of students at the Arabic Language Development Institute (LPBA) in PP. Mambaul Ulum Bata-Bata is accepted because the "r" value is **0.676** in the range of numbers between 0.600 and 0.800 with a **high interpretation**. This is supported by observational data, interviews, and documentation.

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