The Effectiveness of Think Talk Write Learning Model to the Students' Writing Skills in Indonesian Elementary School

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Abstract

This research is about the use of Think Talk Write learning in Indonesian language learning material for writing skills at the Said Na'um Integrated Islamic Elementary School, East Jakarta. The objectives of the researcher are 1) to find out Think Talk Write learning in Indonesian language learning writing skills material. 2) knowing the correlation value of Think Talk Write learning in Indonesian language learning writing skills material. 3) knowing the correlation value of Think Talk Write learning in Indonesian language learning material for writing skills at the basic education level. The research used the library research method by conducting a meta-analysis of 36 research results, through analysis of the correlation value of the research results. The application of Think Talk Write learning is a cooperative learning model where learning focuses on using small groups to work together in maximizing learning conditions to achieve learning goals. The results showed that the population correlation means for Elementary School/equivalent was 0.393, Junior High School/equivalent was 0.513, and High School/equivalent was 0.433. While the impact of sampling errors for Elementary School / equivalent is 10.5%, Junior High School / equivalent is 64.6% and Senior High / Equivalent is 53.2%. So, it can be concluded that learning thinks talk write in Indonesian language learning material for writing skills in elementary schools can improve student learning outcomes with a positive correlation.

Keywords: Meta-Analysis; Learning Think Talk Write; Writing Skills; Writing Paragraphs

Introduction

Education is a basic right of every citizen that must be fulfilled by the government as a manifestation of its commitment to providing educational opportunities. Building education is still being pursued until now, with the expected result that all young people can experience the world of education to become their guide in the future (Iasha et al., 2020). The national education system must be able to ensure equitable distribution of educational opportunities, increase the quality and relevance, and efficiency of education management to face challenges under the demands of changes in local, national, and global life so it is necessary to carry out educational reforms in a planned, directed and sustainable manner. Every Indonesian citizen has the right and deserves to get educational opportunities to develop young people who are progressing and under the demands of the times (Bramianto Setiawan et al., 2021).
Realizing the potential of students according to continuous change must be developed since elementary school, which is the initial golden foundation for children as a reflection of the character of the progressive Indonesian nation's children (Acesta et al., 2021). Every development, especially in elementary schools, is different, so learning must be managed creatively and innovatively, according to the stage of student development. The stages of student development can be seen from the characteristics of the specificity of the ages of 6-9 years and 10-12 years which can be seen from the intellectual and emotional aspects and their implications for the learning process (Maryono 2017: 106–7). The uniqueness and characteristics of children need to be developed to achieve success.

Education in primary schools should be a teacher in learning to motivate and direct students' interest in learning to allow learning outcomes to increase. Given that elementary school students are unique children and need attention (Juniarso et al., 2020).

As for what is of particular concern to children in this study is writing skills. Writing in elementary schools is the foundation for higher levels of education and is mandatory for students. As a skill that underlies the next level of education, writing needs to get the attention of the teacher, because if the basis is not strong in the next education students will have difficulty being able to acquire and have knowledge (Pramujiono et al., 2020). A person is said to have the ability if he has gone through and completed a process, the process that must be passed in language and language is the four aspects of language skills. These four aspects are not only supported in the sphere of language but also in the sphere of life which are closely related (Iskandar et al., 2018).

This problem was also found in the Tanah Abang Central Jakarta education institution in grade IV of the Said Na'um Integrated Islamic Elementary School. The results of preliminary research conducted by researchers through observations found that the learning outcomes of grade IV students in the average value of Indonesian language subjects in the discussion of paragraph writing skills, student learning outcomes were still low with scores that were still far from the average. Of the total 21 students, there were 15 students whose scores were far below the KKM average score.

After further investigation, one of the main causes of low-grade IV student learning outcomes is that the teaching method of teachers still uses lectures a lot and only occasionally teachers use a learning model that uses a cooperative approach in small study groups. Therefore we need the right method that can build students' enthusiasm for learning so that student learning outcomes are truly optimal (B Setiawan et al., 2017).

This is one of the things that encourages literature study of Think Talk Write learning in Indonesian language learning writing skills material. The subject of discussion of paragraph writing skills on student learning outcomes is still low with a value that is still far from the average.

According to (Sarwono: 2006), library research studies various reference books as well as the results of similar previous research which are useful for obtaining a theoretical basis for the problem to be studied "(Mirzaqon and Purwoko 2018: 4). Researchers used literature studies because researchers did not allow them to enter the field to collect field research data caused by the covid-19 virus pandemic conditions. The lack of enthusiasm of students in learning so that the writer is encouraged to use the Think Talk Write learning which will later be translated into paragraph writing skills ( Bramianto Setiawan et al., 2020).

Learning Think Talk Write in this research involves three important stages that must be developed and carried out in learning, as follows: (1) Thinking, thinking activities can be seen from the process of reading a reading text, imagining what the idea is going to be designed in ideas, then take notes. (2) Talking, the next stage is talk, which is communicating with his teammates in language that is
easy for the students to understand about the problems being considered which will later be outlined in the form of paragraph writing skills. (3) Writing, the writing stage is writing down the results of the discussion or on the provided student worksheets. This writing activity constructs writing ideas through a series of learning to think and discuss with a group of friends.

Furthermore, research on the application of the Think Talk Write (TTW) model in learning to write effective sentences of students is active and enthusiastic in carrying out the learning process of writing effective sentences, such as during the think, talk, and write stages, which were carried out by (Aryananda, Chamisijatin, and Hafi. 2019). Still, in research on the skills of writing instructional texts on the application of the Think Talk Write learning model, the results showed an increase in teacher performance planning and student activities from cycle I to cycle II and the skill of writing instructional texts to save energy had increased, by (Farsyafat 2020). Furthermore, research (Ningrum, Satrijono, and Kurniasih 2020) on the application of the Think Talk Write learning model through poster media has a significant effect on poetry writing skills.

Based on the results of previous research, it has been proven that Think Talk Write learning is very effective in writing paragraph skills suitable to be applied in school institutions carried out by researchers at the elementary school level (Asrifah et al., 2020; Rachamatika et al., 2021). Think Talk Write learning is to familiarize students with thinking and communicating with friends, teachers, and even with themselves, developing meaningful problem-solving to understand teaching material, developing students' critical and creative thinking skills.

One of these problems is the writing skills obtained through the learning process. The ability of writing skills is very important for students. According to Hedge (in Nurhayati, 2008, p. 112) states, "Writing skills are needed by students because students need them both for their education, social life, and later in their professional life.

The description of the researcher's problem in the review of journal studies, that the use of Think Talk Write learning is very good to be applied at the elementary school level in the learning process of paragraph writing skills. Based on the above problems, the authors are interested in researching "Learning Think Talk Write in Indonesian Language Learning Writing Skills Material" (Sudrajat et al., 2018).

Writing skills in this study are limited to paragraph writing skills. The competence of students who want to be achieved through research is limited to the basic competence of "arranging information obtained from the text based on the relationship between ideas into a written framework". Subjects researched focused on Indonesian for grade IV elementary school students (Sudrajat et al., 2021).

This is one of the things that encourages literature study of Think Talk Write learning in Indonesian language learning writing skills material. Think Talk Write learning is very effective in writing paragraph skills suitable for application in school institutions carried out by researchers at the elementary school level. The research objectives are as follows:

1. Knowing Think Talk Write learning in Indonesian language learning writing skills material.
2. Knowing the correlation value of Think Talk Write learning in Indonesian language learning writing skills material.
3. Knowing the correlation value of Think Talk Write learning in Indonesian language learning material for writing skills for elementary schools.
Method

Literature searches are obtained through books, searches through electronic databases of PsychINFO, ProQuest, Science Direct, Google Scholar. The search strategy is focused on using the keyword "Think Talk Write learning," writing skills ".

The author found 36 journal articles in journals that match the criteria. The author sets three criteria as follows: (1) The results of an empirical study using the concept of Think Talk Write learning theory and writing skills, (2) The research context is education (school), (3) The subject is elementary school students.

The data collection techniques used by the authors in this study are documentation. According to (Arikunto, 2010) documentation, is "looking for data about things or variables in the form of notes, books, papers or articles, journals and so on" (Mirzaqon and Purwoko 2018: 4). The data in the literature is collected and processed in the following way:

1. Editing, namely re-checking the data obtained, especially in terms of completeness, clarity of meaning, and harmony of meanings between one another.

2. Organizing, namely organizing the data obtained with a framework that is already needed.

3. Research findings, namely conducting further analysis of the results of data organizing using predetermined rules, theories, and methods so that certain conclusions are obtained which are the results of the answers to the problem formulation.

Data analysis in this literature research is content analysis, which is research that is an in-depth discussion of the content of written or printed information. According to (Serbaguna, 2005) the analysis process of this research will be carried out "the process of selecting, comparing, combining and sorting various meanings until they are found that are relevant (Mirzaqon and Purwoko 2018: 4)". The content analysis stages taken by the researcher are as follows:

1. Determine the problem

2. Develop a frame of mind

3. Develop a methodology consisting of a series of methods that include:
   a. Determine the measurement method or procedure for operationalizing the concept
   b. Determine the universe or population to be studied and how the sample is taken
   c. Determine the data collection method by making a coding sheet
   d. Determine the method of analysis

4. Data analysis

Data analysis was performed using meta-analysis techniques by Hunter and Schmidt (2004) in the study (Indriartiningtias 2015: 78) carried out with the following steps:

a. Change the algebraic equation from the value of t to the value of r
b. Bare Bones Meta-Analysis to correct sample errors by:

   1) Calculating the average population correlation

\[
\bar{r}_{xy} = \frac{\sum(N_i \cdot r_{ij})}{\sum N_i}
\]
2) Calculating variance $r_{xy}$ ($\sigma_{r}^2$)
\[
\sigma_{r}^2 = \frac{\Sigma N_i (r_i - \bar{r}_{xy})^2}{\Sigma N_i}
\]

3) Calculating the variance of sampling error ($\sigma_{e}^2$)
\[
\sigma_{e}^2 = \frac{(1 - S_r^2)^2}{N - 1}
\]

4) The corrected variant or the true variance
\[
\sigma_p^2 = \sigma_r^2 - \sigma_e^2
\]

5) Impact of sampling errors
\[
\sigma_e^2 = \frac{S_e^2}{\sigma_p^2} \times 100\%
\]

6) Confidence interval
\[
\bar{r}_{xy} \pm 1.96 \times SD
\]
\[
\bar{r}_{xy} \pm 1.96 \times \sqrt{\sigma_r^2}
\]

5. Data Interpretation

In this study, the writer wanted to know how big the relationship between the two variables was by looking at the positive or negative correlation between the two variables to be measured.

Result

Characteristics of the research sample

The characteristics of the research sample are as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Study</th>
<th>Sample</th>
<th>N</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Afif Zaenal Arifin, Choirul Huda &amp; Ikha Listyarini, (2019)</td>
<td>SD</td>
<td>29</td>
<td>10.239</td>
</tr>
<tr>
<td>2</td>
<td>Dyah Fatkasari &amp; Heru Subrata, (2017)</td>
<td>SD</td>
<td>57</td>
<td>-3.575</td>
</tr>
<tr>
<td>3</td>
<td>Friska Ayu Kusuma Ningrum, Hari Satrijono &amp; Fitria Kurniasih, (2020)</td>
<td>SD</td>
<td>60</td>
<td>4.871</td>
</tr>
<tr>
<td>4</td>
<td>Helda Try Meiroza &amp; Guslinda, (2019)</td>
<td>SD</td>
<td>30</td>
<td>10.589</td>
</tr>
<tr>
<td>6</td>
<td>Irma Yunika Widyarti, (2018)</td>
<td>SD</td>
<td>35</td>
<td>0.893</td>
</tr>
<tr>
<td>7</td>
<td>Khairun Nisa, (2017)</td>
<td>SD</td>
<td>36</td>
<td>18.85</td>
</tr>
<tr>
<td>8</td>
<td>Km. Agus Darmawan, I Kt Dibia &amp; Luh Pt Putrini Mahadewi, (2017)</td>
<td>SD</td>
<td>59</td>
<td>12.46</td>
</tr>
<tr>
<td>9</td>
<td>Linda Nur Azizah &amp; Sri Hariani, (2018)</td>
<td>SD</td>
<td>25</td>
<td>16.496</td>
</tr>
<tr>
<td>14</td>
<td>Nurlaili Iftitah, I Wayan Widiana &amp; Alexander Hamonangan Simamora, (2020)</td>
<td>SD</td>
<td>59</td>
<td>11.457</td>
</tr>
<tr>
<td>16</td>
<td>Safira, Ahmad Asif &amp; Ibrahim Nasbi, (2019)</td>
<td>SD</td>
<td>60</td>
<td>-6.692</td>
</tr>
<tr>
<td>17</td>
<td>Wilda Ayu Hajar Octavia et al., (2020)</td>
<td>SD</td>
<td>44</td>
<td>2.208</td>
</tr>
<tr>
<td>18</td>
<td>Yuyun Novita Wijayanti, (2019)</td>
<td>SD</td>
<td>54</td>
<td>3.147</td>
</tr>
</tbody>
</table>
Table 2. Characteristics of Research Samples at SMP/equivalent

<table>
<thead>
<tr>
<th>No.</th>
<th>Study</th>
<th>Sample</th>
<th>N</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Agus Setyonegoro (2020)</td>
<td>SMP</td>
<td>32</td>
<td>7.931</td>
</tr>
<tr>
<td>2</td>
<td>Julia Fitri &amp; Atmazaki, (2020)</td>
<td>SMP</td>
<td>32</td>
<td>2.39</td>
</tr>
<tr>
<td>3</td>
<td>Mega Febrianti, Tressyalina &amp; Yulianti Rasyid, (2018)</td>
<td>SMP</td>
<td>10</td>
<td>1.84</td>
</tr>
<tr>
<td>4</td>
<td>Nendi Dwi Wahyuni &amp; Harris Effendi Thahar, (2019)</td>
<td>SMP</td>
<td>50</td>
<td>10.64</td>
</tr>
<tr>
<td>5</td>
<td>Nurhayati, Mardian &amp; Wahyuni Oktavia, (2019)</td>
<td>SMP</td>
<td>23</td>
<td>8.72</td>
</tr>
<tr>
<td>7</td>
<td>Riska Mulyani &amp; Syahrul, R, (2019)</td>
<td>SMP</td>
<td>64</td>
<td>4.32</td>
</tr>
<tr>
<td>8</td>
<td>Siska Savitri, Emidar &amp;vYulianti Rasyid, (2018)</td>
<td>MTS</td>
<td>32</td>
<td>7.48</td>
</tr>
<tr>
<td>9</td>
<td>Tri Wasillah, Syahrul R &amp; Ena Noveria, (2016)</td>
<td>SMP</td>
<td>27</td>
<td>9.32</td>
</tr>
</tbody>
</table>

Table 3. Characteristics of Research Samples at SMA/Equivalent Level

<table>
<thead>
<tr>
<th>No.</th>
<th>Study</th>
<th>Sample</th>
<th>N</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Ayu Lestari, (2016)</td>
<td>SMA</td>
<td>45</td>
<td>12.6</td>
</tr>
<tr>
<td>3</td>
<td>Intan Permata Sari, (2017)</td>
<td>SMA</td>
<td>61</td>
<td>1.39</td>
</tr>
<tr>
<td>4</td>
<td>Ninit Alfianika, (2016)</td>
<td>SMA</td>
<td>64</td>
<td>4.25</td>
</tr>
<tr>
<td>5</td>
<td>Tifani, Atmazaki &amp; Nursaid, (2017)</td>
<td>SMA</td>
<td>100</td>
<td>3.02</td>
</tr>
<tr>
<td>6</td>
<td>Tuti Herawati, (2018)</td>
<td>SMK</td>
<td>36</td>
<td>3.74</td>
</tr>
<tr>
<td>8</td>
<td>Yulia Fitri, Syahrul R &amp; Andria Catr Tamsin, (2016)</td>
<td>SMA</td>
<td>327</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Transformasi nilai t ke dalam \( r \)

There are 36 journal studies which are research that produces \( t \) values and the rest are correlational studies that produce \( r \) values. The value of \( t \) needs to be transformed into \( r \) first. The \( r_{xy} \) value was obtained from the correlational and transformational \( t \) values of the study. The formula for transforming the \( t \) value can be seen in the following equation:

\[
 r = \frac{t}{\sqrt{t^2 + (N - 2)}} \tag{i}
\]

The process of transforming the \( t \) value into the \( r \)-value of all samples at each level of education can be seen in the table as follows:

Table 4. Transformation of the value of \( t \) to \( r \) for SD/equivalent

<table>
<thead>
<tr>
<th>No.</th>
<th>Study</th>
<th>Sample</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
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<td>2</td>
<td>Dyah Fatkasari &amp; Heru Subrata, (2017)</td>
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<td>4</td>
<td>Helda Try Meiroza &amp; Guslinda, (2019)</td>
<td>SD</td>
<td>30</td>
</tr>
<tr>
<td>6</td>
<td>Irma Yunika Widyarti, (2018)</td>
<td>SD</td>
<td>35</td>
</tr>
<tr>
<td>7</td>
<td>Khairun Nisa, (2017)</td>
<td>SD</td>
<td>36</td>
</tr>
</tbody>
</table>
Based on the data in the table above, of the 18 primary school level research journals that have been transformed from the t value to the r value, it is found that the values have a positive and negative correlation, namely 2 studies with negative correlation values and 16 studies with positive correlation values.

Table 5. Transformation of t to r value for SMP / equivalent

<table>
<thead>
<tr>
<th>No.</th>
<th>Study</th>
<th>Sample</th>
<th>t</th>
<th>r</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Agus Setyonegoro (2020)</td>
<td>SMP</td>
<td>32</td>
<td>7,931</td>
</tr>
<tr>
<td>2.</td>
<td>Julia Fitri &amp; Atmazaki, (2020)</td>
<td>SMP</td>
<td>32</td>
<td>2,390</td>
</tr>
<tr>
<td>3.</td>
<td>Mega Febrianti, Tressyalina &amp; Yulianti Rasyid, (2018)</td>
<td>SMP</td>
<td>100</td>
<td>1,840</td>
</tr>
<tr>
<td>5.</td>
<td>Nurhayati, Mardian &amp; Wahyu Oktavia, (2019)</td>
<td>SMP</td>
<td>23</td>
<td>8,720</td>
</tr>
<tr>
<td>7.</td>
<td>Riska Mulyani &amp; Syahrul R, (2019)</td>
<td>SMP</td>
<td>64</td>
<td>4,320</td>
</tr>
<tr>
<td>9.</td>
<td>Tri Wasillah, Syahrul R &amp; Ena Noveria, (2016)</td>
<td>SMP</td>
<td>271</td>
<td>9,320</td>
</tr>
</tbody>
</table>

Based on the data in the table above, of the 10 junior high school level research journals that have been transformed from the value of t to the value of r, it was found that the values were positively correlated, namely 10 studies with positive correlation values.

Table 6. Transformation of t to r value for SMA / equivalent

<table>
<thead>
<tr>
<th>No.</th>
<th>Study</th>
<th>Sample</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Ayu Lestari, (2016)</td>
<td>SMA</td>
<td>45</td>
</tr>
<tr>
<td>2.</td>
<td>Erina, Susan Neni Triani &amp; Wahyu Oktavia, (2018)</td>
<td>SMK</td>
<td>148</td>
</tr>
<tr>
<td>3.</td>
<td>Intan Permata Sari, (2017)</td>
<td>SMA</td>
<td>61</td>
</tr>
<tr>
<td>5.</td>
<td>Tifani, Atmazaki &amp; Nursaid, (2017)</td>
<td>SMA</td>
<td>100</td>
</tr>
<tr>
<td>6.</td>
<td>Tuti Herawati, (2018)</td>
<td>SMK</td>
<td>36</td>
</tr>
<tr>
<td>7.</td>
<td>Yelsa Afriani, Ifrani Basri &amp; Emidar, (2016)</td>
<td>SMA</td>
<td>240</td>
</tr>
<tr>
<td>8.</td>
<td>Yulia Fitri, Syahrul R &amp; Andria Catri Tamsin, (2016)</td>
<td>SMA</td>
<td>327</td>
</tr>
</tbody>
</table>
Based on the data in the table above, from 8 high school level research journals that have been transformed from the value of t to the value of r, it was found that the values were positively correlated, namely 8 studies with positive correlation values.

**Correction of Sampling Errors (Bare Bone Meta-Analysis)**

There are several steps to perform a Bare Bone Meta-Analysis to correct sample errors (Hunter & Schmidt, 1990). The best estimate for population correlation is formulated in the following equation:

\[ \bar{r}_{xy} = \frac{\sum(N_i, r_i)}{\sum N_i} \]

Where:
- \( r_i \) = correlation value for study \( i \)
- \( N_i \) = Number of samples in Study \( i \)

Knowing the mean population correlation after being corrected by the number of samples is described in the table.

1) **Mean population correlation for SD/equivalent**

\[ \bar{r}_{xy} = \frac{447,731}{1139} \]

\[ \bar{r}_{xy} = 0.393 \]

From the calculation results, the magnitude of the average population correlation after being corrected by the number of samples for the SD/equivalent level (\( \bar{r}_{xy} \)) is 0.393.

2) **Mean population correlation for SMP / equivalent**

\[ \bar{r}_{xy} = \frac{341,748}{666} \]

\[ \bar{r}_{xy} = 0.513 \]

From the calculation results, the amount of the average population correlation after being corrected by the number of samples for the junior high school / equivalent level (\( \bar{r}_{xy} \)) is 0.513.

3) **Mean population correlation for SMA / equivalent**

\[ \bar{r}_{xy} = \frac{442,354}{1021} \]

\[ \bar{r}_{xy} = 0.433 \]
From the calculation results, the magnitude of the average population correlation after being corrected by the number of samples for the high school / equivalent level ($\bar{r}_{xy}$) is 0.433.

$Variance \ \bar{r}_{xy} \ (S_r^2)$

Here is calculating the Variance rxy or $\sigma_r^2$

$$\sigma_r^2 = \frac{\Sigma N_i (r_i - \bar{r}_{xy})^2}{\Sigma N_i}$$

1) Variance $\bar{r}_{xy} \ (S_r^2)$ for SD/equivalent

$$\sigma_r^2 = \frac{\Sigma N_i (r_i - \bar{r}_{xy})^2}{\Sigma N_i}$$

$$\sigma_r^2 = \frac{182,252}{1139}$$

$$\sigma_r^2 = 0,16$$

From the calculation results, the amount of variance ($S_r^2$) for SD/equivalent is 0.16.

2) Variance $\bar{r}_{xy} \ (S_r^2)$ for SMP/equivalent

$$\sigma_r^2 = \frac{\Sigma N_i (r_i - \bar{r}_{xy})^2}{\Sigma N_i}$$

$$\sigma_r^2 = \frac{25,785}{666}$$

$$\sigma_r^2 = 0,0387$$

From the calculation results, the amount of variance ($S_r^2$) for SMP/equivalent education is 0.0387.

3) Variance $\bar{r}_{xy} \ (S_r^2)$ for high school education/equivalent

$$\sigma_r^2 = \frac{\Sigma N_i (r_i - \bar{r}_{xy})^2}{\Sigma N_i}$$

$$\sigma_r^2 = \frac{23,195}{1021}$$

$$\sigma_r^2 = 0,0227$$

From the calculation results, the amount of variance ($S_r^2$) for SMA/equivalent is 0.0227.

Variansi Kesalahan Pengambilan Sampel

The sampling error variance can be calculated by the following formula

$$\sigma_e^2 = \frac{(1 - S_r^2)^2}{N - 1}$$

1) The variance of Sampling Errors at Elementary School Level/equivalent

$$\sigma_e^2 = \frac{(1 - S_r^2)^2}{N - 1}$$

$$\sigma_e^2 = \frac{(1 - 0,16^2)^2}{63,278 - 1}$$

$$\sigma_e^2 = 0,0152$$
So, the variance of sampling error ($\sigma_e^2$) for SD/equivalent is 0.0152.

2) The variance of Sampling Errors at Junior High School/equivalent

$$\sigma_e^2 = \frac{(1 - S_r)^2}{N - 1}$$

$$\sigma_e^2 = \frac{(1 - 0,0387)^2}{66,6 - 1}$$

$$\sigma_e^2 = 0,0152$$

So, the variance of sampling error ($\sigma_e^2$) for SMP/equivalent is 0.0152.

3) Sampling Error Variance at SMA / Equivalent Level

$$\sigma_e^2 = \frac{(1 - S_r)^2}{N - 1}$$

$$\sigma_e^2 = \frac{(1 - 0,0227)^2}{127,625 - 1}$$

$$\sigma_e^2 = 0,0079$$

So, the variance of sampling error ($\sigma_e^2$) for the SMA/equivalent level is 0.0079.

**Estimation of population correlation variance**

The population correlation variance can be calculated by the following formula.

$$\sigma_p^2 = \sigma_r^2 - \sigma_e^2$$

1) Actual variance at SD / equivalent level

$$\sigma_p^2 = \sigma_r^2 - \sigma_e^2$$

$$\sigma_p^2 = 0,16 - 0,0152$$

$$\sigma_p^2 = 0,145$$

So the variance of the population correlation at the SD/equivalent level is 0.145.

2) Actual variance at SMP / equivalent

$$\sigma_p^2 = \sigma_r^2 - \sigma_e^2$$

$$\sigma_p^2 = 0,0387 - 0,0152$$

$$\sigma_p^2 = 0,024$$

So the variance of the population correlation at SMP/equivalent is 0.024.

3) Actual variance at SMA / equivalent

$$\sigma_p^2 = \sigma_r^2 - \sigma_e^2$$

$$\sigma_p^2 = 0,0227 - 0,0079$$

$$\sigma_p^2 = 0,015$$

So the variance of the population correlation at SMA/equivalent is 0.015.

**Impact of sampling error**
The impact of sampling errors can be determined by the following formula:
\[ \sigma_e^2 = \frac{S_e^2}{\sigma_n^2} \times 100\% \]

1) Impact of sampling errors at the Elementary School Level/equivalent
\[ \sigma_e^2 = \frac{S_e^2}{\sigma_n^2} \times 100\% \]
\[ \sigma_e^2 = \frac{0.0152}{0.145} \times 100\% \]
\[ \sigma_e^2 = 10.5\% \]

So the impact of sampling errors at the SD/equivalent level is 10.5%.

2) Impact of sampling errors at SMP/equivalent
\[ \sigma_e^2 = \frac{S_e^2}{\sigma_n^2} \times 100\% \]
\[ \sigma_e^2 = \frac{0.0152}{0.024} \times 100\% \]
\[ \sigma_e^2 = 64.6\% \]

So, the impact of sampling errors at the SMP/equivalent level is 64.6%.

3) Impact of sampling errors at SMA/equivalent
\[ \sigma_e^2 = \frac{S_e^2}{\sigma_n^2} \times 100\% \]
\[ \sigma_e^2 = \frac{0.0079}{0.015} \times 100\% \]
\[ \sigma_e^2 = 53.2\% \]

So the impact of sampling errors at the SMA/equivalent level is 53.2%.

**Confidence interval**

If the population correlation after being corrected for the number of samples has a normal distribution, then the confidence interval can be calculated by the equation with the following formula:

\[ \overline{r_{xy}} \pm 1.96 \text{ SD} \]
\[ \overline{r_{xy}} \pm 1.96 \sqrt{\sigma_r^2} \]

1) Elementary / equivalent level confidence interval
\[ \overline{r_{xy}} \pm 1.96 \text{ SD} \]
\[ \overline{r_{xy}} \pm 1.96 \sqrt{\sigma_r^2} \]
\[ 0.393 \pm 1.96 \sqrt{0.16} \]
\[ 0.393 \pm 0.784 \]

So the confidence interval for SD/equivalent is equal to \(-0.391 < \overline{r_{xy}} < 1.177\).
2) Junior high school level confidence interval/equivalent
\[
\bar{r}_{xy} \pm 1.96 \text{ SD} \\
\bar{r}_{xy} \pm 1.96 \sqrt{\sigma_r^2} \\
0.513 \pm 1.96 \sqrt{0.0387} \\
0.513 \pm 0.386
\]
So the confidence interval for SMP / equivalent is equal to \(0.127 < \bar{r}_{xy} < 0.899\).

3) High school / equivalent level confidence interval
\[
\bar{r}_{xy} \pm 1.96 \text{ SD} \\
\bar{r}_{xy} \pm 1.96 \sqrt{\sigma_r^2} \\
0.433 \pm 1.96 \sqrt{0.0227} \\
0.433 \pm 0.295
\]
So, the confidence interval for the SMA / equivalent level is equal to \(0.138 < \bar{r}_{xy} < 0.729\).

Discussion

The application of Think Talk Write learning in Indonesian language learning writing skills material

The purpose of this study was to find out how to learn Think Talk Write in Indonesian language learning in paragraph writing skills. Based on the elaboration of some of the above theories, the writer can conclude that the steps for implementing Think Talk Write learning in Indonesian language learning, paragraph writing skills material refer to the steps put forward by according to (Shoimin, 2014: 213) in the study (Putri et al. 2017) which is then concluded as learning steps in research, including the following:

a. The teacher explains about Think Talk Write learning.
b. The teacher conveys the learning objectives.
c. The teacher explains the material to students.
d. The teacher forms students into groups, each group consisting of 3-5 students (who are grouped heterogeneously).
e. The teacher distributed individual sheets of drawing paper.
f. Prepare students to write their knowledge acquired as a result of an agreement with group members (write).
g. The teacher asks each group to present their work.

The paragraph-forming elements that will be developed in paragraph writing skills research are that students are expected to be able to compile main ideas and supporting ideas into paragraphs. Aspects of composing Indonesian paragraph writing skills in this study refer to Zulela (2013: 123) in research (Ulfa and Soenarto 2017: 24) and Alice Oshima and Ann Hogue (2006: 315) in research (Helaluddin 2016: 222), among others: written format, mechanics, content, organization, grammar, and sentence structure.

The Think Talk Write learning steps and the assessment rubric are the design of the learning process in research. Think Talk Write learning model is expected to help students in constructing their knowledge so that they can better understand students' conceptual understanding through group learning activities.
The results of the correlation value of Think Talk Write learning in Indonesian language learning writing skills material

This meta-analysis study aims to obtain the true population correlation value by correcting sampling errors from various studies so that in the end a single conclusion is obtained. From the results of the meta-analysis calculation, 36 studies are consisting of 18 studies at the elementary school level, 10 studies at the junior high school level, and 8 studies at the high school level.

First, the population correlation means for the SD / equivalent level produced in this study is 0.393 which is in the range 0.20 - 0.399, so it can be assumed that the correlation coefficient is around the value of +1, meaning that the correlation coefficient has a perfect positive linear relationship. In addition, the results of the calculation of the impact of sampling errors at the SD / equivalent level are 10.5%, which means that the impact of sampling errors is classified as very small.

Second, the mean population correlation for the SMP / equivalent levels produced in this study is 0.513 which is in the range 0.40 - 0.599, so it can be assumed that the correlation coefficient is around the value of +1, meaning that the correlation coefficient has a perfect positive linear relationship. In addition, the results of the calculation of the impact of sampling errors at the SMP / equivalent level of education are 64.6%, which means that the impact of sampling errors is large.

Third, the population correlation means for the SMA / equivalent level produced in this study is 0.433 which is in the range 0.40 - 0.599, so it can be assumed that the correlation coefficient value ranges from +1, meaning that the correlation coefficient has a perfect positive linear relationship. In addition, the results of the calculation of the impact of the sampling error at the SMA / equivalent level were 53.2%, which means that the impact of the sampling error was quite large.

Based on the data from the calculation of research results at the primary school level, junior high school level, and high school level, it is found that the similarities and differences in the results of the research are found in terms of the results of the average population correlation and the calculation of the impact of sampling errors. The similarity of the results of this study is that the results of the calculation of the mean population correlation at the primary, junior high, and high school levels show that the results are positively correlated. The difference is that the level of the impact of sampling errors at the SD / equivalent level of 10.5% is classified as very small, at the SMP / equivalent level 64.6% is classified as large and at the SMA / equivalent level of education is 53.2% quite large.

The results of the correlation value of Think Talk Write learning in Indonesian language learning material for writing skills at the elementary school level

This meta-analysis study aims to obtain the true population correlation value by correcting sampling errors from various studies so that in the end a single conclusion is obtained. From the results of the calculation of the meta-analysis of research at the primary school level, the mean population correlation for the elementary/equivalent levels produced in this study is 0.393 which is in the range of 0.20 - 0.399, so it can be assumed that the correlation coefficient value ranges from +1, meaning the coefficient correlation has a perfect positive linear relationship. In addition, the results of the calculation of the impact of sampling errors at the SD / equivalent level are 10.5%, which means that the impact of sampling errors is classified as very small.

Conclusion

The conclusions in this study are as follows: First, the Think Talk Write learning model is a model that is built through thinking, speaking, and writing. The learning flow of Think Talk Write starts
from, (1) Thinking, thinking activities can be seen from the process of reading a reading text, imagining what kind of picture you want to design in the ideas, then making notes. (2) Talking, the next stage is talk, which is communicating with his teammates in language that is easy for the students to understand about the problems being considered which will later be outlined in the form of paragraph writing skills. (3) Writing, the write stage is writing down the results of the discussion or on the provided student worksheets. This writing activity constructs writing ideas through a series of learning to think and discuss with a group of friends.

Paragraph writing skills are an ability that a child has in pouring his ideas into an essay in which there are elements of the main idea as the key to the problem and supporting ideas which are an explanation of the main problem and contain language elements in accordance with correct Indonesian writing rules. Aspects that will be taken into consideration in paragraph writing skills include: writing format, mechanics, content, organization, grammar and sentence structure.

Learning Think Talk Write in Indonesian language learning material for writing skills can be applied to levels at Elementary School (SD) / equivalent, Junior High School (SMP) and its equivalent. Based on the data from the Bare Bone Meta Analysis results for elementary school level equivalent, junior high school equivalent, and senior high school equivalent, all of them show a positive correlation, which means that the correlation coefficient has a perfectly positive linear relationship. However, differences were found in the impact of errors in sampling for SD, SMP and SMA / equivalent. Therefore, researchers must be careful in taking research samples, so that the research objectives are well maintained.

Second, the results of the meta-analysis that have been carried out provide support for the results of research which states that learning Think Talk Write in Indonesian language learning material for writing skills at the educational level with a sample of 18 researchers at Elementary School level, 10 researchers at Junior High School level, High School, amounting to 8 researchers. The results of the calculation of the average correlation value after being corrected by the number of samples for each level of education are as follows:

a. \( \hat{r}_{xy} \) Education level of SD / equivalent is 0.393 (positively correlated)
b. \( \hat{r}_{xy} \) Education level for SMP / equivalent is 0.513 (positively correlated)
c. Education Level SMA / equivalent is 0.433 (positively correlated)

Third, the results of the meta-analysis that has been carried out with a sample size of 18 researchers provide support for the research hypothesis which states that Think Talk Write learning in Indonesian language learning material for writing skills at the Elementary School Education Level is 0.393 (positively correlated).

References


The Effectiveness of Think Talk Write Learning Model to the Students' Writing Skills in Indonesian Elementary School


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