

Correlation Of Critical Thinking Ability, Reading Motivation, And Student's Writing Skills (Study On Learning To Write Observation Reports In Sengkang District Junior High School)

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Abstract

This study aims to determine the relationship between: (1) critical thinking skills and observation report writing skills, (2) reading motivation and observation report writing skills, (3) critical thinking skills and reading motivation together with observation report writing skills. . This research was conducted at SMP Negeri 8 Sengkang, SMP Negeri 14 Sengkang, and SMP Negeri 16 Sengkang. The research method used is a correlational survey method. The population of this study were all students of class VIII SMP Negeri Sengkang. A sample of 170 people was taken by means of Cluster Random Sampling. The instruments for collecting data were a test of writing observation report skills, a test of critical thinking skills, and a reading motivation questionnaire. The analysis technique used is statistical regression and correlation (simple and multiple). The results of the analysis show that: (1) there is a positive relationship between critical thinking skills and writing observational report skills ($r_{y1} = 0.39$ at the level of significance = 0.05 with $N = 170$, $r_t = 0.1497$, and $t_1 = 5$, 42 $t_t = 1.645$); (2) there is a positive relationship between reading motivation and observational report writing skills ($r_{y2} = 0.15$ at the level of significance = 0.05 with $N = 170$, $r_t = 0.1497$, and $t_1 = 1.99$ $t_t = 1.645$); (3) there is a positive relationship between critical thinking ability and reading motivation together with writing observation report skills ($R_{y12} = 0.41$ at the significance level = 0.05 with $N = 170$, $R_t = 0.1497$, and $F_0 = 16.50$ $F_1 = 3.0532$). Based on the results of the study, it was concluded that together critical thinking skills and reading motivation contributed significantly (16.81%) to the skill of writing observation reports. This shows that these two variables can be good predictors of observation report writing skills.

Keywords— observation report writing skills, critical thinking skills, reading motivation ciples

Introduction

Indonesian language is one of the subjects related to four skills. Skill is one element of competence that must be possessed by every student in addition to attitudes and knowledge. The new paradigm places Indonesian lessons not only in teaching linguistic aspects, but places more emphasis on aspects of the ability to use the language. Writing as an aspect of language competence is something that is very important to be taught to students because writing skills have become an unavoidable need in meeting daily needs related to writing (Durga & Rao, 2018). By writing, students are expected to be able to express ideas clearly,

logically, systematically, according to the context and communication needs. In other words, Indonesian should be more focused on achieving language skills that cover four aspects at once, namely speaking, listening, writing, and reading.

In fact, writing is seen as a complex skill related to several things, including reading, listening, and speaking. Writing and reading are activities that make writers as readers and readers as writers. According to Dalman (Pradnyawathi & Agustika, 2019) a person is able to write after reading other people's works or indirectly reading his own compositions or writings. Regarding writing skills, a person needs inspiration, ideas, or information for his writing. Obtaining ideas, information, and

inspiration can be done by listening to various sources, including: printed sources such as books, journals, magazines, newspapers, and non-printed sources such as radio, television, lectures, speeches, interviews, and discussions. In addition to reading and listening, writing skills are also related to speaking skills. Both are productive language skills, meaning that the writer and speaker act as a messenger or sender of messages to other parties.

Writing and reading are interrelated communication activities. According to Slamet (2017) the habit of writing is impossible without the habit of reading. The results of someone's writing can represent the results of complex cognitive work that describes ideas, feelings, experiences, knowledge, and thoughts as well as a wide range of readers. One of the results of writing that requires complex cognitive work is writing an observation report. Writing an observation report is basically the process of collecting information or information collected through data in the field according to facts then processed and presented in writing. Someone who has a low coverage area of knowledge and insight will have difficulty in producing a good written observation report. Broad knowledge and insight can be obtained through a lot of reading activities. Thus, someone will produce a good observation report writing.

A person's low writing skills can be influenced by many factors such as low knowledge of writing procedures, feeling not talented, not knowing what and how to write, environmental factors, and low motivation and errors in the writing or composing learning process that stop at achieving basic skills. basic skills acquired through rote thinking habits and dominated by routine tasks solved through repetition of examples).

This is emphasized by Smith in (Slamet, 2017) that the experience of learning to write or compose experienced by students at school cannot be separated from the condition of the teacher himself. Ratna Harsanto (Widowati, 2008) stated that it is ironic that learning that occurs today in schools is still mostly oriented towards developing and testing students' memory so that students' thinking abilities are reduced and only understood as the ability to remember. So that students have the opportunity to practice writing less intensively, as a result students are trapped in the limitations of good and correct writing skills when viewed from sentence structure, spelling, vocabulary, content, coherence and cohesion of paragraph composition, and other provisions. This condition is the reason the author is interested in conducting research on writing

observational report writing skills.

Writing besides being a process is also seen as a complex activity because it involves an orderly way of thinking. An article can describe a person's level of intelligence. However, writing is not the main determinant of one's intelligence. Writing is a skill that can be learned through the learning process. The ability to write can be followed by everyone, as long as they are willing to learn and practice seriously because writing is an ability that can be learned (Slamet, 2017). The learning process cannot be separated from thinking activities in line with Perkins' opinion (Kauchak & Eggen, 2012) that learning is the impact of thinking. Writing will be easier to learn if someone often practices and learns to write, indirectly thinking skills will be trained as well.

Researchers realize that writing is a form of communication in written form that has a close relationship with thinking skills and reading motivation. Reading and writing skills are acquired intentionally through the learning process. Therefore, it is often referred to as literary language skills. Both language skills are used in indirect written communication. Someone who likes to read will produce better writing than those who don't like to read. This happens because students who like to read have broad knowledge so they tend to be more critical than those who don't like to read, because to produce a good writing requires critical thinking. Through critical thinking, the stripping of material or ideas in an article will be deeper and the truth can be accounted for so that the report submitted is clearer because of its logic. Critical thinking here is not the same as criticizing, criticizing or debating, but being able to be neutral and objective towards relevant and irrelevant information to formulate solutions and make decisions.

Critical thinking skills in writing activities have a major influence on the quality and quantity of written results (Griffin, 2003). Someone who has high critical thinking skills tends to produce quality and quantity of writing so that what is communicated with readers can be conveyed effectively. Students who think critically are able to evaluate the information obtained based on knowledge with the truth they believe and experience. Someone who thinks critically tries to be honest and avoids unverified knowledge so that he tends to delay judgment and has healthy skepticism about something.

Thinking is a daily activity, in line with the opinion of Gilbert Highet in (Suriasumantri, 1993) that humans think every moment is a very ordinary

everyday picture. Each person has a different way and style of thinking. Cassidy (2007) suggests that there are no absolute students who only have one thinking style or learning style. Grinder (Saipul Muklas, 2017) explains that for every 30 students, 22 (73.33%) of them have a varied learning style on average, and only 8 (26.67%) have a monotonous learning style. Those who are 26.67% will be able to learn effectively if the learning process is in the way they like.

Differences in thinking styles, learning styles, and students' reading motivation lead to differences in learning achievement, including in writing skills. Giving motivation and feedback to students with diverse backgrounds is very necessary. The knowledge that students construct varies depending on the different levels of their experience and prior knowledge. Motivation to read can be one of the factors that distinguish a person's writing. Critical thinking is very important in analyzing, synthesizing, and evaluating all forms of arguments to be able to make rational and responsible decisions in writing an observation report.

Researchers are interested in conducting research on students' critical thinking skills because of the low writing ability of students, it is estimated that many factors influence it both from within and from outside or environmental factors. Factors from within students include the problem of basic knowledge on performance or writing ability and teaching writing in Indonesian language lessons is not handled seriously. Finally, the habit of habitual thinking in expressing ideas, ideas, and thoughts in writing activities develops in students. The implementation of writing tests that are mostly carried out is more result-oriented, not process-oriented. In the process of learning report writing skills, especially observation reports, students are accustomed to habitual thinking, namely thinking that reflects on things that were often done before without considering existing data or changes. Students are used to brainstorming (saying whatever comes to mind without evaluating it first); prejudic thinking (gathering evidence or statements to support a concept or assumption without questioning the truth of the data obtained) and emotional thinking (responding to a message emotionally without paying too much attention to its substance). Starting from this, there needs to be a shift in habits from habitual thinking to critical thinking.

Researchers feel the need to do research writing an observation report at a public junior high school in the city of Sengkang, it should be for the level of class VIII junior high school students whose activities tend to be closely related to study tours. In addition, observing a certain situation, junior high school students should be familiar with the task of writing reports. Writing reports to class VIII students in accordance with KD 4.1 write reports in good and correct language. Nurgiyantoro, (2001) in his book explains that in relation to language teaching, writing reports can also be used to train and reveal students' writing skills. The description above gives an idea to the researcher that it is suspected that there is a relationship between critical thinking and reading activities with writing skills. Therefore, researchers feel the need to examine this relationship.

Method

Types of Research

The research method used in this research is a survey method through correlational study techniques because through this type of correlational research it can be used to detect the extent to which variations in a factor are related to variations in one or more other factors based on the coefficients. correlation. This method was chosen for research with large and small populations, but the data studied were data from samples taken from the population, so that relative events, distributions and relationships between variables were found. Survey research is usually carried out to draw generalizations from observations that are not in-depth, but generalizations made can be more accurate if a representative sample is used (Riduwan, 2004).

Surveys to make generalizations and some are useful for making predictions. The generalization that is commonly used is the generalization of a representative sample study of the population. There are two kinds of surveys, namely: surveys to obtain basic data, to obtain an overview, which is useful for planning and public policy (census); and surveys used to reveal public opinions, attitudes, and expectations (Muhadjir, 2000). Schematically, the pattern of the relationship between the independent variables and the dependent variable in this study can be seen in the following figure:

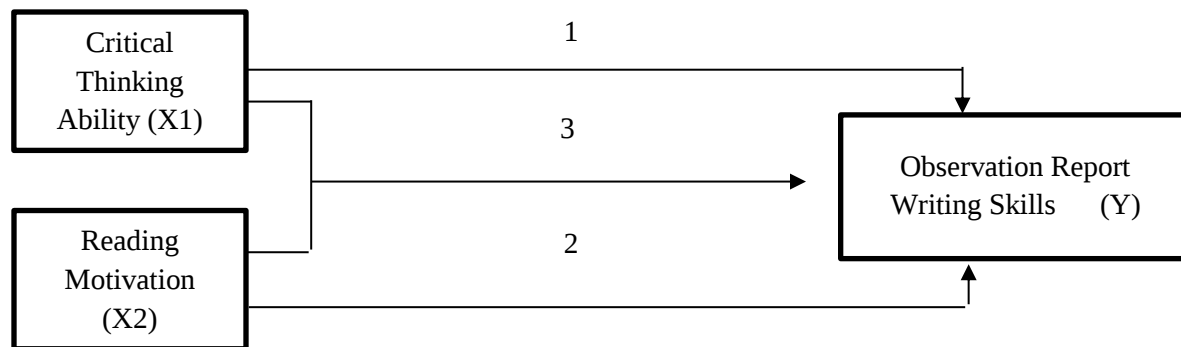


Figure 1 Correlation Research Design

Description:

Independent Variables : Critical Thinking Ability (X1), Reading Motivation (X2)

Bound Variable : Report Writing Skills Observation (Y)

Number 1 : The relationship between critical thinking ability and writing skill observation report

Number 2 : The relationship between reading motivation and writing skill observation report

Number 3 : The relationship between critical thinking ability and reading motivation together with the observation report writing skill.

Population

Population is a generalization area consisting of objects or subjects that become certain quantities and characteristics determined by researchers to study and then draw conclusions (Sugiyono, 2010). Arikunto (2002) said that the population is the whole subject of the study. Meanwhile, Margono (2003) describes population as all data of concern within a predetermined scope and time. So the population is an object or subject that is in an area and fulfills certain conditions that are related to the problem under study. The population of this study were students of class VIII SMP Negeri in the city of Sengkang. There are 27 public junior high schools in the city of Sengkang, but 24 schools are using the KTSP curriculum and the rest are already using the 2013 curriculum (SMP 1 N Sengkang, SMP 4 Sengkang, and SMP 12 Sengkang). Researchers took a sample of 12% of the total population of public junior high schools using the KTSP curriculum, namely SMP Negeri 8 Sengkang, SMP Negeri 14 Sengkang, and SMP Negeri 16 Sengkang. In accordance with the opinion of Arikunto (2002) which gives ancer-ancer in sampling, if the subject is less than 100, it is better to take all so that the research is a population study. Furthermore, if the subject is large, it can be taken between 10%-15% or 20%-25% or more.

Sampling Techniques

Efforts to determine the source of data from the population so that it adequately represents the nature

and character of the population is called research sampling. The sample is part or representative of the population under study. There are several factors that must be considered in determining the sample in a study so that the research has a representative weight that is expected, namely: (1) the degree of population uniformity; (2) the degree of the researcher's ability to recognize the special characteristics of the population; (3) the precision (accuracy) desired by the research. The sampling technique used in this research is a combination sampling technique. The combination sampling technique is a sampling technique of more than one type of sample technique, for example, at the same time, the researcher uses a proportional random sampling technique, so the mention of the sample technique is a random proportional sampling technique (Winarsunu, 2002).

The type of sample used in this study is cluster sampling or cluster random sampling, namely the selection of samples is done by choosing randomly with the provision that each member of the population is given the same opportunity to be selected as a member of the sample. Operationally, the steps taken by the researcher include two stages, namely the first stage, the researcher assigns or draws a school, and the next stage determines the respondent as a sample by drawing the class.

Based on the results of sampling with cluster random sampling, it can be determined 170 respondents as research samples and 30 respondents as research trials so that the total number of students

involved in this study were 200 students of class VIII SMP Negeri in the city of Sengkang. The details of the research data are based on the research

location/school, research time, and class along with the number of students.

Table 1. Details of Research Data for Class VIII State Junior High School Students in Sengkang City Academic Year 2020/2021

No	Name of	Class Class	Number of students
1	SMP N 14 Sengkang	VIII A	32
2	SMP N 14 Sengkang	VIII E	31
3	SMP N 14 Sengkang	VIII C	17
4	SMP N 14 Sengkang	VIII D	30
5	SMP N 16 Sengkang	VIII B	29
6	SMP N 8 Sengkang	VIII H	31

Data Collection Techniques

This study used two data collection techniques, namely tests and questionnaires. A test is a series of questions or exercises or other tools used to measure skills, knowledge, intelligence, abilities or talents possessed by individuals or groups. Questionnaires or questionnaires are a number of written questions that are used to obtain information from respondents in the sense of reports about their personalities, or things they know (Arikunto, 2019).

The test was used to obtain data on the observation report writing skills (Y) and critical thinking skills (X1), while the questionnaire was used to obtain data on reading motivation (X2). The test technique is by giving questions to the respondents to answer or work on, while the questionnaire technique, where respondents are given a number of statements and then asked to respond or respond. All of these data are quantitative in the form of scores or scores.

Research

Instruments Instruments or data collection tools are tools used to collect data in a study (Djali in Lubis, 2007). This study uses three types of data collected, namely data on writing skills of observation reports, data on critical thinking skills and data on reading motivation. Therefore, there are three instruments used to collect the data, namely:

1. Observation report writing

skills test This observation report writing skill test is a tool to measure students' skills, skills, attitudes, and knowledge in expressing ideas, ideas, experiences and problems with using written language media appropriately based on the process and stages of observation according to the facts in the field and the available evidence. The indicators assessed in the observation report writing skill test include: the content of the ideas presented, content organization, grammar, language style (choice of structure and vocabulary), and spelling and writing. The following table 2. Guidelines for scoring skills in writing observation reports are referred to (Nurgiyantoro, 2001):

No	Aspects Assessed	Weight	Level of Work Achievement				Score
			4	3	2	1	
1	Content of ideas put forward	30					
2	Organizational accuracy of content	25					
3	Completeness of Report Objects	20					
4	Style and governance language: choice of structure and vocabulary	15					
5	Spelling and grammar	10					
Quantity :							
Score :							

Description:

4 : very good (the idea content is very clear, the object of the report is very complete, the organization of the report content is very clear, the grammar including the structure and vocabulary chosen is very easy to understand / very communicative, spelling according to EYD and very neatly structured writing).

3 : good (the content of the idea is clear, the object of the report is complete, the organization of the contents of the report is clear, the grammar including the structure and vocabulary chosen is easy to understand/communicative, the spelling is according to EYD and the writing is structured neatly).

2 : enough (the content of the idea is not clear, the

object of the report is incomplete, the organization of the content of the report is not clear, the grammar including the structure and vocabulary chosen is not easy to understand/less communicative, the spelling is according to EYD and the writing is not structured neatly).

- 1 : lacking (unclear idea content, incomplete report object, unclear organization of report content, grammar including the structure and vocabulary chosen is not easy to understand/uncommunicative, spelling according to EYD and unstructured writing).

The scoring of each aspect assessed is given by multiplying the rubric and weight. The value is obtained by dividing the total score by 4, then a maximum value of 100 is obtained. For example, the aspect of "The content of the ideas put forward" has a weight of 30, the achievement of a student may be measured by different rubrics 4, 3, 2, and 1 depending on the quality of the ideas presented. submitted in the observation report. Likewise with other aspects. The maximum possible score is 100 (400/4) and the minimum score is 25 (100/4).

2. Critical Thinking Ability Test

Data on critical thinking ability was obtained by multiple choice test. The test items are obtained through the development of a grid of critical thinking indicators, while the indicators are developed through operational and conceptual definitions of critical thinking. The critical thinking ability test was developed from the following indicators: (1) draw conclusions by analogy, (2) draw conclusions using hypothetical syllogisms and groups, (3) draw logical relationships between problems, (4) identify implied statements, (5) avoiding misunderstandings due to lame analogies, (6) avoiding misunderstandings due to wrong causal relationships (causation), (7) drawing conclusions and similarities based on appropriate generalizations, (8) using appropriate, clear, and distinctive language, (9) assessing facts and evaluating statements, and (10) drawing conclusions based on evidence and relevant information.

3. Reading Motivation Questionnaire

Data on the habit of reading textbooks were obtained by using a reading motivation questionnaire. A person's reading motivation has two dimensions, namely self-concept as a reader and the value of reading which is characterized by several things, namely: (1) there is a sense of 'feeling' like reading, (2) has definite goals related to reading activities, (3) types of books or readings that are considered interesting, (4) favorite authors, (5) where and how to read, (6) frequency of reading, (7) conditions of reading facilities and materials, (8) reading time.

Trial of Research Instruments

Before being used to collect research data, research instruments in the form of tests (skills in writing observation reports and critical thinking skills) and questionnaires (reading motivation) need to be tested to determine the level of item validity and reliability. Reliability refers to the level of reliability of something. Reliability means being trustworthy, so it can be relied on (Arikunto, 2019). Meanwhile, according to Arikunto (2019), validity is a measure that shows the levels of validity or validity of an instrument. An instrument is said to be valid if it can reveal data from the variables studied appropriately.

For the observation report writing skill test (Y) using conceptual validity or construct validity and content validity, it cannot be done empirically or using statistics. Conceptual validity or construct validity is a theoretical validity test by looking at the indicators that become a measure of assessment in the skills of writing observation reports. Content validity relates to the ability of the assessment tool or instrument to measure the supposed content.

However, for the reliability test, the skill test for writing observation reports was carried out using statistical techniques, namely by using reliability ratings with the following formula:

$$r_{ir} = \frac{s_s^2 s_r^2}{s_s^2 + (k - 1)s_r^2}$$

Description:

r_{ir} : rating reliability coefficient of a rater

s_s^2 : variance between subjects, Mks

s_r^2 : residual variance, interaction variance of subject (s) and raters (t), namely Mks

k: number of raters

. To determine the validity of the research instrument, the critical thinking ability test used a biserial point correlation coefficient. The biserial point correlation formula is as follows:

$$r_{bis(i)} = \frac{\bar{X}_i - \bar{X}_t}{S_t} \sqrt{\frac{p_i}{q_i}}$$

Information

$r_{bis(i)}$: biserial correlation coefficient

$\bar{X}_i$: the average total score of respondents who answered correctly item question number i.

$\bar{X}_t$: the average total score of all respondents.

S_t : standard deviation of total score of all respondents

p_i : proportion of correct answers for item number i.

q_i : the proportion of incorrect answers for item number i (1 - p).

(Djaali, 2000)

Meanwhile, to determine the reliability of the critical thinking ability test, the KR-20 reliability formula is used as follows:

$$r_{ii} = k \left(\frac{k}{-1} \right) \left(1 - \frac{pq_i r_i}{S_{t^2}} \right)$$

Description:

r_{ii} : test reliability coefficient

k : chopped

S_{t^2} : variance of total score

p : proportion of respondents who answered correctly the 1st item

q : proportion of respondents who answered incorrectly (1-p)

(Djaali, 2000)

To determine the level of validity of the statement of reading motivation questionnaire items (X2), an internal consistency test was used to determine whether all items have measured the same thing and show the same tendency. The formula used for the internal consistency test is the Product Moment Correlation formula, that is, by correlating the item scores with the total score. The Product Moment Correlation formula used is as follows

$$r_{xixt} = \frac{N | N \sum (x_i x_t) - (\sum x_i)(\sum x_t) |}{\sqrt{[N \sum x_i^2 - (\sum x_i)^2] [N \sum x_t^2 - (\sum x_t)^2]}}$$

r

x_x : correlation coefficient between the item score of the statement and the total score sought.

N : number of test respondents

x_i : score of statement items for item i

x_t : total score

(Djaali, 2000)

To determine the level of reliability of reading motivation questionnaire statement items (X2), Cronbach's alpha formula is used as follows.

$$r_{11} = \left(\frac{k}{k-1} \right) \left(1 - \frac{is_t}{s_t} \right)$$

Description:

r_{11} : Reliability value

k : number of items

s_{score} : variance of total

s_i : the number of variance scores for each item

(Riduwan, 2004)

Statistical Hypothesis

To test the need for testing, the three hypotheses need to be transformed into statistical hypothesis formulations as follows:

1. First hypothesis

$$H_0: \rho_{y1} = 0$$

$$H_1: \rho_{y1} > 0$$

Information: ρ_{y1} (Correlation coefficient between X_1 and Y)

2. Second hypothesis

$$H_0: \rho_{y2} = 0$$

$$H_2: \rho_{y2} > 0$$

Information : ρ_{y2} (Correlation coefficient between X_2 and Y)

3. Third hypothesis

$$H_0: \rho_{y3} = 0$$

$$H_3: \rho_{y3} > 0$$

Information: ρ_{y3} (correlation coefficient between X_3 and Y)

Data Analysis Techniques Data

analysis is intended to test the hypothesis that has been proposed. Data analysis in this study includes descriptive data analysis and inferential data analysis. Descriptive data analysis includes a description of the central tendency and the spreading tendency, the arrangement of the frequency distribution of values and their histograms. Meanwhile, inferential data analysis is used for hypothesis testing purposes. Hypothesis testing includes testing hypothesis I and hypothesis II using a simple correlation technique, while hypothesis III uses a multiple correlation technique.

To test the hypothesis that has been proposed, it is necessary to test requirements analysis which includes normality test, significance test, and regression linearity. Two main steps are needed in the analysis of the research data, namely:

1. Prerequisite analysis tests, such as the normality test performed using the Lilliefors statistical technique and the significance and regression linearity test using the Anova technique.
2. Analysis of research data, which includes:
 - a. Descriptive analysis, includes a description of the central tendency and the spreading tendency, the preparation of the frequency distribution of values and their histograms.
 - b. Hypothesis testing, including testing hypotheses I and II, used a simple correlation-regression technique, while testing the third hypothesis used a multiple-correlation-regression technique. The simple and multiple regression equations to look for are as follows:

Simple linear regression in the form: bX_1 and bX_2

Multiple linear regression in the form: $b + b_1X_1 + b_2X_2$
 - c. To calculate the simple correlation coefficient, the following formula is used:

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

r

xy : correlation coefficient between score

X and score Y sought
 N : number of respondents
 Y : score of writing skill observation report
 X : score of critical thinking ability and reading motivation
 (Sudjana, 1992).

correlation coefficient, the following formula is used:

$$R_{y.12} = \frac{JK(Reg)}{y^2}$$

Information:

$R_{y.12}$: multiple correlation coefficient (together)

JK(Reg) : the number of Squares of Regression (Sudjana, 1992)

Meanwhile, to calculate the multiple

Result and Discuss

Data Description

1. Observation Report Writing Skills Data (Y) Observation

report writing skills data is the value obtained through the observation report writing skills test of

students/respondents who are the object of the research. This data has the highest score of 90 and the lowest score of 60. The mean (mean score) 75.07; variance 57.32; standard deviation 7.57; mode (most frequently occurring value) 70; and the median (middle value) is 74.38. These prices are calculated using Microsoft Excel software (see attachment 29). Details of the frequency distribution of this data can be seen in the following table:

Table 2. Frequency Distribution of Observation Report Writing Skill Scores (Y)

Interval	f _{absolut}	f _{relatif} (%)
60 – 64	13	7,65
65 – 69	23	13,53
70 – 74	49	28,82
75 – 79	32	18,82
80 – 84	33	19,41
85 – 89	16	9,41
90 – 94	4	2,35
total	170	100,00

2. Critical Thinking Ability Data (X₁)

This critical thinking ability data was obtained through a critical thinking ability test of students/respondents who were used as research objects. The test resulted in the highest score of 28 and the lowest score of 13. The mean (average value) was 20.65; variance 16.05;

standard deviation 4.01; mode (most frequently occurring value) 21; and median (middle value) 21. These prices were calculated using Microsoft Excel software (see Appendix 29). Details of the frequency distribution of this data can be seen in the following table.

Table 3. Frequency Distribution of Critical Thinking Ability Score (X₁)

Interval	f _{absolut}	f _{relatif} (%)
13 – 15	21	12,35
16 – 18	31	18,24
19 – 21	47	27,65
22 – 24	36	21,18

25 – 27	27	15,88
28 – 30	8	4,71
Jumlah	170	100,00

3. Reading Motivation (X₂)

This reading motivation data was obtained through a reading motivation questionnaire for students/respondents who were used as research objects. The test resulted in the highest score of 135 and the lowest score of 91. The mean (average value)

was 112.51; variance 133.39 ; standard deviation 11.55; mode (most frequently occurring value) 114; and the median (middle value) is 113. These prices are calculated using Microsoft Excel software. Details of the frequency distribution of this data can be seen in the following table.

Table 4. Frequency of Reading Motivation Values (X₂)

Interval	f _{absolut}	f _{relatif (%)}
90 – 95	15	12,35
96 – 111	58	18,24
112 – 117	43	27,65
118 – 123	24	21,18
124 – 129	16	15,88
130 – 135	14	4,71
Total	170	100,00

Requirements Analysis Test Results

The characteristics of the research data that have been collected will determine the analytical techniques that will be used in processing the data. Therefore, before inferential data analysis for the purpose of testing the hypothesis is carried out, the data needs to be tested first. The test carried out is the normality test of the data. The following is an explanation of the test results.

The normality test of the data was carried out using the Lilliefors technique with the help of Microsoft Excel software. The criteria for testing are to reject the null hypothesis that the population is normally distributed if L_o obtained is greater than L_t (Sudjana, 1992: 466-467). Testing the normality of the observation report writing skill data (Y) produces a maximum L_o of 0.0675. Calculation of the list of critical values L for Lilliefors test with $n = 170$ and significance level = 0.05 obtained $L_t = 0.0680$. Based on the comparison above, it appears that L_o is smaller than L_t , so the null hypothesis is accepted and it can be concluded that the observation report writing skill data (Y) comes from a normally distributed population.

Furthermore, normality testing of critical thinking ability data (X₁) produces a maximum L_o of 0.0650. Calculation of the list of critical values L for

Lilliefors test with $n = 170$ and significance level = 0.05 obtained $L_t = 0.0680$. Based on the comparison above, it appears that L_o is smaller than L_t , so the null hypothesis is accepted and it can be concluded that the critical thinking ability data (X₁) comes from a normally distributed population.

Meanwhile, the normality test of the reading motivation data (X₂) resulted in a maximum L_o of 0.0602. Calculation of the list of critical values L for Lilliefors test with $n = 170$ and significance level = 0.05 obtained $L_t = 0.0680$. Based on the comparison above, it appears that L_o is smaller than L_t , so the null hypothesis is accepted and it can be concluded that the reading motivation data (X₂) comes from a population that is normally distributed.

Hypothesis Test Results

Hypothesis testing is intended to determine whether the proposed null hypothesis (H_o) is rejected or vice versa at a certain level of confidence the alternative hypothesis (H_1) proposed is accepted. In accordance with the proposed hypothesis, the results of these tests can be presented as follows.

1. The Relationship between Critical Thinking Skills and Observation Report Writing Skills

The first hypothesis proposed in this study is "there is a positive relationship between critical thinking skills and observational report writing skills". Meanwhile, before testing hypothesis I, the significance and linearity simple regression test of Y over X1 was first performed. The results of simple linear regression analysis between critical thinking

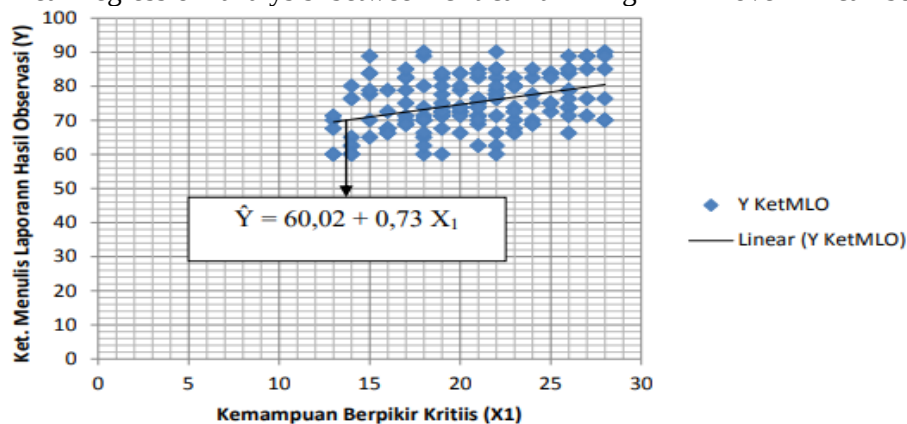


Figure 2. Scatter and Linear Y Linear Regression Diagram above X₁

Furthermore, to determine the significance (significance) and linearity of the simple regression equation between critical thinking abilities, the F test was carried out, the following is the explanation. The ANOVA table for the significance test and regression linearity = $60.02 + 0.73 X_1$ respectively produces Fo of 29.39 and 1.36 (see ANOVA table). Calculations from the distribution list F at the significance level = 0.05 with dk the numerator of 1 and dk the denominator of 168 for the null hypothesis (1) that the regression is not significant/meaningless, resulting in Ft = 3.922; and with dk in the numerator of 14 and dk in the denominator of 154 for the null hypothesis (2) that the regression is linear, we get Ft of 1.756. It appears that the null hypothesis (1) is rejected because Fo is greater than Ft. In conclusion, the regression direction coefficient is real, so from this point of view the regression obtained is significant (meaning). On the other hand, the null hypothesis (2) is accepted because Fo is smaller than Ft. So, the hypothesis which states that the Y regression on X1 is linear is acceptable.

Based on the explanation above, it is known that the simple linear regression analysis Y on X1 is significant and linear, so the next step is a simple correlation analysis to test hypothesis I. A simple correlation analysis between critical thinking skills and writing skills of observation reports obtained a correlation coefficient (ry1) of 0,39(see Appendix 34). Furthermore, to determine the significance of the correlation coefficient, a t-test was carried out. Based on the results of the tests that have been carried out, it shows that the strength of the relationship between

skills and writing observational report skills, obtained a regression direction of 0.73 at a constant of 60.02 (see Appendix 30). This results in the form of a regression line equation between critical thinking skills and observation report writing skills as follows: $= 60.02 + 0.73 X_1$. A simple regression image of Y over X1 can be seen in Figure below.

critical thinking skills and writing observational report skills is 5.42, which is greater than ttable of 1.645 (see Appendix 36). Based on the results of the analysis, it can be said that there is a significant positive relationship between critical thinking skills and observational report writing skills. Therefore, it can be concluded that the null hypothesis (Ho) which reads "there is no relationship between critical thinking skills and writing observational report skills" is rejected. On the other hand, the alternative hypothesis (H1) which reads "there is a positive relationship between critical thinking skills and writing observational report skills" is accepted. The determinant coefficient of critical thinking skills with the skill of writing observation reports is 0.1521. This means that about 15.21% of the variance in writing observational report skills can be explained by critical thinking skills. So, it can be said that the ability to think critically contributes (contribution) to the skill of writing an observation report by 15.21%.

2. The Relationship between Reading Motivation and Observation Report Writing Skills

The second hypothesis proposed in this study is "there is a positive relationship between reading motivation and observational report writing skills". Meanwhile, before testing the second hypothesis, the significance and linearity simple regression test of Y over X2 was first performed. Simple linear regression analysis between reading motivation and observation report writing skills, obtained a regression direction of 0.10 at a constant of 63.88 (see Appendix 31). This results in the form of a regression line equation between reading motivation and writing skill of the observation report as follows: $= 63.88 + 0.10 X_2$. The

simple regression image of Y over X₂ can be seen in

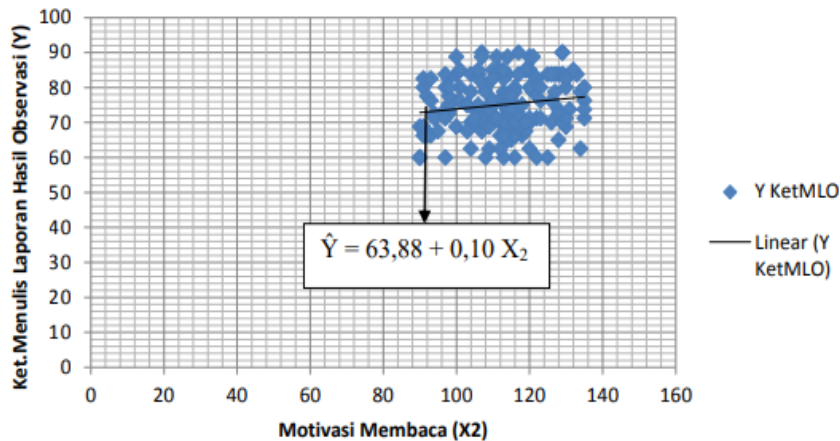


Fig. below this.

Figure 3. Scatter and Linear Y Linear Regression Diagram above atas X₂

Furthermore, to determine the significance (significance) and linearity of the simple regression equation between reading motivation and writing skills, the F test was carried out, the following is the explanation. The ANOVA table for the significance test and regression linearity = $63.88 + 0.10X_2$ yielded Fo of 3.96 and 1.07, respectively (see ANOVA table). Based on calculations from the F distribution list at the significance level = 0.05 with dk in the numerator of 1 and dk in the denominator of 68 for the null hypothesis (1) that the regression is not significant/meaningless, resulting in Ft = 3.922; and with dk in the numerator of 41 and dk in the denominator of 127 for the null hypothesis (2) that the regression is linear, we get Ft of 1.4844. It appears that the null hypothesis (1) is rejected because Fo is greater than Ft. In conclusion, the regression direction coefficient is real, so from this point of view the regression obtained is significant (meaning). On the other hand, the null hypothesis (2) is accepted because Fo is smaller than Ft. So, the hypothesis which states that the Y regression on X₂ is linear is acceptable.

Based on the explanation above, it is known that the simple linear regression analysis of Y over X₂ is significant and linear, so the next step is a simple correlation analysis to test hypothesis II. Simple correlation analysis between reading motivation and writing skills of observation reports obtained a correlation coefficient (ry₂) of 0.15 (see Appendix 35). Furthermore, to determine the significance of the correlation coefficient, a t-test was performed. Based on the results of the tests that have been carried out, it shows that the strength of the relationship between reading motivation and writing skills of observation reports is 1.99 which is greater than ttable of 1.645. Based on the results of the analysis, it can be said that there is a significant positive relationship between reading motivation and writing observational report

skills, so it can be concluded that the null hypothesis (Ho) which reads "there is no relationship between reading motivation and observation report writing skills" is rejected. On the other hand, the alternative hypothesis (H1) which reads "there is a positive relationship between reading motivation and writing skill in writing an observation report" is accepted. The determinant coefficient of reading motivation and writing skill of observation report is 0.0225. This means that about 2.25% of the variance in writing observational report skills can be explained by reading motivation. So, it can be concluded that reading motivation contributes (donations) to the skill of writing observation reports by 2.25%.

3. The Relationship between Critical Thinking Ability and Motivation to Read Together with Observation Report Writing Skills

The third hypothesis proposed in this study is "there is a positive relationship between critical thinking skills and reading motivation together with writing observational report skills". Before testing the third hypothesis, what must be done first is to test the significance and linearity of multiple regression. Multiple linear regression analysis between critical thinking ability and reading motivation together with observation report writing skills resulted in the direction of the regression coefficient b₁ of 0.71; b₂ of 0.08; and constant b₀ of 51.41 (see Appendix 38). This results in the form of a regression line equation between critical thinking skills and reading motivation together with the following observational report writing skills: $= 51.41 + 0.71X_1 + 0.08X_2$. To determine the degree of significance of the multiple linear regression equation between critical thinking skills and reading motivation together with writing observational report skills, it is necessary to do the F test.

Based on attachment 16, it is known that the Fo test results are 16.50 which is greater than Ftable with

dk in the numerator of 2 and dk in the denominator of 167 at $\alpha = 0.05$ at 3.0532 so that it can be concluded that the linear regression equation between critical thinking skills and motivation to read together -same as the observation report writing skill is significant (mean). Furthermore, from the results of the multiple correlation analysis between critical thinking skills and reading motivation together with observation report writing skills, the correlation ($R_{y.12}$) is 0.41. Furthermore, to determine the significance of the multiple correlation coefficient, it is necessary to carry out the F test. Based on the test results, it is obtained that F_o is 16.50 which is greater than F_{table} with dk in the numerator of 2 and dk in the denominator of 167 at the real level $\alpha = 0.05$, which is 3.0532. Therefore, it can be concluded that there is a significant positive relationship between critical thinking skills and reading motivation together with observation report writing skills (H_o is accepted). The determinant coefficient of critical thinking ability and reading motivation together with the skill of writing observation reports is 0.1681. This means that about 16.81% of the variance in writing observational report skills can be explained by critical thinking skills and reading motivation together. So, it can be said that the ability to think critically and motivation to read together contributes (contribution) to the skill of writing an observation report by 16.81%.

Research Limitations

The implementation of this research has been attempted to be maximally prepared by using scientific methods and referring to standard research procedures. The results of this study have proven that critical thinking skills and reading motivation have a relationship or correlation with writing observational report skills. The important finding of this research is that the skill of writing a person's observation report is influenced by several aspects, namely the ability to think critically and motivation to read. However, it is not the other way around that the skill of writing an observation report has an effect on a person's critical thinking ability and reading motivation. There needs to be research and regression tests to prove it.

The results of this study can be generalized in general. However, due to the limitations of the researcher's ability (both theory and use of methods), it is possible that there will be errors or mistakes in the results of this study, resulting in this study having several limitations related to the generalization of research conclusions that can only be used for populations that have criteria and the same characteristics as the study population. In order to obtain more comprehensive results and fulfill generalizations, the sample size and population area

need to be expanded, so it is hoped that more information will be obtained regarding the skills of writing observation reports.

There are three instruments used to obtain data in this study. The three instruments are self-made instruments, although in their manufacture they have been adjusted to the indicators of each variable, it is possible that the three instruments still have shortcomings and weaknesses. This can happen because these instruments have only been tested once, in addition to the limited knowledge and abilities of the researchers, it can result in not measuring all variable indicators evenly, so that when compared to instruments that have been standardized, the instruments in this study are still far from perfect. The research conducted by the researcher is included in the category of survey research, in this research the data collection process uses test instruments and questionnaires. The test instrument was used to collect data on critical thinking skills and reading motivation. The questionnaire instrument was used to collect data on reading motivation. The three instruments were given to the respondent without any conditions or sanctions, so there was a possibility that the respondent was dishonest in the process. What may happen is that the respondent sees the work of other respondents or sees a notebook, this can be done when working on the variable instrument of critical thinking ability and writing skill of observation reports. Unlike the case with fraud that occurred when working on reading motivational instruments, many respondents were dishonest and tended to choose alternative answers that were "fine" to the statement items provided, because respondents might feel embarrassed if they answered according to the capacity of the situation. the real respondent. To overcome this, researchers have taken action during the research to urge respondents to answer honestly to each question or statement provided and researchers have made efforts so that when taking research data, respondents do not cheat by providing strict supervision..

Conclusion

Based on the results of data analysis and hypothesis testing that have been described previously, it can be concluded that the research results (1) There is a significant relationship between critical thinking skills and observation report writing skills, (2) There is a significant relationship between reading motivation and observation report writing skills and (3) There is a significant relationship between critical thinking skills and reading motivation together with writing observational report skills. School managers should increase their participation and attention to learning Indonesian. This could be done by improving library

management and wall magazine management. Efforts to improve library management can be done by improving services and adding library collections, thus making the library a comfortable place to study and read for students, so that students' reading motivation can increase. With the increase in reading motivation, students are expected to have broad knowledge so that they can support critical thinking skills. Furthermore, if the students' critical thinking skills are good, the observation report writing skills are also good.

In connection with the positive relationship in this study, teachers should be able to develop learning in schools using the principles of cognitive learning theory in order to help students get used to critical thinking. Teachers are also expected to be able to create opportunities in each lesson so that students are provoked to think critically, one way is to teach thinking, which is one of the most effective ways to help students feel smart and the results can increase their motivation to learn. They will automatically get used to including evidence for their conclusions. This is very influential on the skills of writing an observation report, students will report based on what is reported with the inclusion of evidence and facts in the field. Indirectly honest and wise attitude cannot be separated from the critical thinking process. Other researchers can use this study as a reference material and for those who are interested in this field of study, it is recommended to conduct similar studies with a larger population (expanding the research area). So that other aspects that are suspected to have a significant contribution or contribution to the skills of writing observation reports can be detected as a whole.

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