

## THE CORRELATION BETWEEN STUDENTS' LEARNING STRATEGIES AND THEIR ENGLISH READING ACHIEVEMENT <br> TEST SCORES

(The Case of the Eighth Graders of MTS N 1 Semarang in the Academic Year of 2009 / 2010)


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## THE CORRELATION BETWEEN

## STUDENTS' LEARNING STRATEGIES AND THEIR

ENGLISH READING ACHIEVEMENT TEST SCORES (THE
CASE OF THE EIGHTH GRADERS OF MTS N 1 SEMARANG IN THE ACADEMIC YEAR OF 2009 / 2010)
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Semarang, Februari 2010
Yang membuat pernyataan

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"GIVE THANKS FOR WHAT YOU ARE NOW AND KEEP FIGHTING FOR WHAT YOU WANT TO BE TOMORROW" (Fernanda Miramontes-Landeros) PERPUSTATo My beloved mother (Rini Absari)

My beloved father (Suwarto)


#### Abstract

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This study is a quantitative study. Thus, the problem of this study is whether or not there is a significant correlation between students'learning strategies and their English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year of 2009/2010. It used questionnaire and test to collect the data. The sample was the eighth graders of MTS N 1 Semarang year 2009/2010 that consisted of 30 students. The sample was taken by using cluster sampling technique. It was chosen based on the level of students' groups. Then, the correlation of the data was calculated by using Pearson Product Moment Formula.

The hypothesis can be formulated that there is a significant correlation between leaning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year 2009/2010, while the null hypothesis is that there is no correlation between learning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year 2009/2010.

Using Pearson Product Moment Formula, it was revealed that the coefficient correlation was 0.062 . On the other hand, the critical value of $5 \%$ of significance level with ( N ) is 30 is 0.361 . It means that the coefficient correlation was lower than the critical value. So, there is no correlation between learning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year 2009/2010.

The finding shows that there is no correlation between students' learning strategies and their English reading achievement test scores. It is possibly caused by other strategies that are used by students in learning. The other possible cause is there are other factors that affect their achievement test scores.

It is also suggested that students should be aware of their duty as students. They have to learn and should have strategies in their learning. They also should know what factors that affect their achievement test scores, so they can be successful learners and get the best scores in the achievement test.


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## CHAPTER I

## INTRODUCTION

### 1.1 General Background of the Study

Language is needed in our life. It is acquired by all people in the world. It has many functions. One of them is as a means of communication. Many experts give their opinions about language. According to Hornby (1995:662) language is the system of sounds and words used by humans to express their thoughts and feelings. Wardraugh (1992:1) states that language is also what the members of particular society speak. Brown (2000:5) says that it operates in speech community and culture. From all above, we can conclude that we need language for communication. All people in this world communicate each other with languages.

There are many languages in this world. One of the international languages is English. Brumfit (1988:2) states that English is an international language in that it is the widest spread medium of international communication, both because of a number and geographical spread of its native speakers and because of a large number of non native speakers who use it.

English as an International language is important to be taught in school. It is taught at schools from fourth grades of elementary school through the twelfth grades of senior high school, sometimes, it is also
taught in some semesters at universities.
As we know, the goals of teaching English at junior high school are different from those of senior high school in their depth and broadness of the materials, so are the goals of teaching English at universities. They, however, share the same general objective, such as: their graduate are supposed to be able to use the language well, spoken and written (Soejono, 1990:63).

Learning a foreign language, especially learning English is difficult. Lado (1961:13) argues that learning a foreign language is a matter of habit and transfer. A foreign language learner transfers the habit of his native language to foreign language and this happens without his awareness.

Learning a second language is a long and complex undertaking and your whole person is affected as you struggle to reach beyond the confines of your first language and into a new language, a new culture, a new way of thinking, feeling, and acting. Total commitment, involvement, physical, intellectual, and emotional responses are necessary to successfully send and receive messages in a second language (Brown, 2000:1).

The students have different problems in learning and have different ways in learning to achieve their goals. Learning strategies are needed to solve their problems.

Ellis (2003:77) states that learners employ learning strategies when they are faced with some problems, such as: how to remember new words.

Learning strategies are different from learning styles. Learning styles according to Brown (2000:122) are general characteristics that differentiate one individual from another; strategies are those specific attacks that we make on a given problem. They are the moment by moment techniques that we employ to solve the problems posed by second language input and output.

Learning strategies are divided into three categories. They are cognitive strategies, metacognitive strategies, and socioaffective strategies.

O'Malley gives statements that were quoted by Brown (2000:125).
Metacognitive is a term used in information processing theory to indicate an executive function, strategies that involve planning for learning, thinking about the
learning process as it is taking place, monitoring of
one's production or comprehension and evaluating
learning after an activity is completed. Cognitive strategies are more limited to specific learning tasks and involve more direct manipulation of the material itself. Socioaffective strategies have to do with social mediating activity and interacting with others.

The above quotation implies that metacognitive strategies are about planning and evaluating learning and cognitive strategies are about the ability of brain to learn something. Then, socioaffective strategies are about students' interaction with others.

To know whether the students have achieved their goals of learning, then teacher needs achievement test. This achievement test is held at the end of the study.

According to Heaton (1974: xi) the achievement tests are generally used to refer to more formal tests which have been designed to show
mastery of a particular syllabus, such as: final test, school leaving examinations, and public tests. These tests are generally based on a syllabus and measure what has been taught and has been learned. They are rarely constructed by the classroom teacher for a particular class and they are designed primarily to measure individual performance rather than to act as a means of motivating the students or reinforcing learning. The score of this achievement test can show whether the students have succeeded in learning.

### 1.2 Reason for Choosing the Topic

Learning second language is difficult, especially in learning English. Sometimes, students have problems in learning English. Because of it, students use some strategies in learning English. They use these strategies to solve their learning problem. On the other hand, some students also use it to increase their English achievement test scores. From their scores, the students will know whether they have been successful learners.

In this final project, the writer chooses this topic to know whether there is a correlation between students' learning strategies and their scores in English reading achievement test. Then, from the result of the correlation analysis, it will be known whether or not learning strategies are related to their achievement test scores and whether or not learning strategies are important in learning English.

### 1.3 Statements of the Problem

In this final project, the writer intends to limit the discussion by presenting the following problem:

Is there any significant correlation between learning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year of 2009 /2010?

### 1.4 Objectives of the Study

This final project has objective as follow:
To find out whether or not there is a significant correlation between learning strategies and English reading achievement test scores of the 2 2010.

### 1.5 Statements of the Hypothesis

Based on the above statement of the problem, the writer hypothesizes that PERPUSTAKAAN
"There is a significant correlation between learning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year 2009 / 2010.

However, since the way of testing the hypothesis is conducted using statistics, the above statement is changed into the following null hypothesis (Ho):" There is no correlation between learning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang in the academic year 2009 / 2010.

### 1.6 Significance of the Study

The writer hopes this research can give some contributions:
For teachers:
(1) The result of study is expected to become an evaluation for English teaching learning process and gives some contribution to the improvement of it.
(2) It is to give information to teachers about their students' learning strategies.
(3) It also informs teachers how they can apply their students' learning strategies in the classroom.
(4) Then, it is to give information to teachers how they can help their - students to be successful learners.

For students:
(1) The result of the study is expected to encourage students to use appropriate learning strategies.
(2) It is also expected to encourage students to study harder than before.
(3) Then, it is expected to advise students to become more independent learners.
(4) It helps the students to become better language learners.

Besides, it is also to inform the readers about the correlation between the learning strategies and English achievement test scores.

### 1.7 Outline of the Report

Chapter I presents introduction, which contains general background of the study, reason for choosing the topic, statements of the problem, objectives of the study, significance of the study, statements of the hypothesis, and outline of the report.

Chapter II is a review of related literature. It reveals some ideas and opinions related to the topic. It consists of learning, learning strategies, the kinds of learning strategies, cognitive strategies, metacognitive strategies, social and affective strategies, achievement test, achievement test scores, and the relationship between learning strategies and achievement test scores.

Chapter III deals with method of research, which concerns with population, sample, variable, instruments, the procedure of collecting data, and method of analyzing data.

Chapter IV is the findings and discussion, which consists of the data analysis and the correlation analysis.

The last chapter is conclusions and suggestions. It concludes and gives suggestions to the reader based on the research findings.

## CHAPTER II <br> REVIEW OF RELATED LITERATURE

This chapter presents about the theory of this study which becomes the theoretical background of this study. Review of previous study and the theoretical framework are also presented in this chapter.

### 2.1 Review of Previous Studies

There are many researches on learning strategies. One of them is a study of learning strategies in foreign language instruction which has conducted by Chamot (1987). His study is the description of identification of the range and characteristics of learning strategies used in studying foreign language. This research is on high school and college students. The result of this study is that the students at all levels of instructions use predominantly cognitive strategies supported by metacognitive strategies.

Then, Warr (2000) conducted a research about learning strategies, learning anxiety, and knowledge acquisition. This research is on adult learners. From this research, it was found that four reported learning strategies were negative significantly associated with learning gain.

Griffiths (2004) wrote a book about learning strategies theory and research. It is about the development of learning strategies theory and how it fits into the framework of contemporary language teaching and learning for students who speak other languages.

Besides, Magogwe (2007) also conducted a research about the relationship between language learning strategies, proficiency, age, and self-eficacy beliefs. It is a study of language learners in Botswana. Lai (2009) also conducted a similar research. It is about language learning strategy use and English proficiency of university freshmen in Taiwan. Those researches are on college students. Both of them give the similar result that there is a dynamic relationship between use of language learning strategies and proficiency.

From the researches above, it can be known that there is no research about learning strategies which took junior high school students as samples and its relationship to achievement test scores, so this research is conducted to know the correlation between learning strategies and achievement test scores. Then, this research took the eighth/graders of MTS N 1 Semarang in the academic year 2009/2010 as samples.

### 2.2 Theoretical Background

### 2.2.1 Learning

There are a lot of definitions of learning. They can be found in many books, but those definitions have the some guidelines. Sudjana (1989:22) states that learning is a process indicated by people's change. The change is the result of the learning process which can be seen in the gained knowledge, comprehension, attitude, behavior, skill, habit and other aspects stated in the individuals who want to learn.

Besides, Kimble and Garmezy (2001:6) also define learning as a relatively permanent change in a behavioral tendency and is the result of reinforced practice. Another definition of learning which is stated by Estes (1975:9) is some systematic change behavior or behavioral disposition that occurs as a sequence of experience in some specified situations.

Furthermore, learning begins at birth and ends at death. People learn under a wide range of conditions and circumstances. We learn more and less continuously everywhere. There are some kinds of learning, such as language learning. There is a lot of language in this world, especially English. Before we learn about English we have to know what language learning is.


It means that language learning is an integrated and long process. Sometimes, mistakes appear in language learning process and it is normal for language learners. Besides, language learners must be active in teaching learning process so the goal of learning can be achieved.

There are many principles in language learning. According to Brown (2004:20) many principles of language learning are cognitive, affective, and linguistic principles. These principles are important, so students can learn language correctly.

### 2.2.2 Learning Strategies

Learning is not separated from learning strategies. It is used to achieve the goals of learning. Oxford quoted by Celce-Murcia (2001:359) states that learning strategies are defined as specific actions, behaviors, steps, or techniques such as seeking out conversation partners or giving oneself encouragement to tackle a difficult language task which is used by students to enhance their own learning.

According to Weinstein and Mayer (1990:43) learning strategies are the behaviors and thoughts that a learner engages in during learning that are intended to influence the learner's encoding process. They have learning facilitation as a goal and are intentional on the part of learner. The goal of strategy is to affect the learners' motivational or affective state, or the way, in which the learner selects, acquires, organizes, or integrates new knowledge.

Besides, the learning strategies are used to make learning easier so the learner can understand the subject easily. It is based on the O' Malley and Chamot (1990:42) statements.

Learning strategies are specific actions taken by the learner to make learning easier, faster, more enjoyable, more self -
directed, more effective and more transferable to new situations. In dealing with learning materials and demands during language use, learners will engage in systematic mental steps to process the language in order to entrance production, comprehension, learning or retention.

Learning strategies are also used by learners when they face some problems in learning. It is according to Ellis statements (2003:77).

Learning strategies are the particular approaches or techniques that learners employ to try to learn a second language. They can be behavioral or they can be mental. They are faced with some problems; such as how to remember new word learners are generally aware of the strategies they use and when asked can explain what they did to try to learn something.

It means that students use strategies when they face many problems. For example, when they have many difficulties in remembering new words, they use a strategy to make it easier for them.

### 2.2.3 Kinds of Learning Strategies

According to O'Malley and Chamot (1990:151) learning strategies are divided into direct strategies, which involve mental processing of the target language and indirect strategies, which support learning through focusing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy and other means. Indirect strategies are subdivided into three categories: metacognitive, social, and affective.

It is similar with the statement of O' Malley and Chamot that was quoted by Richard-Amato (2003:84). They proposed a more detailed schema based on three major categories:

### 2.2.3.1 Cognitive Strategies

O'Malley and Chamot (1990:136) says that cognitive strategies are operations carried out directly on the material to be learnt. Brown (2000:124) says that cognitive strategies are more limited to specific learning tasks and more direct manipulation of the learning material itself.

According to Ellaine and Christines, (2004:188) cognitive strategies operate directly on incoming information and enable learners to process texts and materials for learning. This can be done by manipulating the information mentally or physically. Examples of cognitive strategies are visualize the information, use background knowledge to make inferences, draw concept maps to group items to be learnt, and make notes about important information to be remembered.

- Celce-Murcia (2001:363) also states that cognitive strategies enable the learner to manipulate the language material in direct ways, through reasoning, analyzing, note taking, summarizing, synthesizing, outlining, reorganizing information to develop stronger schema, practicing in naturalistic setting, and practicing structures and sounds formally.


### 2.2.3.2 Metacognitive Strategies

According to Ellaine and Christine (2004:188) metacognitive strategies are mental processes for managing thinking and learning. O'Malley and Chamot (1990:134) states that they have four important functions. They are thinking about the learning process, planning for learning, monitoring the learning task, and evaluating how well one has learnt.

They describe mental operations used by learners in the self management of their learning. O' Malley and Chamot (1990:138) organize these into seven major groups: planning, directed attention, selective attention, self management, self monitoring, problem identification and self evaluation.

Celce-Murcia (2001:364) also states that metacognitive strategies are identifying one's own learning style preference and needs, planning for second language tasks, gathering and organizing materials, arranging schedule, monitoring mistakes, evaluating the success of any type of learning strategies are employed for managing the learning success overall.

### 2.2.3.3 Social and Affective Strategies

According to Ellaine and Christine (2004:188), social strategies are learner initiated actions to engage another person's help and cooperation. Affective strategies are behaviors or thoughts for coping with one's emotions so as to ensure the successful completion of a learning or communicative task.

According to Benson (2001:82) social and affective strategies describe actions taken by the learner to control aspects of the learning situation related to others and to self. They are also related to the learner's attitude towards language as an object of learning. Brown (2000:124) also states that social and affective strategies have to do with social mediating activity and interacting with others.

### 2.2.4 Achievement Test

There are two forms of test which differ according to their purpose. One of them is achievement test. According to McNamara (2000:131), the achievement test is a test which aim to establish what has been learned in a course of instruction.

Davies (1977:45) also states that achievement tests are concerned with assessing what has been learned of a known syllabus. This may be within a school or within a total educational system.

Besides, Gronlund (1982:1) also gives a statement about the achievement test. An achievement test is a systematic procedure for determining the amount a student has learned so the writer can conclude that the achievement test is associated with what has been learned. It is given at the end of study in order to see whether and where progress has been made in terms of the goals of learning, it has to relate to the curriculum and has constructive relationship with teaching and learning process.

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Although, according to Gronlund (1982:1) the emphasis of an achievement test is on measuring learning outcomes, it should not be implied that testing is to be done only at the end of instruction. All too frequently, achievement testing is viewed as an end of unit or end of course activity that is used primarily for assigning course grades.

A good achievement test is needed to achieve the goal of the achievement test. There are many criteria to be a good achievement test. Gronlund (1982:1) states as follows:

Achievement tests should support and reinforce other aspects of the instructional process. They can aid both the teacher and students to assessing learning outcomes...monitoring learning progress...diagnosing learning difficulties...and evaluating learning outcomes....

This implies that achievement tests can aid students and teachers to assess and evaluate learning outcomes. Achievement tests also help students and teachers to monitor learning progress and diagnose learning difficulties. Besides, achievement tests are also as a proponent of other aspects of the instructional process.

### 2.2.5 Achievement Test Scores

The achievement test score should show the result of teaching learning process because achievement test relates to the past in that they measure what language the students have learned as a result of teaching learning process. Achievement test score can show what the learners have achieved the goals of learning. If the learners have achieved the goals of learning, they can be successful learners. The frequency of score shows the frequency of goals that has been achieved by the learners. So, it can be concluded that the achievement test score shows who successful learners are.

### 2.2.6 The Relationship between Learning Strategies and

## Achievement Test Scores

Because achievement test scores show the result of study, so students have
to have a strategy in their learning process. Learning strategies are used by students to be successful learners. Because successful learners get the high scores of achievement test, so students use learning strategies to get the high score.

It means that students that have the high scores show that their strategies are appropriate and effective to be used. The scores can show which learning strategies are appropriate to the students.

### 2.3 Theoretical Framework

There are many studies on learning strategies which are conducted by language researchers, but there is no research about learning strategies which are used by eighth graders of junior high school, especially on MTS N 1 Semarang in the academic year 2009/2010 and their relation to students' achievement test scores. Then, this research is conducted to complete it.

Every student has to get high score in achievement test. It will be got in several ways. One of them is by learning. In learning, students have to have strategies so they can be successful learners. According to Willis (2004:10) different types of learners adopt different strategies for learning successfully. Good learners tend to have more strategies than weak ones, and they use them more regularly.

According to Richard-Amato (2003:83) learning strategies usually are applied spontaneously and they often come to the individual naturally as
the situations demands. However, frequently there are times when such strategies are applied methodically after having been learned from others.

There are many learning strategies. In this research, there is an explanation about them. They are cognitive, metacognitive, social, and affective strategies. According to Willis (2004:9) adults usually learn faster than children because they use both cognitive and metacognitive strategies. Children have better memories and rely less on cognitive strategies.

A learning strategy is neither good nor bad. It depends on how students used each learning strategy. According to Celce-Murcia (2001:362) a strategy is useful if the following conditions are presents: (a) the strategy relates well to the second language task at hand, (b) the strategy fits the particular student's learning style preferences to one degree or another, (c) the student employs the strategy effectively and links it with other relevant strategies.

It can indicate that students have to apply learning strategies and also look at those three criteria. Their learning strategies will possibly help them to increase their achievement test scores. Although, their achievement test scores do not depend on their learning strategies but their strategies have the role in determining their achievement test scores.

## CHAPTER III

## METHODS OF INVESTIGATION

This chapter deals with the methods in conducting the research. It presents research design, population, sample, instruments, procedure of collecting data, and method of analyzing data. It also presents the reliability and the validity of instruments.

### 3.1 Research Design

On the basis of the nature of the data being analyzed, scientific research is categorized into two. They are qualitative and quantitative research. Qualitative research is one which collects some type of non numerical data to answer a research question. On the other hand, quantitative research is research carried out by collecting numerical data from sample drawn from a certain population. Based on these statements, this study constitutes a quantitative research.

As the topic indicates, the primary aim of this study is to reveal the correlation between students' learning strategies and their English reading achievement test scores. This study seeks to identify the possible relationship between the two variables. So, this study is called a correlation research.

Gall and Borg (2003:320) state that correlation research refers to studies in which the purpose is to discover relationship between variables through the use of correlational statistics. They further explain that the basic design of correlational research is collecting data on two or more variables for each individual in a sample and computing a correlational coefficient.

A positive correlation indicates that the variables vary together in the same direction, so increases in one variable are equivalent with the other. It means that a generally consistent proportional relationship exists. On the other hand, a negative correlation indicates that the increases in one measure are accompanied with the decreases the other.

### 3.2 Population

Quantitative researchers attempt to discover something about a large group of individuals by studying a much smaller group. The larger group that they wish to learn about is called population and the smaller group they actually study is called sample (Gall and Borg, 2003:167).

Tuckman quoted by Saleh (2005:227) also states that population is group about which the researcher is interested in gaining information and drawing conclusion.

Based on the definition above, the population of this study was the eighth graders of MTS N 1 Semarang in the academic year of 2009/2010. The total number of population was 312 students divided into 8 classes. Each class consists of 38 to 40 students.

### 3.3 Sample

Tuckman quoted by Saleh (2005:226) says that sample is representative group from the population to serve as respondents. One way to insure that this sample will be representative of the larger population is to draw a sampling. According to Gall and Borg ( 2003:167) Sampling refers to the process of selecting a sample from a defined population with the intent that the sample accurately represents that population.

There are five sampling technique in quantitative research such as: simple random sampling, stratified sampling, cluster sampling, and convenience sampling.

- Besides using sampling technique, there are three factors in determining an optimal sample size for a quantitative research study. They are subgroup analysis, attrition, and reliability of the measures. Gall and Borg (2003:176) points out that in correlation research, a minimum 30 participants is desirable.

Based on the statement above, 30 students were taken as participants. Then, by using cluster sampling technique, V.III A was chosen as a sample. It was chosen based on the level of students' groups.

This study used cluster sampling technique because it was more feasible to select groups of individuals from defined population. Gall and Borg (2003:174) state that the unit of sampling in cluster of sampling is a naturally occurring group of individuals.

### 3.4 Variable

According to Brown that is quoted by Saleh (2005:7) variable is something that may vary or differ. There are five variables. They are dependent variables, independent variable, moderator variable, control variable and intervening variable.

This study has two variables. They are dependent variable and dependent variable. The independent variable is students' learning strategies and the dependent variable is students' English reading achievement test scores. For the independent variable, the data was obtained from the result of the learning strategies questionnaires. Meanwhile, for the dependent variable, the data was obtained from the result of achievement test.

### 3.5 Instruments

The data for this study were collected using two instruments. They are questionnaire and achievement test. The following presents the description of these instruments.

### 3.5.1 Questionnaire

According to Gall and Borg (2003:222) questionnaires are documents that ask the same questions of all individuals in the sample. Respondents record a written or typed response to each questionnaire item. Also, the respondents typically control the data collection process. They
can fill out the questionnaire at their convenience, answer the item in vary order, take more than one sitting to complete it, make marginal comments or skip questions.

This study used closed questionnaire to measure the students learning strategies. The questionnaire consists of 20 statements which are developed from 4 indicators. The characteristics of measurement are related to cognitive strategies, metacognitive strategies, social and affective strategies. Each item is followed by four closed options. They are selalu (always), sering (often), kadang-kadang (frequently), and tidak pernah (never).

To find out the scores of the students' learning strategies, score 3 was given to the answer of selalu and score 0 was given to the answer of tidak pernah. The questionnaire is presented as follows:

Table 1
The questionnaire for obtaining the data on students' learning strategies

| No. | Indicators | Number | Total |
| :---: | :--- | :--- | :---: |
| 1 | Cognitive strategy | $9,10,11,12,13,14,15,16,17$ | 9 |
| 2 | Metacognitive strategy | $1,2,3,4,5,6,7$ | 7 |
| 3 | Social strategy | $18,19,20$ | 3 |
| 4 | Affective strategy | 8 | 1 |
|  |  |  | 20 |

### 3.5.1.1 Validity of the Questionnaire

According to Eichelberger (1989:117) validity addresses the extent to which a measurement process measures what a researcher wants it to measure. This characteristic of a measurement process is not inherent in the process, as is reliability, but depends on the purpose of a researcher have for the data and the way of the data are used.

This study used classical pure theory formula. The formula is as follows:


### 3.5.1.2 Reliability of the Questionnaire

Eichelberger (1989:119) mentions some statements about reliability as follows:

Researchers have learned how to develop instruments and procedures in ways that maximize reliability. When most educators think about the reliability of a measure they usually think about the stability of produced over time by that measure. When quantitative data are data produced, mathematical indexes can be used to estimate the reliability of the measurement processes.

Therefore, reliability is the steadiness of the test. It means that students will have the similar result in the same test. Scores of students will be relatively same although students do the same test many times.

This study used variance analysis technique. The formula is as follows:

$$
r
$$

$$
r_{x x}^{1}=1-S e^{2} / S s^{2}
$$

$r_{x x}{ }^{1}=$ reliability coefficient
Se = error variance
Ss = cross subject variance
using formula:
(Azwar, 2006:93)

To make it easy, the computation of error variance can be done

$$
s_{e} 2=\frac{\sum i-\left(\sum X^{2}\right) / k-\left(\sum \overline{Y^{2}}\right) / n+\left(\sum i\right)^{2} / n k}{(n-1)(k-1)}
$$

$i=$ the score of a subject on an item
$\mathrm{X}=$ the total score a subject on all items
$Y=$ the total score all subjects on an item
$\mathrm{k}=$ the number of item
$\mathrm{n}=$ the total number of subject
(Azwar, 2006:93)

While the computation to the cross subject variance can be done using formula:

$$
s_{s} 2=\frac{\left(\sum X^{2}\right) / k-\left(\sum i\right)^{2} / n k}{n-1}
$$

$i=$ the score of a subject on an item
$\mathrm{X}=$ the total score a subject on all items
$\mathrm{k}=$ the number of item
$\mathrm{n}=$ the total number of subject

### 3.5.2 Achievement Test

Gronlund (1982:1) states that:
An achievement test is a systematic procedure for determining the amount a students has learned. Although, the emphasis is on measuring learning outcomes, it should not be implied that testing is to be done only at the end of instruction. All too frequently, achievement testing is viewed as an end of unit or end of course activity that is used primarily for assigning course grades. Although, this is necessary and useful function of testing, it is just one of many. As with teaching, the main purpose of testing is to improve learning and within this larger context, there are a number of specific contributions it can make. (Gronlund, 1982:1)

The test in this study was in the form of a multiple-choice test that consists of four alternative answers. It consists of 30 items. The scores of the items were from 0 to 1 in which each right answer was scored 1 and the wrong answer was scored 0 . The test is presented is as follows:

Table 2
The content of achievement test

|  |  | Item number | Total |
| :--- | :--- | :--- | :--- |
| Reading | Descriptive text | $1,2,3$, | 3 |
|  | Recount text | 5,6 | 2 |
|  | Dialogue | $12,13,14$ | 3 |
| Vocabulary | Norrative text | Noun | 18,19 |

### 3.5.2.1 Validity of the Test

Brown as quoted by Saleh (2005: 101) says that test validity is defined as the degree to which a test measures what it claims to be measuring.

Gronlund (1982:126) also points out the concept of validity, as used as in testing, can be clarified further by nothing the following general points:
(1) Validity refers to the interpretation of test result.
(2) Validity is inferred from available evidence.
(3) Validity is specific to a particular use.
(4) Validity is expressed by degree.

There are three types of validity. They are content validity, criterion-related validity, and construct validity. The formula that was used to measure validity is Classical Pure Score Theory. The formula is as follows:

$$
r x y=\sqrt{\left(S t^{2} / S x^{2}\right)}
$$

### 3.5.2.2 Reliability of the Test

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Azwar (2006:4) says that reliability is how far a measurement is reliable. A measurement is reliable if there is similarity of the result in many times of measurement to the same subject.

Three types of reliability (Eichelberger, 1989:119) that addresses somewhat different concerns about a measurement or testing process are the following:
(1) Stability of data over time.
(2) Internal consistency of data.
(3) Equivalence of alternate forms.

Variance analysis technique is formula to know whether the items are reliable or not. The formula is as follows:

$$
\begin{array}{ll} 
& r_{x x}{ }^{1}=1-S e^{2} / S s^{2} \\
r_{x x}{ }^{1} \quad=\text { reliability coefficient } \\
S e & =\text { error variance } \\
\text { Ss } & =\text { cross subject variance }
\end{array}
$$

To make it easy, the computation of error variance can be done using formula:

$$
s_{e} 2=\frac{\left.\sum i-\left(\sum X^{2}\right) / k-\left(\sum Y^{2}\right) / n+\left(\sum i\right)^{2} / n k\right)}{(n-1)(k-1)}
$$

$i=$ the score of a subject on an item
$\mathrm{X}=$ the total score a subject on all items
$Y=$ the total score all subjects on an item
$\mathrm{k}=$ the number of item $\mathbb{C}$
$\mathrm{n}=$ the total number of subject
(Azwar, 2006:93)
While the computation to the cross subject variance can be done using formula:

$$
s_{s} 2=\frac{\left(\sum X^{2}\right) / k-\left(\sum i\right)^{2} / n k}{n-1}
$$

$i=$ the score of a subject on an item
$\mathrm{X}=$ the total score a subject on all items
$\mathrm{k}=$ the number of item
$\mathrm{n}=$ the total number of subject
(Azwar, 2006:94)

### 3.6 Procedure of Collecting Data

Once, the research instruments were prepared. The instruments consisted of questionnaire of learning strategies and the achievement test. Therefore, after finishing the instruments and analyzing their validity, reliability and the effectiveness of each item, these were administered. Then, they were scored. The scores of the test were the data required by this study. After the data were gathered, they were analyzed and interpreted.

### 3.7 Method of Analyzing Data

The aim of analyzing the data was to find out the correlation between the students' learning strategies and their scores in achievement test. The data were obtained from the questionnaire and achievement test. After getting score of the questionnaire and the achievement test, the data were statistically computed in order to calculate the correlation between them. As the data were in the form of interval scale and because there was always a possibility that the result of the study will show no relationship
between the variables, the Pearson Product Moment Formula was used.
The formula is as follows:

$$
r_{x y}=\frac{N \sum X Y-\left(\sum X\right)\left(\sum Y\right)}{\left.\left.\sqrt{\left\{N \sum X^{2}-\left(\sum X\right)^{2}\right\}}\right\} N \sum Y^{2}-\left(\sum Y\right)^{2}\right\}}
$$


$\left(\sum X\right)^{2}=\underbrace{\text { the square of the sum of students' learning strategies }}_{\text {scores }}$
$\left(\sum Y\right)^{2} \quad=\quad$ the square of the sum of students' achievement test
scores
$\mathrm{N} \quad=\quad$ the total number of the respondents
(Healey, 1996:386).

Based on the formula above, we would know how the correlation between the students' learning strategies and their English reading achievement test scores. When the value of the coefficient level was relatively high from table, the research had a positive correlation between two variables. However, if the value of the coefficient correlation was low from $t$ table, it had negative correlation between two variables.


## CHAPTER IV

## FINDINGS AND DISCUSSIONS

This chapter presents the way of computing the students' learning strategies and their achievement test scores, which becomes the indicator of the correlation analysis between those, and the research finding is also presented in this chapter.

### 4.1 Data Analysis

### 4.1.1 Scoring of the Students' English Reading Achievement

## Test

The scores of the students' English reading achievement test were obtained from the total number of the right answers that was multiplied by 4.76. The product of multiplication was considered as the students’ English reading achievement test scores, The highest possible score was 100 . The table of Appendix 9 shows that there were nineteen students who got good scores, ten students got fair scores, and one student got poor score.

Their scores are related to other aspects. One of them is their strategies in learning. Sometimes, their strategies affect their achievement test scores but there are other factors that affect their achievement test scores.

### 4.1.2 Scoring of the Students' Questionnaires

The scores of the questionnaires were obtained by summing up the item credits of the students' answer. Each item had four response options, selalu (always) credited 3, sering (often) credited 2, kadang-kadang (sometimes) credited 1, and tidak pernah (never) credited 0 . After that, they were summed up in percentage description to facilitate the analysis.

The distribution of the scores can be presented in the following table.

Table 4
The distribution of the scores of the questionnaire

| No. | Indicators | Items | A | B | C | D |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1 | Cognitive strategy | $9-17$ | 93 | 152 | 139 | 0 |
| 2 | Metacognitive strategy | $1-7$ | 99 | 106 | 113 | 0 |
| 3 | Social strategy | $18-20$ | 21 | 28 | 50 | 0 |
| 4 | Affective strategy | 8 | 0 | 8 | 17 | 0 |
|  |  |  | 216 | 290 | 292 | 0 |

The number in column A in the table was obtained from the number of students that chose option A multiplied by 3 . Then, the number of column B was obtained from the number in students that chose option B multiplied by 2. Besides, the number in column $C$ was obtained from the number of students that chose option C multiplied by 1 . The last, the number in column D was obtained from the number of students that chose option D multiplied by 0 .

Each column on the table has different number. The highest number in cognitive strategy is in column B that is 152 . It means that almost students often used cognitive strategy. The lower number is 139. It is in column C. It means that there were many students who sometimes used this strategy. The lowest number is in column A. It means that the rest number of students who always used cognitive strategy in their learning.

In metacognitive strategy column, there are four columns that have different number. The highest number is in column $C$ which is 113 . The smaller number is in column B, and the smallest number is in column A. It can be known that almost students sometimes used this strategy, the other students often used it, and little number of students always used this strategy.

Then, the comparison number of each column in social strategy is similar with metacognitive strategy column. The highest number is in column C , the lower number is in column B , and the lowest number is in column A. It can be known that it is similar with metacognitive strategy that the highest number of students sometimes used social strategy, the smaller number of students often used this strategy, and the others always used this learning strategy.

The last strategy is affective strategy. It is also same with metacognitive strategy and social strategy. Almost students sometimes applied this learning strategy because the highest number is in column C . Then, other students often used it, and no one who always used this strategy.

From the distribution of the scores of students' questionnaire, students' learning strategies can be measured as follows:

The total value of answers (A): $216+290+292+0$

The total value of ideal answers (B): $30 \times 20 \times 3$
: 1800
The percentage of students' learning strategies: $\frac{A}{B} X 100 \%$

$$
\frac{798}{1800} \times 100 \%
$$

$$
\text { : } 44.3 \text { \% }
$$

The computation above shows that the percentage of students' learning strategies was $44.3 \%$. It means that the students used these learning strategies in low frequency because 44.3 \% was regarded as low. They almost used their own learning strategies.

Then, the score of questionnaire was got from the total number of the credit points of students' questionnaire answers that were multiplied by 10 and then divided by six. The highest possible score was 100 .

### 4.1.2.1 The Cognitive Strategy

This strategy consists of nine items. The following scores were computed to determine the percentage of this strategy.

The total value of answers (A): $93+152+139+0$

The total value of ideal answers (B): $30 \times 9 \times 3$
: 810
The percentage of cognitive strategy: $\frac{A}{B} X 100 \%$

$$
: \frac{384}{810} \times 100 \%
$$

: 47.4 \%

The computation above shows that the percentage of cognitive strategy was $47.4 \%$. It was regarded as low. It means that students used cognitive strategy in low frequency. They almost used other strategies.

- After analyzing each student, it was got that there are five students got very low score, thirteen students got low score, nine students got fair score, and three students got high score. Students who got high score are students number nine, twenty seven, and thirty. It means that they used cognitive strategy.

The ninth student used cognitive strategy in her learning. It can be looked at her daily activities in English learning. She imitated her teacher's English talk, made notes, translated words, sentences, and texts, made English sentences, memorized new English words, and elaborated new information to other concepts in memory. The twenty-seventh student also used cognitive strategy by imitating teacher's English talk, making notes, translating, making sentences, memorizing new words, elaborating new information with other concept in memory, and memorizing words
using pictures. The thirtieth student also used cognitive strategy. Although, she used different way, she still used her cognitive ability. She always imitated her teacher's English talk, grouped words, elaborating new information with other concept in memory, and memorizing words using pictures.

The three of them almost used their brain in English learning. It is why their learning strategy called cognitive strategy. They really used her brain to get knowledge about English. From three of them, there are only two of them that got good score in achievement test. They are the ninth student and the twenty-seventh student. After getting information, it can be known that the ninth student and the twenty-seventh student also used other strategy. They combined two strategies to get much knowledge about English. They combined cognitive and metacognitive strategies. On the other hand, the thirtieth student only used cognitive strategy in her learning but she used it normally. It is why she only got fair score in achievement test.

### 4.1.2.2 The Metacognitive Strategy

This strategy consists of seven items. The following scores were computed to determine the percentage of this strategy.

The total value of answers (A): $99+106+113+0=318$
The total value of ideal answers (B): $30 \times 7 \times 3=630$
The percentage of the metacognitive strategy: $\frac{A}{B} X 100 \%$
$: \frac{318}{630} \times 100 \%$
: 50.5 \%

The computation above shows that the percentage of the metacognitive strategy was $50.5 \%$. It was regarded as low. It means that the students used the metacognitive strategy in low frequency. They almost used other strategies.

In analyzing each student, it can be known that three students got very low score, nine students got low score, thirteen students got fair score, three students got high score, and one student got very high score. Students who got high score are seventh, fifteenth, and twenty-seventh students. The student who got very high score is the ninth student. To proof it, it can be seen from what they did.

The seventh student always made functional planning in learning and directed her attention when she learnt. She also often evaluated herself and prepared herself before doing the test. The fifteenth and the twentyseventh students are also similar with the seventh student. They always made functional planning in learning and directed her attention when she learnt. They also often evaluated herself and prepared herself before doing the test. The ninth student, who got very high score always made functional planning in learning, directed her attention when she learnt, evaluated herself, and prepared herself before doing the test.

In achievement test, three of them got good score. They are the ninth, fifteenth, and twenty-seventh students. On the other hand, the seventh student got fair score. It is similar with cognitive strategy analysis that the ninth student and the twenty-seventh student got good score in achievement test. They got good score because they used two strategies. They used cognitive and metacognitive starategies.

In this case, there are two students who used metacognitive strategy and did not use cognitive strategy but got different score in achievement test. The seventh student got fair score but the fifteenth student got good score. Before concluding, it can be seen from their scores in metacognitive strategy questions. In fact, the fifteenth student's score is higher than the seventh student's score.

### 4.1.2.3 The Social Strategy

This strategy consists of three items. The following scores were computed to determine the percentage of this strategy.

The total value of answers (A): $21+28+50+0=99$
The total value of ideal answers (B): $30 \times 3 \times 3=180$
The percentage of social strategy: $\frac{A}{B} \times 100 \%$
$: \frac{99}{180} \times 100 \%$
: 55 \%

The computation above shows that the percentage of students' social strategy was $55 \%$. It means that students used not only this learning strategy but also other learning strategies because 55 \% was regarded as fair. They combined both this learning strategy and other learning strategies.

In social strategy, there are twenty students who got very low scores, three students got low scores, and four students got fair scores. There are no students who got high scores. It indicates that students are self-learners. They liked to learn by themselves.

However, after looking at the students who got good score and also used cognitive and metacognitive strategy, it was got that they got fair score in social strategy questions. They are the ninth student and the twenty-seventh student. It means that social strategy can support their learning.

### 4.1.2.4 The Affective Strategy

This strategy consists of two items. The following scores were computed to determine the percentage of this strategy.

The total value of answers (A): $0+8+17+0$

The total value of ideal answers (B): $30 \times 1 \times 3$

The percentage of affective strategy: $\frac{A}{B} \times 100 \%$

$$
: \frac{25}{90} X 100 \%
$$

## : 27.8 \%

The computation above shows that the percentage of students' affective strategy was 27.8 \%. It means that students did not use this learning strategy because 27.8 \% was regarded as very low. They completely used other learning strategies.

There are only four students who got fair score and the others got very low score in affective strategy questions. It indicates that students didn’t have interest and motivation in learning English. They might learn English because English is a compulsory subject.

2 However, it is similar with the social strategy. It also supports other strategies. It can be seen from the students who got high score in cognitive and metacognitive strategies got fair score in this strategy. They used this strategy as an additional strategy. They who used it are the ninth student and the twenty-seventh student.

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### 4.2 Correlation Analysis

The correlation analysis was computed from the scores of the students' questionnaire and the scores of students' achievement test. Then, the result of computing would interpret the research finding or to test the null hypothesis ( $h_{0}$ )," There is no correlation between the students' learning strategies and their English reading achievement test scores."

In getting the result, this study used Pearson Product Moment formula. It was used to find the correlation between two variables. From the table of scores the following values were found.


Then, those were put into the Pearson Product Moment formula.
The following was the result of the computation.
$r_{x y}=\frac{N(\Sigma X Y)-(\Sigma X)(\Sigma Y)}{\sqrt{\left.\left\{N \Sigma X^{2}(\Sigma X)^{2}\right\} N \Sigma Y^{2}-(\Sigma Y)^{2}\right\}}}$
$r_{x y}=\frac{30(95562)+(1384)(2067)}{\left.\sqrt{\left\{30(70154-(1387))^{2}\right.}\right\}\left(30-(144133-(2067))^{2}\right\}}$

$$
r_{x y}=\frac{2866860-2860728}{\sqrt{\{2104620-1915456\}-\{4323990-4272489\}}}
$$

$r_{x y}=\frac{6132}{\sqrt{\{189164\}\{51501\}}}$

$$
r_{x y}=\frac{6132}{\sqrt{9742135164}}
$$

$$
\begin{aligned}
r_{x y} & =\frac{6132}{98702} \\
& =0,062
\end{aligned}
$$

The computation above shows that the correlation coefficient was 0.062. It means that the coefficient correlation was lower than the critical value ' $r$ ' because ' $r$ ' with $5 \%$ significance level and the subject number was 30 was 0.361 . The critical value was higher than the correlation coefficient. It means that the null hypothesis was accepted. Therefore, it could be interpreted that there is no correlation between students' learning strategies and their English reading achievement test scores.


After looking at the correlation analysis, it was got that there is no correlation between learning strategies and English reading achievement test scores of the eighth graders of MTS N 1 Semarang. It can be proved PERPUSTAKAAN that there are only two stüdents that got high scores in questionnaire and also got high score in achievement test. They are the ninth student and the twenty-seventh student.

The ninth student and the twenty-seventh student got high score in cognitive and metacognitive strategies. It means that they used cognitive and metacognitive strategies. They also got good score in achievement test. It indicates that cognitive and metacognitive strategies can influence their achievement test score. It is also supported by their social and
affective strategies because they got fair score in social and affective strategies questions.

In fact, the seventh student who only used metacognitive strategy only got fair score in achievement test. It also happened to the thirtieth student who only used cognitive strategy also got fair score in achievement test. On the other hand, the fifteenth student who only used metacognitive strategy can get good score. It can be seen that the score of fifteenth student in metacognitive strategy questions was higher than the seventh student.

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## CHAPTER V

## CONCLUSIONS AND SUGGESTIONS

The last chapter of this final project consists of two parts. The first part is conclusions of the study and the other part is suggestions based on the findings of the study.

### 5.1 Conclusions

There are many conclusions of this study. First, the percentage of the students' English learning strategies in MTS N 1 Semarang in the academic year 2009/2010 was 44.3 \% that was regarded as low. It means that students did not use these learning strategies that were reviewed in this final project. There was a possibility that they used other strategies.

Second, the average of the students' English reading achievement test scores was 68.9. It was fair. It means that students got fair scores. There were 8 students got scores that were under the average and the rest of students got scores that were above the average.

Third, the coefficient correlation of the students' English learning strategies and their English reading achievement test scores in the case of the eighth graders of MTS N 1 Semarang year 2009/2010 was 0.062. It meant that there is no correlation between students' learning strategies and
their English reading achievement test scores because the coefficient correlation was lower than the critical value that was 0.361 .

Fourth, there are many kinds of strategies that can be used by students besides cognitive, metacognitive, social, and affective strategies. Finally, there are many factors that affect students' achievement test scores besides how they learn. The other factors are their creativity, their intelligence, their environment, their conditions, etc.

### 5.2 Suggestions

There are many suggestions from the writer. First, teacher should help students how to increase their achievement test scores. The teacher should give direction to students to improve their learning because the learning strategies are just strategies and these can not work without direction.

Second, students should be aware of their duty as students. They have to learn even though students use any kind of strategies because their strategies are important to increase their scores in achievement test.

Finally, students should increase their English ability not only learning in school but also practicing English everywhere, reading English books, and enriching their knowledge related to English.

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Appendix 1

## QUESTIONNAIRE

Nama :
Class :

Pilihlah jawaban yang sesuai dengan keadaan anda dengan memberi tanda silang pada a, b, c, atau d!

1. Seberapa seringkah anda membuat rencana kegiatan termasuk kegiatan belajar sebelum anda melaksanakan kegiatan tersebut?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
2. Seberapa seringkah anda mempersiapkan dahulu tempat yang akan anda gunakan untuk belajar?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
3. Seberapa seringkah anda mendengarkan dan mengoreksi percakapan bahasa Inggris orang lain?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
4. Seberapa seringkah anda mengukur sendiri kemampuan bahasa Inggris anda misalnya, dengan berlatih menjawab soal-soal bahasa Inggris?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
5. Seberapa seringkah anda memusatkan perhatian pada apa yang pelajari ketika anda belajar dan tidak menghiraukan gangguan yang ada?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
6. Seberapa seringkah anda belajar jauh-jauh hari sebelum ujian?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
7. Seberapa seringkah anda mempelajari lagi di rumah pelajaran yang telah anda dapat di sekolah?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
8. Seberapa seringkah anda membaca buku, novel, buku cerita atau yang lainnya yang berbahasa Inggris?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
9. Seberapa seringkah anda mencoba menirukan kata-kata bahasa Inggris yang diucapkan oleh guru?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
10. Seberapa seringkah anda membuat ringkasan atau catatan khusus setelah anda belajar?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
11. Seberapa seringkah anda mencoba menerjemahkan kata, kalimat ataupun teks berbahasa Inggris yang anda temui?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
12. Seberapa seringkah anda mencoba mengelompokkan kata-kata bahasa Inggris yang anda temui ke dalam kelompok kata misalnya, kata benda, kata kerja, kata sifat dll?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
13. Seberapa seringkah anda mencoba membuat kalimat dari kata-kata bahasa Inggris yang anda temui?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
14. Seberapa seringkah anda mencoba membuat kalimat bahasa Inggris sesuai dengan struktur kalimat yang tepat?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
15. Seberapa seringkah anda menghafalkan kata-kata bahasa Inggris yang baru anda temui?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
16. Seberapa seringkah anda menghubungkan pengetahuan yang baru saja anda dapat dengan pengetahuan yang telah anda dapat?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
17. Seberapa seringkah anda menghafalkan kata-kata bahasa Inggris dengan gambar yang sesuai dengan arti kata-kata tersebut?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
18. Seberapa seringkah anda membuat kelompok belajar dalam belajar bahasa Inggris?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
19. Seberapa seringkah anda bertanya pada guru, orang tua atau orang yang lebih berpengetahuan tentang kesulitan anda dalam mempelajari bahasa Inggris?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah
20. Seberapa seringkah anda belajar bahasa Inggris dari orang yang menggunakan bahasa Inggris dalam percakapan sehari-hari, misalnya mencoba berkomunikasi dengan mereka menggunakan bahasa Inggris?
a. Selalu
c. Kadang-kadang
b. Sering
d. Tidak pernah

Appendix 2

## ENGLISH READING ACHIEVEMENT TEST

Name :
Class :

Choose the correct answer by crossing $\mathrm{a}, \mathrm{b}, \mathrm{c}$, or d ! The question no. $1-$ no. 3

Indonesia is located between two continents, Asia and Australia. It is also located between two oceans, the Indonesian and the Pacific Ocean. It extends to the north until 60 degrees latitude and to the south until 110 degrees latitude. To the east, it reaches until go degrees longitude and to the west, it is until 141 degrees. Indonesia is 5.120 kilometers wide from west to east, and 1.770 kilometers wide from north to south.

Indonesia consists of 13.667 islands. Some of the islands are stretch on the equator line. They are Kalimantan, Sumatra, Sulawesi, and Halmahera. The islands get a lot of sunshine. The five large islands are Sumatra, Java, Kalimantan, Sulawesi and Irian Jaya or Papua.

The land width of Indonesia is 1.904 .345 square kilometers. Most of the area is covered by forests. They are about 120 million hectares. The forests comprise low land and high land.

1. "It is also located between two oceans ..." (see paragraph 1 ). What does the word "it" refers to?
a. Indonesia
c. Australia
b. Asia
d. Pacific
2. Which islands are stretched on the equator line?
a. Sulawesi, Sumatra, Java, and Halmahera
b. Kalimantan, Java, Sulawesi, and Halmahera
c. Sumatra, Java, Sulawesi, and Kalimantan
d. Kalimantan, Sulawesi, Halmahera and Sumatra
3. What is the main idea of paragraph three?
a. Indonesia is between two continents
b. The location of Indonesia
c. Indonesia's land area
d. The widht of Indonesia
4. Irfan : I have ever seen hippopotamus before. I ... it at the zoo last holiday.
a. See
c. Have seen
b. Saw
d. Will see

Mr. Ruhadi drove the family to Cilacap's mile center. There, they met Mr. Harjono. The dairy farmers in Cilacap milk their cows. "But, we don't sell the milk" explained Mr. Harjono, "instead; we send it to the laboratory. The milk is pasteurized elt the laboratory. Then, the lab sells the milk".

Mr. Ruhadi and the family had a wonderful time at the farm. They are very interesting. They even tried to milk a cow.
5. Who is Mr. Harjono? He is ...
a. Mr. Ruhadi's brother
b. The owner of the dairy farm
c. Mr. Ruhadi's son
d. Mr. Ruhadi’s workers
6. What do the dairy farmers do after they have milked their cows?
a. They sell the milk
b. They pasteurize the milk
c. They send the milk to the laboratory
d. They send the milk to the government
7. A: ... did the students arrive?

B: They arrived at seven o'clock.
a. How
c. What time
b. What
d. Where
8. The boy... to my party two days ago.
a. Comes
c. Came
b. Come
d. Has came
9. Baby 4 : "What time did you hear the explosion last night?

Banu : "I . . . it at 11.45 p.m".
a. Hear
c. Heard
b. Hears
d. To hear
10. A: ... does your brother clean his bicycle?

B: twice a week.
a. How many
c. How often
b. How much
d. How long
11. The animal that people usually look after and as a hobby is called ...
a. Breeding animal c. Wild animal
b. Domestic animal
d. Pet

The question no. 12 - no. 14
Guest : Good morning, Sir. What can I do for you?
Receptionist : Good morning. Is there any room?
Guests : A single room, please. Is there a bank near here? I want to change my money.

Receptionist : Oh, yes. It is not for form here. It is about 500 meters from here.
Guests : How about restaurant?

Receptionist : We have restaurant. You must order food and drink, and then we will prepare them for you.
12. What kind of room does the guest want? He want ...
a. Single room
c. A single and double room
b. Double room
d. not any
13. How far is the bank from the hotel? It is about ...
a. 200 m
c. 400 m
b. 300 m
d. $500 \mathrm{~m} G E R$
14. Does the hotel have a restaurant?
a. Yes, it does
b. Yes, they do
c. No, it doesn't
d. No, they don't
15. To keep our money. We could save it in the
a. Hospital
c. Drugstore
b. Restaurant
d. Bank
16. A: Can you help me?

B: : ....
a. I'm sorry to hear that
b. By all means
c. I'm very happy
d. Thank you very much
17. A: This is a present for your birthday party.

B: Thank you very much.
A: ...
a. OK
c. You are welcome
b. That's a good idea
d. I'm sorry to hear that

The question no. 18 - no. 19
Once upon a time, there was a little girl named Snow White. She lived with her aunt and uncle because her parents were died.

One day, she heard her uncle and aunt talking about leaving. Snow White in the castle because they both wanted to go to America and they didn't have enough money to take Snow White.

Snow White did not want her uncle and aunt to do this so she decided it would be best if she ran way. The next morning, she ran away into woods.
18. With whom did Snow White live? She lived with her ..
a. Parent
c. Brother
b. Uncle and aunt
d. Grandmother
19. Where did Snow White run way? She ran away into
a. Castle
c. Mountains
b. Woods
d. America
20. The classical music is ... modern music.
a. As popular as
c. Most popular
b. More popular
d. Not popular
21. A: Who is the boy over there?

B: Oh, he is Yulianto. He is the ... boy in my class.
a. Clever
c. Cleverest
b. Cleverer

Appendix 3
The Computation of Validity of the Questionnaire for Item Number 1
$\sum Y_{1}^{2}=4,900$
$\sum t^{2}=8,100$
$\mathrm{N}=30$

1. $\mathrm{St}^{2}=\frac{\sum Y_{1}^{2}}{N}$
$\mathrm{St}^{2}=\frac{4,900}{30} \mathrm{R}^{2} \mathrm{NEGER}$
2. $\mathrm{Sx}^{2}=\frac{\sum t^{2}}{N}$
$\mathrm{Sx}^{2}=\frac{8,100}{30}$
$S x^{2}=270$
3. $r_{x y^{1}}=\sqrt{\left(S t^{2} / S x^{2}\right)}$
$r_{x y^{1}}=\sqrt{(22.5 / 30)}$ PERPUSTAKAAN
$r_{x y^{1}}=\sqrt{0.75}$
$r_{x y^{1}}=0.87>0.361 \quad$ valid

Appendix 4
The Computation of Reliability of the Questionnaire

| $\sum i=1,155$ | $\mathrm{n}=$ | 30 |
| :--- | :--- | :--- |
| $\sum X^{2}=48,151$ | $\mathrm{k}=$ | 20 |
| $\sum Y^{2}=68,631$ |  |  |

1. $\mathrm{Se}^{2}=\frac{\sum i-\left(\sum X^{2}\right) / k-\left(\sum Y^{2}\right) / n+\left(\sum i\right)^{2} / n \cdot k}{(n-1)(k-1) / E}$
$\mathrm{Se}^{2}=\frac{1,155-(48,151) / 20-(68,631) / 30+(1,155)^{2} /(30)(20)}{(30-1)(20-1)}$
$\mathrm{Se}^{2}=2.39$
2. 

$\mathrm{Ss}^{2}=\frac{\left(\sum X^{2}\right) / k-\left(\sum i\right)^{2} / n \cdot k}{n-1}$
$\mathrm{Ss}^{2}=\frac{48,151 / 20-(1,155)^{2} /(30)(20)}{(30-1)}$
$\mathrm{Ss}^{2}=6.35$
3. $r_{x x^{1}}=1-\mathrm{Se}^{2} / \mathrm{Ss}^{2}$
$=1-2.39 / 6.35$ PERPUSTAKAAN
$=1-0.38$
$=0.62>0.361$ reliable

Appendix 5
Table of Validity of Questionnaire

| Subject | Item Number |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Number | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |  |  |
| 1 | 3 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 2 | 1 | 3 | 3 | 2 | 2 | 1 | 25 | 625 |
| 2 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 2 | 0 | 15 | 225 |
| 3 | 0 | 0 | 2 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 2 | 14 | 196 |
| 4 | 3 | 1 | 3 | 1 | 0 | 3 | 3 | 1 | 2 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 0 | 2 | 1 | 2 | 37 | 1369 |
| 5 | 3 | 0 | 3 | 3 | 1 | 1 | 1 | 2 | 3 | 3 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 1 | 2 | 1 | 28 | 784 |
| 6 | 3 | 1 | 3 | 1 | 2 | 1 | 2 | 2 | 3 | 0 | 2 | - 3 | 2 | 1 | 0 | 1 | 2 | 1 | 1 | 1 | 32 | 1024 |
| 7 | 3 | 2 | 2 | 3 | 0 | 2 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 0 | 0 | 3 | 3 | 2 | 3 | 43 | 1849 |
| 8 | 3 | 2 | 2 | 2 | 0 | 0 | 2 | 1 | 3 | 0 | 2 | 3 | 2 | 2 | 2 | 0 | 2 | 2 | 2 | 1 | 33 | 1089 |
| 9 | 2 | 2 | 3 | 1 | 3 | 1 | 2 | 3 | 3 | 2 | 2 | 2 | 3 | 3 | 2 | 0 | 3 | 2 | 3 | 2 | 44 | 1936 |
| 10 | 3 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 0 | 0 | 2 | 2 | 2 | 2 | 44 | 1936 |
| 11 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 0 | 2 | 2 | 3 | 2 | 46 | 2116 |
| 12 | 3 | 1 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 2 | 0 | 2 | 1 | 0 | 3 | 3 | 2 | 3 | 41 | 1681 |
| 13 | 0 | 2 | 2 | 1 | 3 | 3 | 1 | 1 | 2 | 1 | 2 | 3 | 2 | 3 | 2 | 1 | 3 | 1 | 2 | 3 | 38 | 1444 |
| 14 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 2 | 2 | 3 | 50 | 2500 |
| 15 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 51 | 2601 |
| 16 | 3 | 3 | 3 | 2 | 3 | 2 | 2 | 2 | 3 | 1 | 2 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 3 | 2 | 47 | 2209 |
| 17 | 3 | 1 | 3 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 0 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 50 | 2500 |
| 18 | 3 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 1 | 3 | 1 | 1 | 2 | 49 | 2401 |
| 19 | 1 | 2 | 3 | 1 | 2 | 2 | 1 | 1 | 2 | 3 | 3 | 3 | 1 | 1 | 3 | 3 | 1 | 2 | 2 | 1 | 38 | 1444 |
| 20 | 3 | 3 | 3 | 0 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 1 | 3 | 3 | 3 | 1 | 1 | 3 | 3 | 2 | 48 | 2304 |
| 21 | 2 | 2 | 3 | 0 | 2 | 3 | 3 | 2 | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | 40 | 1600 |
| 22 | 3 | 3 | 3 | 0 | 3 | 3 | 2 | 2 | 2 | 3 | 2 | 2 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 1 | 35 | 1225 |
| 23 | 3 | 3 | 3 | 1 | 3 | 3 | 3 | 1 | 3 | 3 | 2 | 0 | 0 | 3 | 3 | 3 | 0 | 3 | 3 | 1 | 44 | 1936 |
| 24 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 1 | 3 | 3 | 2 | 2 | 3 | 52 | 2704 |
| 25 | 1 | 2 | 3 | 0 | 0 | 2 | 2 | 2 | 3 | 3 | 2 | 1 | 2 | 1 | 1 | 1 | 0 | 0 | 0 | 2 | 28 | 784 |
| 26 | 3 | 2 | 3 | 2 | 2 | 3 | 3 | 1 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 49 | 2401 |
| 27 | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 1 | 2 | 3 | 3 | 3 | 2 | 3 | 3 | 2 | 52 | 2704 |
| 28 | 3 | 1 | 3 | 2 | 2 | 3 | 1 | 1 | 3 | 1 | 2 | 3 | 0 | 3 | 3 | 3 | 3 | 2 | 2 | 1 | 42 | 1764 |
| 29 | 2 | 1 | 3 | 1 | 1 | 1 | 1 | 0 | 3 - | - 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 20 | 400 |
| 30 | 1 | 0 | 1 | 0 | 1 | 2 | 1 | 0 | 1 | 0 | 2 | 1 | 0 | 3 | 1 | 0 | 1 | 2 | 2 | 1 | 20 | 400 |
| Y | 70 | 51 | 78 | 46 | 58 | 63 | 60 | 53 | 76 | 60 | 62 | 52 | 52 | 71 | 52 | 38 | 49 | 55 | 56 | 53 | $\mathrm{r}_{\mathrm{xx}}=0,62$ |  |
| $Y^{2}$ | 4900 | 2601 | 6084 | 2116 | 3364 | 3969 | 3600 | 2809 | 5776 | 3600 | 3844 | 2704 | 2704 | 5041 | 2704 | 1444 | 2401 | 3025 | 3136 | 2809 |  |  |  |
| $\mathrm{r}_{\mathrm{xy}}$ | 0,78 | 0,57 | 0,87 | 0,50 | 0,64 | 0,70 | 0,67 | 0,59 | 0,84 | 0,67 | 0,69 | 0,58 | 0,58 | 0,79 | 0,58 | 0,42 | 0,54 | 0,61 | 0,62 | 0,59 |  |  |  |
| criteria | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid | valid |  | able |

Appendix 6
The Computation of Validity of the Try-Out Test for Item Number 1
$\sum Y_{1}^{2}=676$
$\sum t^{2}=900$
$\mathrm{N}=30$
2. $\mathrm{St}^{2}=\frac{\sum Y_{1}^{2}}{N}$

3. $\mathrm{Sx}^{2}=\frac{\sum t^{2}}{N}$
$\mathrm{Sx}^{2}=\frac{900}{30}$
$S x^{2}=30$
4. $r_{x y^{\prime}}=\sqrt{\left(S t^{2} / S x^{2}\right)}$
$r_{x y^{1}}=\sqrt{(22.5 / 30)}$ PERPUSTAKAAN
$r_{x y^{1}}=\sqrt{0.75}$
$r_{x y^{1}}=0.87>0.361$ valid

Appendix 7
The Computation of Reliability of the Try-Out Test
$\sum i=540 \quad n=30$
$\sum X^{2}=10,882 \mathrm{k}=30$
$\sum Y^{2}=11,298$

1. $\mathrm{Se}^{2}=\frac{\sum i-\left(\sum X^{2}\right) / k-\left(\sum Y^{2}\right) / n+\left(\sum i\right)^{2} / n \cdot k}{(n-1)(k-1)}$

$$
\mathrm{Se}^{2}=\frac{540-10,882 / 30-11,298 / 30+(540)^{2} /(30)(30)}{(30-1)(30-1)}
$$

$$
\mathrm{Se}^{2}=\frac{540-362.73-376.6+291,600 / 900}{(29)(29)}
$$

$$
\mathrm{Se}^{2}=\frac{540-362.73-376.6+324}{841}
$$

$$
\mathrm{Se}^{2}=\frac{124.67}{841}
$$

$$
\mathrm{Se}^{2}=0.15
$$

2. $\mathrm{Ss}^{2}=\frac{\left(\sum X^{2}\right) / k-\left(\sum i\right)^{2} / n \cdot k}{n-1}$
3. $r_{x x^{1}}=1-\mathrm{Se}^{2} / \mathrm{Ss}^{2}$
$\mathrm{Ss}^{2}=\frac{10,882 / 30-(540)^{2} /(30)(30)}{(30-1)} \equiv \mathrm{S}$

$$
r_{x x^{1}}=1-0.15 / 1.33
$$

$\mathrm{Ss} 2=\frac{\left(\sum X^{2}\right) / k-\left(\sum i\right)^{2} / n \cdot k}{n-1} \quad r_{x x^{1}}=1-0.11$
Ss2 $=\frac{362.73-324}{29}$
$\mathrm{Ss}^{2}=1.33$

$$
r_{x x^{1}} \quad=0.88>0.361
$$

reliable

Table of Validity of the Try Out Test

| Subj ect <br> Num ber | Item Number |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | X | X2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 |  |  |
| 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 27 | 729 |
| 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 26 | 676 |
| 4 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 5 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 6 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 7 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 8 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 24 | 576 |
| 9 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 25 | 625 |
| 10 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 23 | 529 |
| 11 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 22 | 484 |
| 12 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 13 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 21 | 441 |
| 14 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 19 | 361 |
| 15 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 18 | 324 |
| 16 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 17 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 18 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 19 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 |  | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 17 | 289 |
| 20 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 15 | 225 |
| 21 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 16 | 256 |
| 22 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 1 | 1 | 1 | 17 | 289 |
| 23 | 1 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 11 | 121 |
| 24 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 9 | 81 |
| 25 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 9 | 81 |
| 26 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 0 | 1 | 1 | 1 | 8 | 64 |
| 27 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 10 | 100 |
| 28 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 10 | 100 |
| 29 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 9 | 81 |
| 30 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 1 | 8 | 64 |
| Y | 26 | 10 | 20 | 9 | 6 | 24 | 8 | 26 | 15 | 10 | 6 | 8 | 21 | 19 | 21 | 20 | 17 | 7 | 22 | 21 | 8 | 19 | 26 | 24 | 17 | 29 | 26 | 25 | 25 | 25 |  |  |
| $\mathrm{Y}^{2}$ | $\begin{gathered} 67 \\ 6 \end{gathered}$ | $\begin{gathered} \hline 10 \\ 0 \\ \hline \end{gathered}$ | $\begin{gathered} 40 \\ 0 \end{gathered}$ | 81 | 36 | $\begin{gathered} 57 \\ 6 \end{gathered}$ | 64 | $\begin{gathered} 67 \\ 6 \end{gathered}$ | $\begin{gathered} 22 \\ 5 \end{gathered}$ | $\begin{gathered} 10 \\ 0 \end{gathered}$ | 36 | 64 | $\begin{gathered} 44 \\ 1 \end{gathered}$ | $36$ | $\begin{gathered} 44 \\ 1 \end{gathered}$ | $\begin{gathered} 40 \\ 0 \end{gathered}$ | $\begin{gathered} 28 \\ 9 \end{gathered}$ | 49 | $\begin{gathered} 48 \\ 4 \end{gathered}$ | $\begin{gathered} 44 \\ 1 \end{gathered}$ | 64 | $\begin{gathered} 36 \\ 1 \end{gathered}$ | $\begin{gathered} 67 \\ 6 \end{gathered}$ | 576 | $\begin{gathered} 28 \\ 9 \end{gathered}$ | $\begin{gathered} 84 \\ 1 \end{gathered}$ | 676 | $\begin{gathered} 62 \\ 5 \end{gathered}$ | $\begin{gathered} \hline 62 \\ 5 \end{gathered}$ | 625 |  |  |
| $\mathrm{r}_{\mathrm{xy}}$ | $\begin{array}{\|c\|} \hline 0.8 \\ 7 \\ \hline \end{array}$ | $\begin{gathered} 0.3 \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 0.6 \\ 7 \\ \hline \end{gathered}$ | 0.3 | 0.2 | 0.8 | 0.3 | $\begin{gathered} 0.8 \\ 7 \\ \hline \end{gathered}$ | 0.5 | $\begin{gathered} \hline 0.3 \\ 3 \\ \hline \end{gathered}$ | 0.2 | 0.3 | 0.7 | $\begin{gathered} \hline 0.6 \\ 3 \\ \hline \end{gathered}$ | 0.7 | $\begin{array}{\|c\|} \hline 0.6 \\ 7 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 0.5 \\ 7 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 0.2 \\ 3 \\ \hline \end{array}$ | $\begin{array}{\|c\|} \hline 0.7 \\ 3 \\ \hline \end{array}$ | 0.7 | 0.3 | $\begin{gathered} \hline 0.6 \\ 3 \\ \hline \end{gathered}$ | $\begin{array}{\|c\|} \hline 0.8 \\ 7 \\ \hline \end{array}$ | 0.80 | $\begin{array}{\|c\|} \hline 0.5 \\ 7 \\ \hline \end{array}$ | $\begin{gathered} 0.9 \\ 7 \\ \hline \end{gathered}$ | 0.87 | $\begin{gathered} \hline 0.8 \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} \hline 0.8 \\ 3 \\ \hline \end{gathered}$ | 0.83 | $\stackrel{r_{x x}}{=}$ | 0.88 |
| criteria | $\begin{gathered} \text { vali } \\ \mathrm{d} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { inv } \\ & \text { alid } \end{aligned}$ | $\begin{aligned} & \text { vali } \\ & \text { d } \end{aligned}$ | $\begin{aligned} & \text { inv } \\ & \text { alid } \end{aligned}$ | $\begin{aligned} & \text { inv } \\ & \text { alid } \end{aligned}$ | vali | inv alid | $\begin{gathered} \text { vali } \\ \text { d } \end{gathered}$ | $\begin{gathered} \text { vali } \\ \text { d } \end{gathered}$ | inv alid | inv alid | inv alid | $\begin{aligned} & \text { vali } \\ & \text { d } \end{aligned}$ | $\begin{gathered} \text { vali } \\ \mathrm{d} \\ \hline \end{gathered}$ | $\begin{gathered} \text { vali } \\ \text { d } \end{gathered}$ | $\begin{aligned} & \text { vali } \\ & \mathrm{d} \\ & \hline \end{aligned}$ | $\begin{gathered} \text { vali } \\ \text { d } \\ \hline \end{gathered}$ | inv alid | $\begin{gathered} \text { vali } \\ \text { d } \end{gathered}$ | $\begin{gathered} \text { vali } \\ \text { d } \end{gathered}$ | inv alid | vali d | $\begin{gathered} \text { vali } \\ \mathrm{d} \\ \hline \end{gathered}$ | valid | $\begin{gathered} \text { vali } \\ \text { d } \\ \hline \end{gathered}$ | $\begin{gathered} \text { vali } \\ \mathrm{d} \\ \hline \end{gathered}$ | valid | $\begin{gathered} \text { vali } \\ \mathrm{d} \end{gathered}$ | $\begin{aligned} & \text { vali } \\ & \text { d } \end{aligned}$ | valid |  | iable |

Appendix 9
THETABLEOFQUESTONNAIRESCORES

| NO | NAME | ITEMNUMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 |  |  | 45 |  |  |  |  | 9 | 10 | 11 | 12 | 13 |  | 14 | 15 | 16 | 17 | 18 | 19 | 20 |  |
| 1 | Aildis | 1 | 2 | 21 | 1 | 12 | 2 | 2 | 2 | 1 | 1 | 1 | 2 | 1 | 1 |  | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 26 |
| 2 | Amy Restu Wibowo | 1 | 3 |  | 3 | 31 | 2 | 21 | 1 | 1 | 3 | 1 | 3 | 1 | 1 |  | 1 | 3 | 3 | 1 | 0 | 3 | 0 | 33 |
| 3 | Anggun Katika slikharoh | 1 | 1 | 1 | 1 | 13 | 1 | 3 | 3 | 0 | 2 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 23 |
| 4 | A Nunul Favah Naill $A$ | 1 | 2 | 1 | 1 | 12 | 2 | 22 | 20 | 0 | 1 | 1 | 2 | 1 | 1 |  | 0 | 1 | 0 | 1 | 0 | 2 | 0 | 21 |
| 5 | AdiliaSetyani | 1 | 1 | 12 |  | 11 | 1 | 11 | 1 |  | 2 | 1 | 2 | 1 | 2 |  | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 25 |
| 6 | DimasAliffauz | 1 | 1 | 1 | 1 | 12 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 2 |  | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 25 |
| 7 | DujantiRahay |  | 3 | 1 | 2 | 23 | 2 | 22 | 2 | 1 | 2 | 3 | 1 | 3 | 1 |  | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 42 |
| 8 | EniPumani |  | 0 | 0 | 1 | 11 | 1 | 11 | 1 | 0 | 2 | 0 | 1 | 0 | 1 |  | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 13 |
| 9 | EvaNoor skandar | 3 |  | 3 | 2 | 23 | 3 |  | 3 | 2 |  | 3 | 3 | 1 | 3 |  | 1 | 3 | 3 | 2 | 2 | 3 | 1 | 50 |
| 10 | FahmiAbdul Maid | 1 | 3 | 2 | 2 | 22 | 1 | 11 | 1 | 0 | 2 | 0 | 1 | 0 | 1 |  | 1 | 2 | 2 | 2 | 0 | 1 | 1 | 25 |
| 11 | FazàalHanif | 1 | 2 | 2 |  | 12 | 2 | 23 | 3 | 1 | 2 | 1 | 2 | 1 | 2 |  | 2 |  | 2 | 1 | 1 | 2 | 1 | 33 |
| 12 | FȧzMaulanaFki | 1 | 3 | 1 | 1 | 12 | 1 | 11 | 1 | 1 | 3 | 2 | 2 | 1 | 2 |  | 1 | 1 | 2 |  | 0 | 1 | 0 | 28 |
| 13 | Hafidouldifith | 1 | 3 | 0 | 1 | 12 | 1 | 11 | 1 | 1 | 2 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 1 | 0 | 2 | 0 | 22 |
| 14 | Kaimalus SaniaMaulan | 1 | 1 | 1 | 2 | 21 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 1 | 1 |  | 1 | 1 | 2 | 1 | 0 | 2 | 0 | 23 |
| 15 | KhoinlAni Lathifah | 3 | 3 | 2 | 2 | 23 | 1 | 3 | 3 | 1 | 2 | 2 | 2 | 1 | 1 |  | 1 | 2 | 1 | 2 | 0 | 2 | 0 | 34 |
| 16 | LabibahR.Rachmah | 1 | 1 | 12 | 1 | 11 | 1 | 12 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |  | 1 | 2 | 1 | 1 | 0 | 1 | 1 | 25 |
| 17 | LiaRulumavai | 1 | 2 | , | 1 | 12 | 3 | 32 | 2 | 1 | 1 | 1 | 1 | 1 | 1 |  | 2 | 1 |  | 2 | 1 | 2 | 1 | 28 |
| 18 | LintangEkawaí | 1 | 3 | 1 | 1 | 11 | 1 | 13 | 3 | 1 | 0 | 2 |  | 2 | 1 |  | 1 | 2 |  | 1 | 0 | 1 | 0 | 26 |
| 19 | LutfaSepianalla Rolysa | 3 | 3 | 31 | 1 | 11 | 1 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 3 |  | 1 | 3 | 1 | 1 | 0 | 3 | 1 | 29 |
| 20 | LutiKhakimAL Hadicz | 1 | 1 | 1 | 1 | 12 | 2 | 22 | 2 | 0 | 2 | 1 | 1 | 1 | 1 |  | 1 | 1 | 1 | 2 | 1 | 1 | 1 | 24 |
| 21 | MayaFtianasaiS.P. | 1 | 1 | 1 | 1 | 11 | 1 | 11 | 1 | 0 | 2 | 0 | 2 | 1 | 1 |  | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 22 |
| 22 | M.Farizal | 0 | 0 | 1 | 0 | 00 | 0 | 0 | 1 | 2 | 2 | 0 | 1 | 0 | 0 |  | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 12 |
| 23 | MithaRahmania | 1 | 3 | 31 | 2 | 22 | 1 | , | 1 | 1 | 3 | 3 | 1 | 1 | 1 |  | 1 | 2 |  | 2 | 1 | 2 | 0 | 31 |
| 24 | M.M.Anam | 1 | 1 | 1 | 1 | 12 | 1 | 11 | 1 | 0 | 1 | 0 | 0 | 1 | 0 |  | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 15 |
| 25 | Muhammad Abdul HaizizA. | 1 | 1 | 12 | 1 | 12 | 0 | 0 | 0 | 1 | , | 0 | 2 | , | 1 |  | 1 | 2 | 2 | 1 | 0 | 2 | 0 | 22 |
| 26 | MuriAgusin | 1 | 3 | 31 | 1 | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 0 | 1 |  | 1 |  | 1 | 1 | 1 | 1 | 0 | 23 |
| 27 | NandaMaulidaHayyahiU | 3 | 3 | 3 | 2 | 22 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 1 | 3 |  | 1 | 3 | 3 | 2 | 2 | 3 | 1 | 46 |
| 28 | NoviaDwiSaniaya | 1 | 3 | 1 | 1 | 11 | 3 | 3 | 1 | 0 | 2 | 3 | 1 | 1 | 1 |  |  | 1 | 2 | 2 | 0 | 3 | 0 | 30 |
| 29 | Nunul Hidayah | 1 | 2 | 1 | 2 | 22 | 2 | 2 | 1 | 0 | 2 | 3 | 1 | 0 | 1 |  | 2 | 2 | 3 | 2 | 0 | 2 | 1 | 30 |
| 30 | PutiPraimi | 1 | 3 | 2 |  | 22 | 3 |  | 1 | 2 |  | 2 | 2 | 3 | 2 |  | 2 | 1 | 3 | 3 | 1 | 3 | 2 | 43 |

Appendix 10
THE TABLE OF THE TEST SCORES

| NO | NAME | ITEMNUMBER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2 | 34 | 45 | 56 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 |  |
| 1 | A Nurul Fava'ih Nailul A | 1 | 1 | 01 | 11 | 1 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 |  | 0 | 15 |
| 2 | Ali Idris | 1 | 10 | 01 | 11 | 10 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 12 |
| 3 | Amy Restu Wibowo | 1 | 10 | 0 | 01 | 1 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 15 |
| 4 | Anggun Kartika Istikharoh | 1 | 10 | 01 | 11 | 1 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 15 |
| 5 | Ardita Setyani | 1 | 1 |  | 11 | 10 | 0 | 10 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 15 |
| 6 | Dimas Alif Fauzi | 1 | 10 | 0 | 01 | 10 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 16 |
| 7 | Dwijanti Rahayu | 1 | 1 | 01 | 11 | 11 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 14 |
| 8 | Eni Purwanti | 1 | 1 | 01 | 11 | 10 | 0 | 0 | 0 | 0 | 1 | 1 |  | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 12 |
| 9 | Eva Noor Iskandar | 1 | 1 | 11 | 11 | 10 | 0 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 15 |
| 10 | Fahmi Abdul Majid | 0 | 1 | 10 | 01 | 10 | 0 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 12 |
| 11 | Faiz Maulana Fikri | 1 | 1 | 10 | 01 | 10 | 0 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 15 |
| 12 | Faizal Hanief | 1 | 1 | 10 | 01 | 10 | 1 | 01 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 14 |
| 13 | Hafidlotul Rif'ah | 1 | 1 | 11 | 11 | 10 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 17 |
| 14 | Karimatus Sania Maulani | 1 | 1 | 11 | 11 | 10 | 0 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 16 |
| 15 | Khoirul Aini Lathifah | 1 | 1 | 10 | 01 | 1 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 15 |
| 16 | Labibah R. Rachmah | 1 | 1 | 01 | 11 | 10 | 1 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 15 |
| 17 | Lia Rukmawati | 1 | 1 | 11 | 11 | 10 | 0 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 16 |
| 18 | Lintang Ekawati | 1 | 1 | 10 | 01 | 10 | 1 | 10 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 14 |
| 19 | Lutfia Septianalfa Rolysa | 1 | 1 | 01 | 11 | 1 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 15 |
| 20 | Lutvi Khakim Al Hafidz | 1 | 1 | 11 | 11 | 10 | 0 | 10 | 0 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 14 |
| 21 | Maya Fitrianasari S.P. | 1 | 0 | 10 | 01 | 10 | 1 | 10 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 13 |
| 22 | Mitha Rahmania Pratiwi | 1 | 1 | 01 | 11 | 1 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 0 | 15 |
| 23 | Muhammad Farizal | 1 | 1 | 11 | 10 | 0 | 1 | 01 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 16 |
| 24 | Muhammad Abdul Hafizh A. | 0 | 10 | 0 | 01 | 10 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 1 | 0 | 9 |
| 25 | Muhammad Misbachul A | 1 | 10 | 01 | 11 | 10 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 15 |
| 26 | Murti Agustin | 1 | 1 | 11 | 11 | 1 | 1 | 01 |  | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 17 |
| 27 | Nanda Maulida Hadyahti U | 1 | 1 | 11 | 11 | 10 | 0 | 01 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 15 |
| 28 | Novia Dwi Sanjaya | 1 | 1 | 10 | 01 | 10 | 1 | 10 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 0 | 1 | 0 | 14 |
| 29 | Nurul Hidayah | 1 | 1 | 11 | 11 | 10 | 1 | 01 |  | 1 | 1 | 1 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 15 |
| 30 | Putri Pratiwi | 0 | 0 | 01 | 11 | 1 | 1 | 01 |  | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 | 0 | 1 | 1 | 0 | 14 |

Appendix 11

## THE TABLE OF SCORES

| NO | NAME | $\mathbf{X}$ | $\mathbf{X}^{\mathbf{2}}$ | $\mathbf{Y}$ | $\mathbf{Y}^{\mathbf{2}}$ | $\mathbf{X . Y}$ |
| :---: | :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | A Nurul Fava'ih Nailul A | 35 | 1225 | 71 | 5041 | 2485 |
| 2 | Ali Idris | 43 | 1849 | 57 | 3249 | 2451 |
| 3 | Amy Restu Wibowo | 55 | 3025 | 71 | 5041 | 3905 |
| 4 | Anggun Kartika Istikharoh | 38 | 1444 | 71 | 5041 | 2698 |
| 5 | Ardita Setyani | 42 | 1764 | 71 | 5041 | 2982 |
| 6 | Dimas Alif Fauzi | 42 | 1764 | 76 | 5776 | 3192 |
| 7 | Dwijanti Rahayu | 70 | 4900 | 67 | 4489 | 4690 |
| 8 | Eni Purwanti | 22 | 484 | 57 | 3249 | 1254 |
| 9 | Eva Noor Iskandar | 83 | 6889 | 71 | 5041 | 5893 |
| 10 | Fahmi Abdul Majid | 42 | 1764 | 57 | 3249 | 2394 |
| 11 | Faiz Maulana Fikri | 47 | 2209 | 71 | 5041 | 3337 |
| 12 | Faizal Hanief | 55 | 3025 | 67 | 4489 | 3685 |
| 13 | Hafidlotul Rif'ah | 37 | 1369 | 81 | 6561 | 2997 |
| 14 | Karimatus Sania Maulani | 38 | 1444 | 76 | 5776 | 2888 |
| 15 | Khoirul Aini Lathifah | 57 | 3249 | 71 | 5041 | 4047 |
| 16 | Labibah R. Rachmah | 42 | 1764 | 71 | 5041 | 2982 |
| 17 | Lia Rukmawati | 47 | 2209 | 76 | 5776 | 3572 |
| 18 | Lintang Ekawati | 43 | 1849 | 67 | 4489 | 2881 |
| 19 | Lutfia Septianalfa Rolysa | 48 | 2304 | 71 | 5041 | 3408 |
| 20 | Lutvi Khakim Al Hafidz | 40 | 1600 | 67 | 4489 | 2680 |
| 21 | Maya Fitrianasari S.P. | 37 | 1369 | 62 | 3844 | 2294 |
| 22 | Mitha Rahmania Pratiwi | 52 | 2704 | 71 | 5041 | 3692 |
| 23 | Muhammad Farizal | 20 | 400 | 76 | 5776 | 1520 |
| 24 | Muhammad Abdul Hafizh A. | 37 | 1369 | 43 | 1849 | 1591 |
| 25 | Muhammad Misbachul A | 25 | 625 | 71 | 5041 | 1775 |
| 26 | Murti Agustin | 38 | 1444 | 81 | 6561 | 3078 |
| 27 | Nanda Maulida Hadyahti U | 77 | 5929 | 71 | 5041 | 5467 |
| 28 | Novia Dwi Sanjaya | 50 | 2500 | 67 | 4489 | 3350 |
| 29 | Nurul Hidayah | 50 | 2500 | 71 | 5041 | 3550 |
| 30 | Putri Pratiwi | 72 | 5184 | 67 | 4489 | 4824 |
|  | M | 1384 | 70154 | 2067 | 144133 | 95562 |

Appendix 12

$$
\begin{array}{ll}
\mathrm{N} & =30 \\
\mathrm{~N} & =30 \\
\sum \mathrm{X} & =1384 \\
\sum \mathrm{Y} & =2067 \\
\sum \mathrm{X}^{2} & =70154 \\
\sum \mathrm{Y}^{2} & =144133 \\
\sum \mathrm{XY} & =95562
\end{array}
$$

$$
\begin{aligned}
& r_{x y}=\frac{N(\Sigma X Y)-(\Sigma X)(\Sigma Y)}{\left.\sqrt{\left\{N \Sigma X^{2}(\Sigma X)^{2}\right\}}\right\}_{\left\{N \Sigma Y^{2}-(\Sigma Y)^{2}\right\}}} \\
& r_{x y}=\frac{30(95562)-(1384)(2067)}{\left.\left.\sqrt{\left\{30(70154-(1387))^{2}\right\}}\right\} 30-(144133-(2067))^{2}\right\}} \\
& r_{x y}=\frac{2866860-2860728}{\sqrt{\{2104620-1915456\}-\{4323990-42724\}}}
\end{aligned}
$$

$$
r_{x y}=\frac{6132}{\sqrt{\{189164\}\{51501\}}}
$$

$$
r_{x y}=\frac{6132}{\sqrt{9742135164}}
$$

$$
r_{x y}=\frac{6132}{98702}
$$

$$
=0,062<0,361 \quad \text { no correlation }
$$

