# CHAPTER III

# RESEARCH METHODS

This chapter showed the research design, population, sampling and sample, data and data source, research variable, research instrument, validity and reliability testing, normality and homogeneity testing, procedure of the research, data collecting method, data analysis, and hypothesis testing.

## A. Research Design

Research design is the application of scientific methods to study problems for producing reliable and useful information. This study used quantitative approach and experimental research design with two group post-test. Daniel Mujis (2004: 1) stated since quantitative method is basically about gathering numerical data to explain certain phenomenon, the research method is a substantial part of research to gain the scientific truth. The essential feature of experimental research is that researchers purposively manipulate and control the conditions of certain events in order to introduce interventions and measure the differences (Cohen et al., 2007: 272). According to Creswell (2012), experimental research is a design which help researcher to find out cause-effect relationship between independent variables and dependent variables. In addition, L.R. Gay (1992: 298) added that the only research method that could really test the hypothesis of cause-effect relationship is experimental research. Briefly, it was an experiment which has a control group, the researcher only tests one effect

at a time, and the subjects have been assigned randomly between the groups.

In this study, Quasi-Experimental was applied as the design of the research to find out the effectiveness of Scavenger Hunt Game on students' vocabulary mastery. Quasi-experimental research is particularly suitable for studying the impacts of an educational invention, such as a school improvement plan, aimed at injecting particular elements (Mujis, 2004: 200). This kind of research design is an alternative method of True-Experimental design which was difficult to be applied. It was used due to the limited numbers of participant and the impossibility to randomize it. Moreover, this research used *"Nonequivalent Control Group Design"* that was Posttest-only Control Group Design (POCGD). Although there was no pre-test organized, the post-test could be conducted when the treatment had been done. The formula used could be seen as follows:

| | | |
|---|---|---|
| G1 | X | Y1 |
| G2 | | Y1 |

Where:

G1 : experimental group

G2 : control group

X : treatment

Y1 : post-test

*(Source: Hatch and Farhady, 1982: 21)*

Thus, two groups of students were selected as the participant or sample. Both of groups were given the different treatment. The first group or called as Experimental group were taught by using Scavenger Hunt Game in learning vocabulary. While the second group or called as Control group were taught by using conventional way or common method in learning vocabulary. Briefly, the design of this research could be seen on the table below:

**Table 3.1**

**Quasi-Experimental Research Design**

| Group | X | Y1 |
|---|---|---|
| Experimental Class (VII-D) | Vocabulary Game "Scavenger Hunt" | Post-test |
| Control Class (VII-E) | Conventional method | Post-test |

According to the table above, the procedure of using two groups post-test design were:

1. Applying the experimental treatment that was Scavenger Hunt Game in VII-D class and applying conventional method in VII-E class for teaching vocabulary to the first-grade students of SMPN 1 Besuki Tulungagung.
2. Administering post-test for both classes (VII-D and VII-E) to measure the vocabulary score of first grade students at SMPN 1 Besuki Tulungagung.

## B. Population, Sampling, and Sample

### 1. Population

Arikunto (2013:173) in Encyclopedia of Educational Evaluation pointed out that population is a group of all elements dealing with one or

more features of interest. Population is a specific group of things selected by researchers, such as people, objects, events, etc., which could be summarized as a group with at least one characteristic different from other groups (Gay, 2006). Moreover, Scott and Johnson (2009: 29) added that population is a group of people in which the study could be generalized. In short, population is all or the entire subject that the researcher interested in, which he or she wants to describe or draw conclusion about. It also could be defined as a large group of subjects or individuals which was the main focus of the study.

The population of this study was all seventh-grade students of SMPN 1 Besuki Tulungagung which has 165 students. They were divided into five classes; VII-A, VII-B, VII-C, VII-D, and VII-E in academic years of 2020/2021 and each class consisted of different number of students. The students of SMPN 1 Besuki, were selected to be the population of this research due to the students' English proficiency which was at the average level among all schools in the sub district. So, the researcher could make generalization from the result of the research. It also suited to one of school's intentions that was realizing an effective and efficient standard of learning process. In addition, there was no any research related to this topic organized there before.

**2. Sampling**

Sampling is the process of selecting the individuals, represent the population, who would participate in the study. According to the statement

from Ary et al (2010: 148), sampling is a substantial feature of inference while statistics is the process offgoing from the part to whole. Nurhayati (2020, 105) pointed out that the aims of sampling are; saves cost and time, increases chances of accuracy, etc. Sampling is the only way to deal with large numbers of population. Finally, the result of research can be draw and generalize it to the entire of population.

Since only a part of population would be taken, a purposive sampling was used to select the sample of this research. Purposive sampling, also known as judgmental sampling, was used to select sample elements judged to be representative of the population (Ary, 2010: 156). It was a kind of non-probability sampling in which the researcher would deliberately choose subjects that have particular characteristics relevant to the research. Thus, purposive sampling is a way to select subjects according to a certain consideration. The main consideration used in this research was the selected classes with homogeneous vocabulary mastery level. Briefly, the students chosen to be samples have average proficiency in vocabulary.

**3. Sample**

Sample is part of population who would take a part in the current study. According to Cresswell (2012: 142), sample is sub set of the target population. Furthermore, sample is the group which the information is gained (Fraenkel and Wallen, 2006: 92). In conclusion, sample is a small part selected from the larger group (population) who would be the subject of study.

The sample of this study were selected by using purposive sampling. Therefore, two classes were selected by applying certain criterion in which both of them are normal or have similar average proficiency in vocabulary. According to the criterion above, the sample of this study were the students of VII-D as experimental group which consisted of 32 students and VII-E as the control group which consisted of 31 students at SMPN 1 Besuki Tulungagung. To prove whether the two classes above have similar average proficiency, their English scores gained from mid-term test were calculated through Independent Sample T-test in SPSS 24.0.

**Table 3.2: The Result of Independent Sample T-test**

**Independent Samples Test**

| | | Levene's Test for Equality of Variances | | t-test for Equality of Means | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | 95% Confidence Interval of the Difference | |
| | | F | Sig. | t | df | Sig. (2-tailed) | Mean Difference | Std. Error Difference | Lower | Upper |
| SCORES | Equal variances assumed | ,057 | ,812 | 1,842 | 61 | ,070 | 2,572 | 1,396 | -,221 | 5,364 |
| | Equal variances not assumed | | | 1,840 | 60,627 | ,071 | 2,572 | 1,397 | -,223 | 5,366 |

**Group Statistics**

| | GROUP | N | Mean | Std. Deviation | Std. Error Mean |
|---|---|---|---|---|---|
| SCORES | VII-D | 32 | 81,28 | 5,413 | ,957 |
| | VII-E | 31 | 78,71 | 5,670 | 1,018 |

The table above showed that the Sig (2-tailed) value was 0.070 which was bigger than the standard significant of education (0.070 > 0.050). It means that the Null hypothesis which said that there was no significant different score between the students of VII-D and VII-E was not rejected. Briefly, it could be said that the two classes above had similar average proficiency in English.

**Table 3.3: The Distribution of the Treatment**

| Group | Class | Number of Student | Treatment |
|---|---|---|---|
| Experimental | VII-D | 32 | Vocab Game "Scavenger Hunt" |
| Control | VII-E | 31 | Conventional Method |

Based on the table 3.3, the treatment by using Scavenger Hunt Game was given only to the experimental group in teaching vocabulary. While for the control group were given the same materials of vocabulary without using Scavenger Hunt Game. In addition, a lesson plan for each meeting and several activities were made based on the school curriculum.

## C. Data and Data Source

Fraenkel and Wallen (2005: 112) stated that data is the kinds of information obtained by the researcher on the subject of the research. While Arikunto (2013: 161) emphasized that data source is the subject where the data could be obtained. The data of this study were collected from the students' scores taken from post-test of both classes to know whether the usage of Scavenger Hunt Game was effective as media to improve students' vocabulary mastery. In addition, the data were in the form of scores/numbers and it belonged to quantitative data. While the data source of this study was the students' works in administering post-test.

## D. Research Variable

Based on the statement from Frankel and Wallen (2006: 40) variable is a noun that represents a variation within a class of subject such as gender,

motivation, color, chair, achievement, eye, or running speed. According to the definitions above, variable is object or problem which emphasized in research that researcher would focus on.

According to the title of this research, there were two variables:

1. **Independent Variable (X)**

   Independent variable is variable that affects or influences another variable. It can appear or exist by itself without any other support. In this research, the independent variable was Scavenger Hunt Game because it affects students' vocabulary mastery.

2. **Dependent Variable (Y)**

   Dependent variable is a variable influenced by independent variable. The dependent variable of this research was students' vocabulary mastery.

## E. Research Instrument

Instrument was used to obtain and collect the data in every research. The function of an instrument was to measure individual's achievement, observe behavior, assess ability, or interview a person (Creswell, 2008: 5). Since it was a quantitative research, instrument was an essential thing as the soul of the research. As stated by Sugiyono (2013) that instrument is a device used to observe and measure in order to result quantitative data. Briefly, a research is impossible to be organized without instrument.

A vocabulary test was applied as the instrument to obtain the data of this research. According to Arikunto (2013: 266) test is procedure or tool used to know or measure something in a condition in which the ways and the rules

are determined. Furthermore, the type of test used was objective test. Burhan (2014: 117) pointed out that objective test is a test with short answers by choosing particular code given which is representing an alternative answer. In addition, the objective test used in this research was in the form of multiple choice question in which students only required to select one of short answers provided. The test was administered at the end of the meeting as post-test after the treatments completed. It was given to both experimental and control class to find out the final score of vocabulary after being taught by Scavenger Hunt Game.

The test specification for post-test could be seen in table below:

**Table 3.4 Test Specification and Distribution of Questions**

| Material | Number of question | Total |
|---|---|---|
| The name and number of things in the classroom and house | 1, 2, 7, 8, 9, 10, 11, 21, 22 | 9 items |
| The name and number of animals | 3, 4, 12, 13, 14, 25 | 6 items |
| The name and number of public places | 15, 16, 17, 23, 24 | 5 items |
| The use of article | 5, 6, 18, 19, 20 | 5 items |

As stated earlier that this research was focused on vocabulary mastery especially noun. The table above showed that there were 25 number of questions consisted of four materials related to noun such as; the name and number of things, animals, public places, and the use of articles. The questions related to state the things consisted of 9 numbers, while questions related to state animals consisted of 6 numbers, and questions related to state public places consisted of 5 numbers. Furthermore, there were 5 numbers of question

about the use of articles related to the three materials which had been mentioned earlier.

## F. Validity and Reliability Testing

### 1. Validity Testing

According to Fraenkel and Wallen (2005), valid instrument is an instrument that measure what it is supposed to measure. In addition, Ary et al (2010: 225) stated that validity is the standard to which as instrument measured what it is supposed to measure.

In this research, to find out whether the instrument has a good validity, the researcher used three kinds of validities. They are face validity, construct validity, and content validity. The definition of those kinds of validity could be seen below:

#### a. Face Validity

Face validity is defined as subjective measurement. Henning (1987: 192) stated that face validity is the subjective impression of how well an instrument and its format fulfills the purpose of measurement. Usually, it was on the part of examinees.

#### b. Construct Validity

According to the statement from Heaton (1975: 159), construct validity of test is test which is capable to measure particular characteristics based on theory of learning and language behavior. A test, part of a test, or a testing technique is said to have construct validity

if it could be presented to measure the skill or ability which has to be measured.

Since this research was aimed to test vocabulary mastery, the instrument of this research was constructed based on the appropriate theory of vocabulary to qualify the construct validity. According to Heaton (1988), there are several ways to test vocabulary such as by using multiple choice items, matching items and completion items.

From the statement above, the researcher constructed the instrument (test of vocabulary) in the form of multiple choice question. It was chosen due to several reasons such as; multiple choice question has wider range of material, higher level of validity and reliability compared to essay questions. Besides, the teacher/researcher could measure various cognitive domains by using multiple choice question (Yuniar et. al., 2015: 189). Furthermore, according to Putra (2013: 233) multiple choice is more flexible and effective. It covers almost all materials, easy to be corrected and assessed. Therefore, multiple choice question is suitable used to test students' vocabulary mastery in this research.

After being constructed based on vocabulary theories, the instrument was firstly consulted to the English teacher of SMPN 1 Besuki Tulungagung. Then, it was consulted to the expert, one of English lecturers at IAIN Tulungagung was selected that was Dr. Dwi Astuti Wahyu as the advisor of this research to check the test out.

Finally, it was tried out to other students of seventh-grade of SMPN 1 Besuki Tulungagung which have similar average proficiency of vocabulary. Here, the researcher chose the VII-C class to try the test items out.

**c. Content Validity**

Content validity is related to the actual content of test. According to Isnawati (2017: 27), instrument is said to had content validity if it represented the language skills being tested. It means that the instrument or test must be based on standard competency and basic competency of school according to the English curriculum of seventh grade students. The test must considered to represent the subject area being covered. In addition, if the test did not measure what students was supposed to learn, the score of test could not reflect students' achievement accurately (Gay, 1992: 156). Therefore, the vocabulary test must be created by items which test vocabulary knowledge. In addition, content validity is the suitability between the curriculum objectives and the objective being tested.

The researcher made the test according to the course objective in the syllabus of English Course for the $7^{th}$ grade of Junior High School used by SMPN 1 Besuki Tulungagung. It presented that the basic competence was about; giving and asking information related to the name and number of animals, things, and public places. This competence focused on the vocabulary building especially about noun.

Thus, the vocabulary test used as the instrument of this research contained the appropriate vocabulary materials such as name and number of animals, things, and public places.

The basic competence and indicators of English course for the 7th grade students was presented in the table below:

**Table 3.5: Basic Competence and Indicator**

| | |
|---|---|
| Basic Competence | 3.4 Giving and asking information related to name and number of animals, things, and public places. |
| Indicator | - Mentioning the name and number of things in the classroom and house<br>- Mentioning the name and number of animals<br>- Mentioning the name and number of public places<br>- The use of article (addition) |
| Technique | Objective test |
| Instrument | Post-test |

According to the table 3.5, the vocabulary test used by researcher as the instrument of the study was called valid in the term of content because it has equal purpose with the basic competence and indicator of K-13 syllabus which tested students' vocabulary mastery.

**2. Reliability Testing**

Brown (1996: 185) stated that the instrument of research should give the same result every time it measured and should be practical to use. Reliability is the consistency of measurement. A test is called reliable if it is dependable and consistent. It means that the test would give consistent result whenever it is administered. To know the reliability of the

instrument, the researcher tried the test out to the other class of seventh-grade students. The try-out was assigned in the second week for VII-C students which have similar proficiency of vocabulary with the two classes before through Google Form. This class was selected after having consultation with the English teacher.

Finally, Spearman Brown formula in SPSS 24.0 for windows was used to find out the reliability of the test. The result of computation then was compared with the table below to see its reliability level. Ridwan (2004) proposed the criteria of reliability as shown below:

**Table 3.6: Criteria of Test Reliability**

| No. | Score | Criteria |
|---|---|---|
| 1. | If the *Alpha Cronbach* score 0.00 – 0.20 | Less Reliable |
| 2. | If the *Alpha Cronbach* score 0.21 – 0.40 | Rather Reliable |
| 3. | If the *Alpha Cronbach* score 0.41 – 0.60 | Enough Reliable |
| 4. | If the *Alpha Cronbach* score 0.61 – 0.80 | Reliable |
| 5. | If the *Alpha Cronbach* score 0.81 – 1.00 | Very Reliable |

The computation result from SPSS 24 for reliability testing could be seen on the table:

**Table 3.7 The Result of Reliability Testing**

**Case Processing Summary**

| | | N | % |
|---|---|---|---|
| Cases | Valid | 32 | 100,0 |
| | Excluded[a] | 0 | ,0 |
| | Total | 32 | 100,0 |

a. Listwise deletion based on all variables in the procedure.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| ,873 | 25 |

To find out whether the instrument was reliable, it could be seen from the Cronbach's Alpha column. The table 3.7 above showed that the Cronbach's Alpha was 0.873. According to the table of reliability level presented earlier, it means that the instrument used by the researcher was very reliable. In conclusion, the instrument could be used in post-test to measure students' vocabulary mastery.

Besides functioning to check the reliability of instrument, by trying the test out the researcher could know the difficulty level of test items. It was used in order to find which test items should be revised and which items should be used in post-test. It should be revised to the better one if the test items were too easy or too difficult. The formula used to determine the difficulty level of test item was *Item Facility (IF)*, as stated by Arikunto (2015: 225) that it was a statistical index to examine the percentage of

students who correctly answer an item given. The formula could be seen as follows:

$$\textbf{IF} = \frac{\textbf{N correct}}{\textbf{N total}}$$

Where

IF : Item Facility

N correct : the number of students who correctly answered a certain item

N total : the total number of students who took the test

The criteria of difficulty level could be seen on the table below:

**Table 3.8 Level of Difficulty**

| | |
|---|---|
| 0,00 < IF ≤ 0,30 | Difficult |
| 0,30 < IF ≤ 0,70 | Moderate |
| 0,70 < IF ≤ 1,00 | Easy |

*Source: Arikunto (2015: 225)*

The result of the calculation presented on the table below:

**Table 3.9 IF Result for Level of Difficulty**

| Item | IF | Level | Item | IF | Level | Item | IF | Level |
|---|---|---|---|---|---|---|---|---|
| 1 | 0,80 | Easy | 10 | 0,50 | Moderate | 19 | 0,50 | Moderate |
| 2 | 0,50 | Moderate | 11 | 0,70 | Easy | 20 | 0,80 | Easy |
| 3 | 0,80 | Easy | 12 | 0,80 | Easy | 21 | 0,70 | Moderate |
| 4 | 0,90 | Easy | 13 | 0,50 | Moderate | 22 | 0,50 | Moderate |
| 5 | 0,30 | Moderate | 14 | 0,90 | Easy | 23 | 0,80 | Easy |
| 6 | 0,60 | Moderate | 15 | 0,70 | Easy | 24 | 0,70 | Easy |
| 7 | 0,50 | Moderate | 16 | 0,90 | Easy | 25 | 0,30 | Difficult |
| 8 | 0,60 | Moderate | 17 | 0,50 | Moderate | | | |
| 9 | 0,90 | Easy | 18 | 0,20 | Difficult | | | |

From the table of IF result above, it was found that there were several level of test item according to the difficulty level; easy, moderate, and difficult. Since there was no too-easy and too-difficult item, all of the test items above could be used in post-test with no revision required.

## G. Normality and Homogeneity Testing

Normality and homogeneity testing are one of pre-requirement tests used for analyzing data in an independent sample t-test to know whether the data has been normally distributed and there is any difference variance between the two groups selected. The definitions of normality and homogeneity testing are shown below:

### 1. Normality Testing

Normality testing was used to determine whether the data were normally distributed . *Kolmogorov-Smirnove test* with SPSS 24.0 was used in this research to know the normality of large sample.

### 2. Homogeneity Testing

Homogeneity testing was used to ensure that the data manipulation collected is firmly obtained from completely different populations. In this research, the researcher used T-test of Homogeneity of Variances with SPSS 24.0 to test the homogenity.

## H. Procedure of the Research

Procedure of the research tells about how the research was conducted. It showed the steps completed by the researcher. In this research, all the steps were done online through WhatsApp Group. The treatment by using Scavenger Hunt Game was applied only to the experimental group. While the control group was taught by using conventional treatment. It was administered four meetings completed with post-test. The treatment was given before conducting post-test. Finally, the post-test was administered on the last meeting via Google Form. Briefly, the schedule which presented the procedure of this research could be seen on the table below:

**Table 3.10 Research Schedule**

| No | Group | Meeting | Date | Time | Activity |
|---|---|---|---|---|---|
| 1. | Experimental (VII-D) | 1 | Thursday, January 7th 2021 | 1-2 | Treatment 1 by Scavenger Hunt Game |
| | Control (VII-E) | | | | Treatment 1 by conventional method |
| 2. | Experimental (VII-D) | 2 | Thursday, January 14th 2021 | 1-2 | Treatment 2 by Scavenger Hunt Game |
| | Control (VII-E) | | | | Treatment 2 by conventional method |
| 3. | Experimental (VII-D) | 3 | Thursday, January 21st 2021 | 1-2 | Treatment 3 & 4 by Scavenger Hunt Game |
| | Control (VII-E) | | | | Treatment 3 & 4 by conventional method |
| 4. | Experimental (VII-D) | 4 | Thursday, January 28th 2021 | 1-2 | Post-test |
| | Control (VII-E) | | | | |

The treatment by using Scavenger Hunt Game was given only to VII-D students as the experimental group. While VII-E students as the control group was taught by using conventional method. In addition, the instrument was tried out to VII-C students on January 14th 2021. The more explanation about the procedure of the research was presented as follow:

**1. First meeting (January 7th 2021)**

Basically, Scavenger Hunt Game could be done either cooperatively in a team or individually. Since the school was still applying an online learning during this pandemic, students were asked to do it individually at their home through WhatsApp Group. Before starting the game, students were given a pre-vocabulary material as the opening, especially about the use of articles such as *a*, *an*, and *the*. Then, they were explained about the rules of playing the game. This game requires students to hunt or find certain vocabulary as much as possible during the time allocation based on the qualification given. Then, students who had the most numbers of correct vocabularies would win this game. In the first meeting, students were asked to hunt things in the classroom. Several clues used in the game could be seen as follow:

a. Something in pencil case
b. Something made of wood
c. Something electronic

While the control group were taught the same material by using conventional or common method.

**2. Second meeting (January 14th 2021)**

In the second meeting, students were given the same treatment which was Scavenger Hunt Game to learn and improve their vocabulary. Students were given the same type of question with different qualification. In this time, they were asked to find things in the house. Before starting the game, teacher/researcher explained briefly about the use between *there is* and *there are* in singular and plural form. Several qualifications given in the second meeting could be seen as follow:

a. Something need to be turn on
b. Something used for eating
c. Something noisy

**3. Third meeting (January 21st 2021)**

In the third meeting, students continued to conduct this game. Firstly, students were asked to hunt vocabularies related to the name of animals by using Scavenger Hunt Game. The qualifications were:

a. Something producing eggs
b. Something herbivore
c. Something smaller than your thumb

Second, students were asked to hunt vocabularies related to the name of public places with several qualifications such as:

a. Place for worship
b. Place you can find vehicles

**4. Fourth meeting (January 28th 2021)**

After the treatments was completed in the first until the third meeting, the researcher administered a post-test in the end of the meeting through Google Form to get the final result of students' vocabulary mastery after getting treatments. The vocabulary test was given to both experimental and control group.

## I. Data Collecting Method

Data collecting method is the method of obtaining the data. In other words, it shows the way the researcher collects the data. Data of this study were obtained by administering test. As mentioned earlier, the instrument used in this study was test. It was administered in the last meeting on January 28th 2021. The kind of test used in the research was:

**1. Post-test**

After getting the treatments, students of VII-D and VII-E administered a post-test to know their final score of vocabulary. Both experimental and control group were given the same questions as what had been tried out to VII-C students. The post-test items were in the form of multiple-choice questions related to vocabulary via Google Form. It consisted of 25 numbers of question with 50 minutes of time allocation.

## J. Data Analysis

Data analysis is the process to evaluate the collected data through logical and reasonable interpretation (Nurhayati, 2020). The aim of analyzing the data is to find the meaning so that the finding can be employed to make

reliable decision. After being collected, the data were analyzed to see the effectiveness of using Scavenger Hunt Game toward students' vocabulary mastery.

The data were divided into two groups, they were the test result of experimental group and the result of control group. The data were gained from the post-test of both experimental and control class. Then, it was statistically analyzed by using *Independent-Sample T-Test* through SPSS 24.0 for windows. The researcher used this kind of test to know whether the significant value was higher or smaller than 0.05. Since the data were in the form of number or score, the technique of data analysis for this study was belonged to quantitative data analysis.

## K. Hypothesis Testing

Based on theories and previous studies presented in the earlier chapter, the researcher predicted that Scavenger Hunt Game was effective to improve students' vocabulary mastery. It means that the mean score would differ significantly. Therefore, the alternative hypothesis of this study was "the mean of the experimental group was different from that of the control one" or it could be said as "there was significant difference score of vocabulary between students taught by using Scavenger Hunt Game and those taught by using conventional way". Then, the data were analyzed by comparing means of independent sample T-test. In T-test for independent samples, the F-test or Levene's test was done prior to the T-test. It was intended to know whether the

variances or standard deviations of the two groups are equal. Finally, the result of F-test would show the *P-value* which would be compared to the $\alpha = 0.05$. The table below presented the rules of hypothesis testing to decide whether the null hypothesis was accepted or rejected.

**Table 3.11 Hypothesis Testing Rules**

| | |
|---|---|
| If *P-value* < α | Null Hypothesis is rejected |
| If *P-value* > α | Null Hypothesis is not rejected |