

## CHAPTER IV

### DATA COLLECTION

#### A. Orientation of the Research Field

The orientation of the research field is done before data collection is carried out. The purpose of conducting the orientation of the research field is to know situations and conditions of an area in which data collection will be conducted. The orientation of the research field was done by surveying directly research location at MTs "X".

##### 1. Location, vision, and missions of MTs "X"

Madrasah Tsanawiyah "X" is an educational institution that it is located in Semarang Central Java. Status of MTs "X" is a private school under the department of religion. MTs "X" sets a vision "Forming Islamic generations who are brainy, skilled, *taqwa*, and *akhlakul Karimah*". Then, to clarify such vision, it is described in the following missions:

- a. Providing a qualified education in academic and non-academic achievement through intro- and extra-curricular activities.
- b. Providing a qualified education to an increase in faith and *taqwa* towards Allah SWT through charities of *sholeh* and religious activities.
- c. Developing scientific learning through experiments in nature.

- d. Developing speaking skills through active communication in learning of the language subject.
- e. Developing multimedia-based educational tools.
- f. Creating conditions that lead to an increase in faith and *taqwa* towards Allah SWT in religious activities.
- g. Developing representative educational tools that are based on multimedia.
- h. Developing students' intellectual potential, talents, and interests through extra-curricular activities.
- i. Developing cultures of tolerance, peace, critic, and democracy.
- j. Creating conditions that lead to habituation for students to have *akhlaqul karimah* and characteristics of *ahlussunnah wal jama'ah*.

## 2. Situations at MTs "X"

MTs "X" is an Islamic-based school, so that Islamic values are more emphasized in the school environment. The curriculum of MTs "X" follows the curriculum both from the Minister of Education and Culture, and the Department of Religion. So, there are 19 subjects consisting of 13 general subjects and 6 additional religious subjects.

Thirteen general subjects are Mathematics, Physical Education and Sports Health, Civic Education, English, Social Sciences, Integrated Social Sciences, Natural Sciences Physics, Integrated Natural Sciences, Javanese, Indonesian, Information and Communication Techniques, Art Culture Skills, and The School

Guidance. While six additional religious subjects are Ke-NU-an, *Qur'an Hadist, Aqeedah Akhlak, Fiqih*, Islamic History, Arabic.

There is an obligatory activity on memorizing some surah of *Asma'ul Husna, Tahlil, Yasin*, and Prays after doing *dhuha* and *tahajud* prayer as a requirement for students at MTs "X" to take school final exam. Also, several teachers oblige the students to memorize some hadith or some verses in Holy Qur'an as daily tests on religious subjects that as well is used as a requirement for the students to take midterm exams and final semester exams.

Therefore, reading and understanding *hija'iyah* letters is necessary for the students. it will make easier for the students to answer test questions on religious subjects. Some students said that having difficulty to read *hija'iyah* letters make them anxious in tests on religious subjects, especially on oral exams. In addition to that, they were confused to study a lot of subjects, so that they felt unable to master subject matters and worried about test results, hence, they felt anxious during testing.

The consideration why the researcher selected MTs "X" as the research location was:

- a. In the preceding interview, it was found that the ninth-grade students at MTs "X" experienced test anxiety, and this phenomenon is confirmed by the finding of Hu, Wu, and Cheng's research (2018) that

the ninth-grade students have greater test anxiety than do those of the seventh and the eighth grade.

- b. There has not been an investigation concerning the relationship between neuroticism, academic self-efficacy and test anxiety among the ninth-grade students at MTs “X”.
- c. The researcher obtained permission to conduct research at MTs “X”.
- d. The researcher is an alumna who wants to contribute in investigating the relationship between neuroticism, academic self-efficacy and test anxiety among the ninth-grade students at MTs “X”.

## **B. Preparation of Data Collection**

### **1. Administration of Data Collection**

The preparation of data collection was started from the administration of research permission, because the researcher was required to have research permission before conducting research. On 20<sup>th</sup> July, 2018, the researcher obtained research permission letter with no. 742/A.7.04/MP/VII/2018. By the research permission letter, the researcher was allowed by the head of madrasah at MTs “X” to conduct research and was given certificate of conducting research. Data collection was conducted twice, firstly, data collection for validity and reliability tests on research scales, and secondly for hypotheses testing. Attachment of the research permission letter can be seen in Appendix 1.

## 2. Arrangement of Instruments

The instruments in this research comprised of test anxiety scale, neuroticism scale, and academic self-efficacy scale. Test anxiety scale was compiled based on facets of test anxiety, neuroticism scale was taken from instrument of the Big Five Inventory (BFI) that has been adapted by Sulastri (2014) into Indonesian, and academic self-efficacy scale was compiled based on dimensions of academic self-efficacy.

### a. Test Anxiety Scale

There were 28 statement items on test anxiety scale that was compiled based on cognitive, affective and behavioral facets. Distribution of items on test anxiety scale can be seen in the following table:

**Table 4.**  
**The distribution of Items on Test Anxiety Scale**

No.	Facets of Test Anxiety	No. Favorable Items	No. Unfavorable Items	Total of Items
1.	Cognitive Facet:			
	- Worry	6,23	9,19	4
	- Self-Preoccupation	4,25	17,28	4
	- Cognitive Interference	18,27	5,10	4
2.	Affective Facet:			
	- Physical Reactions	7,24	13,20	4
	- Emotionality	3,26	11,16	4
3.	Behavioral Facet:			
	- Deficient Study and Test-Taking Skills.	12,15	2,22	4
	- Procrastination, Avoidance, Escape behaviors.	8,14	1,21	4
	Total	14	14	28

### b. Neuroticism Scale

Neuroticism scale in this research was taken from instrument of the Big Five Inventory (BFI) that has been adapted by Sulastrri (2014) into Indonesian. This scale has 8 items of neuroticism based on Costa and McCrae's theory.

### c. Academic Self-Efficacy Scale

There were 12 statement items on academic self-efficacy scale that was compiled based on dimensions of level, generality and strength. Distribution of items on academic self-efficacy scale can be seen in the following table:

**Table 5.**  
**The distribution of Items on Academic Self-Efficacy Scale**

No.	Dimensions of Self-Efficacy	No. Favorable Items	No. Unfavorable Items	Total of Items
1.	Level	6,9	3,11	4
2.	Generality	1,8	5,10	4
3.	Strength	4,12	2,7	4
	Total	6	6	12

## C. Implementation of Trial on the Instruments

### 1. The Trial on the Instruments

In the first phase, the research scales that have been compiled was tested its content validity by both supervisors as expert judgment. Expert judgment was conducted thrice (i.e., 14<sup>th</sup> of August 2018, 16<sup>th</sup>

of August 2018, and 20<sup>th</sup> of August 2018). In the second phase, the researcher did cognitive debriefing towards three junior high school students on 22<sup>nd</sup> of August, 2018, and two junior high school students on 23<sup>rd</sup> of August, 2018 in order to know whether items and instructions on the research scales can be understood easily by research subjects. Based on the result of cognitive debriefing, it was inferred that the research scales can be comprehended with ease by junior high school students, so no need to make changes towards the instruments.

After content validity test on the research scales by expert judgment and doing cognitive debriefing towards the five junior high school students, the researcher did trial on the research scales to test its validity and reliability. In this phase, the researcher came to respondents of trial into classrooms on 26<sup>th</sup> of August, 2018, and carried out trial by distributing the research scales to 36 the ninth-grade students of A class, 30 the ninth-grade students of B class, and 24 the ninth-grade students of E class. Total respondents of trial were as many as 90 the ninth-grade students. Respondents of trial were selected randomly based on the same characteristics of research sample.

## **2. Results of the Trial on the Instruments**

Validity coefficient of the trial on the Instruments in this research was  $\geq 0,174$  ( $N = 90$ ,  $df = N-2$ ). Items on the research scales were

declared eligible to measure the variables that would be investigated if the items have validity coefficient  $\geq 0,174$ . Instrument with reliability coefficient in the range  $0,700 - 0,900$  has good reliability, and instrument with reliability coefficient  $> 0,900$  is stated to have excellent reliability.

#### **a. Validity and Reliability Test on Test Anxiety Scale**

The result of validity test towards 28 items on test anxiety scale was 17 valid items and 11 invalid items after re-calculating thrice. Validity coefficient of 11 invalid items was  $< 0,174$ , while validity coefficient of 17 valid items was in the range  $0,207 - 0,484$  with significance level of 0,05. Reliability coefficient of this scale was 0,748 which implied that this scale has good reliability and can be used for research. Valid and invalid items on test anxiety scale can be seen in Table 6.

#### **b. Checking reliability on Neuroticism Scale**

Calculation of reliability coefficient was done to check the consistency of neuroticism instrument on the Big Five Inventory (BFI) in Indonesian version. Reliability of neuroticism on the Big Five Inventory (BFI) in Sulastri's study (2014) was 0,80, while reliability of neuroticism after the trial on the instruments was 0,745 and all items on neuroticism scale were valid. Based on the result of calculation, neuroticism scale on the Big Five Inventory (BFI) in

Indonesian version (Sulastri, 2014) can be used as instrument of neuroticism in this research, because it has good reliability.

**Table 6.**  
**Valid and Invalid Items on Test Anxiety Scale**

No.	Facets of Test Anxiety	No. Favorable Items	No. Unfavorable Items	Total of Valid Items
1.	Cognitive Facet:			
	- Worry	6*,23	9*,19	2
	- Self-Preoccupation	4,25	17*,28	3
	- Cognitive Interference	18,27	5*,10	3
2.	Affective Facet:			
	- Physical Reactions	7,24	13*,20*	2
	- Emotionality	3,26	11*,16*	2
3.	Behavioral Facet:			
	- Deficient Study and Test-Taking Skills.	12,15	2*,22	3
	- Procrastination, Avoidance, Escape behaviors.	8*,14	1*,21	2
	Total of valid items	12	5	17

Note : (...\*) is invalid items.

### c. Validity and Reliability Test on Academic Self-Efficacy Scale

The result of validity test towards 12 items on academic self-efficacy scale was 11 valid items and 1 invalid item after re-calculating twice. Validity coefficient of 1 invalid item was  $< 0,174$ , and validity coefficient of 11 valid items was in the range  $0,239 - 0,559$  with significance level of  $0,05$ . Reliability coefficient of this scale was  $0,767$  which implied that this scale has good

reliability and can be used for research. Valid and invalid items on academic self-efficacy scale can be seen in the following table:

**Table 7.**

**Valid and Invalid Items on Academic Self-Efficacy Scale**

No.	Dimensions of Academic Self-Efficacy	No. Favorable Items	No. Unfavorable Items	Total of Valid Items
1.	Level	6,9	3*,11	3
2.	Generality	1,8	5,10	4
3.	Strength	4,12	2,7	4
Total of Valid Items		6	5	11

Note : (...\*) is an invalid item.

**d. Distribution of the Research Scale**

The research scale that was distributed to the research subjects consisted of 17 items of test anxiety scale, 8 items of neuroticism scale, and 11 items of academic self-efficacy scales. Items from all scales have fulfilled validity coefficient and reliability coefficient of the instruments. This means that those statement items on all scales are good for being used in research. Attachment of distribution on each scale can be seen in Appendix 4. Distributions of items on academic self-efficacy scale can be seen in Table 9, and test anxiety scale in the following table:

**Table 8.**  
**The Distribution of Test Anxiety Scale**

No.	Facets of Test Anxiety	No. Favorable Items	No. Unfavorable Items	Total
1.	Cognitive Facet:			
	- Worry	10	8	2
	- Self-Preoccupation	2,12	15	3
	- Cognitive Interference	7,14	4	3
2.	Affective Facet:			
	- Physical Reactions	3,11	-	2
	- Emotionality	1,13	-	2
3.	Behavioral Facet:			
	- Deficient Study and Test-Taking Skills.	16,6	9	3
	- Procrastination, Avoidance, Escape behaviors.	5	17	2
	<b>Total</b>	<b>12</b>	<b>5</b>	<b>17</b>

#### **D. Implementation of Data Collection**

Data collection was conducted twice on 3<sup>rd</sup> of September, 2018 and 6<sup>th</sup> of September, 2018. Subjects in the current research were the ninth-grade students at MTs NU Nurul Huda Semarang selected using cluster random sampling technique. The number of samples in this research were 102 the ninth-grade students, that is 35 the ninth-grade students from C class, 32 the ninth-grade students from D class and 35 the ninth-grade students from F class.

Data collection was done by the researcher herself. The researcher came to the research subjects into classrooms, explained instructions

directly to them, and distributed the research scales to them. Research was conducted in two day, that is data collection on 3<sup>rd</sup> of September, 2018 in F class at 10.25 a.m. by distributing 35 the research scales and C class at 12.20 p.m. by distributing 35 the research scales, and on 6<sup>th</sup> of September, 2018 in D class at 10.25 a.m. by distributing 32 the research scales. Implementation of data collection went well, inasmuch as the researcher did not face any obstacle in carrying out data collection.

**Table 9.**  
**The Distribution of Academic Self-Efficacy Scale**

No.	Dimensions of Academic Self-Efficacy	No. Favorable Items	No. Unfavorable Items	Total
1.	Level	5,8	10	3
2.	Generality	1,7	4,9	4
3.	Strength	3,11	2,6	4
	Total	6	5	11