CHAPTER III METHODOLOGY OF RESEARCH

A. Method of Research

1. Type of Research

This research is a field research that is the design of research that combines literature study and survey based on experience and/or case study where researcher tries to identify significant variables and correlation among these variables in a situation of certain problems. While the approach of analysis in this study is a quantitative approach that is a research that emphasizes the analysis on numerical data which processed with statistical methods. With quantitative methods will be obtained group significance differences or significance relationship between the variables studied.

2. Variable of Research

The research variables are anything that is defined by the researchers to study in order to obtain information about it, then drawn the conclusions. Theoretically variable can be defined as an attribute of a person or an object that has a

¹ Jonathan Sarwono, *Metode Penelitian Kuantitatif dan Kualitatif*, Yogyakarta: Graha Ilmu, 2006, p. 82

² Saifuddin Azwar, *Metode Penelitian*, Yogyakarta: Pustaka Pelajar, 1998, p. 5

variation from one person to another or one object with another object.³

In this study the variables are divided into two kinds as follows:

- Independent Variable: The students of Tasawuf and Psychotherapy department and the students of Non-Tasawuf and Psychotherapy Department of Ushuluddin and Humaniora Faculty.
- 2. Dependent Variable: Transcendental intelligence.

3. Operational Definition

A scientific research requires operational limitations to the variables used in the study. Then the operational definition of variables in this study are:

 Student of Tasawuf Psychotherapy and Non-Tasawuf and Psychotherapy Department.

Students of Tasawuf and Psychotherapy are active and registered students of Tasawuf and Psychotherapy Department of Ushuluddin and Humaniora Faculty in UIN Walisongo, while the students of Non-Tasawuf and Psychotherapy Department are active and registered students of the Ushuluddin and Humaniora Faculty of UIN Walisongo other than Tasawuf and Psychotherapy students. The student could be from Tafsir Hadith

³ Sugiyono, *Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi (Mixed Methods)*, Bandung: CV. Alfabeta, 2013, p. 63

Department, Aqidah and Filsafat Department, or Comparative Religion Department.

b. Transcendental Intelligence

Transcendental intelligence is the ability to listen to divine conscience or truth prompting in taking decision or conducting choices, having empathy and adapting. Therefore, spiritual intelligence is largely determined by the effort to purify hearts (*tazkiyyah*) thus giving advice and direction of action and how to make decisions. Transcendental intelligence in this study is based on theories of transcendental intelligence by Toto Tasmara which consists of several aspects as follows:

- 1. Have a vision
- 2. Feel the presence of God
- 3. Dhikr and pray
- 4. Has the quality of patient
- 5. Tend to goodness
- 6. Have empathy
- 7. Have a great heart
- 8. Happy to serve

4. Technique of Collecting Data

In quantitative research, the instrument is used in collecting data by measuring the value of the variables studied. Some research instruments already standardized but some instruments need to be arranged. In this study,

researchers used a Likert scale. Likert scale is used to measure attitudes, opinions, and perceptions of a person or a group of social phenomenon. In research, this social phenomenon has been established specifically by researchers, hereinafter referred to as the study variables.⁴ As in this study the scale used is transcendental intelligence scale based on the theory of transcendental intelligence by Toto Tasmara compiled by the researcher himself.

The response categories used in this scale is as follows:

Answers	Favorable Scores	Unfavorable Scores	
Strongly Agree	4	1	
Agree	3	2	
Disagree	2	3	
Strongly Disagree	1	4	

Table 1: Score of Likert Scale

Favorable is a statement that contains or say things that are positive about the object's attitude, that the sentence is supportive or siding with the object attitudes. On the contrary, is unfavorable, the statement containing the negative things that does not support or counter the object's attitude about to be revealed.⁵

⁴ Sugiyono, Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi (Mixed Methods), p. 136

⁵ Saifuddin Azwar, *Sikap Manusia Teori dan Pengukurannya*, *Ed.* 2, Yogyakarta: Pustaka Pelajar, 2009, p. 107

The following is the blueprint of the transcendental intelligence scale refers to definition argued by Toto Tasmara:

Table 2: Points of Instrument Scale

NT.	A	Indicators		Items		T . 4
No	Aspects		indicators	Favorable	Unfavorable	Tot
1.	Have vision	a.	Living with sense of responsibility as	1, 3*, 4, 8	7*	5
		b.	creature of God. Have a view of himself in the future and an attempt to	2, 11*	12	3
		c.	realize it. Make <i>riḍā</i> of Allah as a life goal.	6, 9, 10	5	4
2.	Feel the	a.	Believes that	13*, 14, 19	17	4
	presence of God	b.	he/she is always in the supervision of Allah. Always feel calm in a state of joy and sorrow, busy and leisure because feeling him/herself in the blessing of Allah	15, 18	16, 20	4
3.	Dhikr and pray	a.	Always perform <i>dhikr</i> to Allah in every moment.	22, 25, 28	-	3
		b.	Humbleness in prayer.	21, 24, 29*	23, 31	5
		c.	Optimistic that Allah would grant his/her prayer.	-	26*, 27, 30*	3
4.	Has the quality	a.	Has a strong fortitude in	36	34, 39*, 40*	4

No	Aspects Indicators		It	Tot		
110	Aspects		indicators	Favorable	Unfavorable	101
	of patient		accepting trials and tests given by Allah.	25 20 41	12:	
		b.	Self-control in facing any pressure.	35, 38, 41	43*	4
5.	Tend to goodnes s	a.	Always strive to implement the obligations as well as possible.	37, 42*, 44	32*, 33	5
6.	Have empathy	a.	Be able to understand and feel what is experienced, performed and suffered by others.	48, 49, 56	52*	4
		b.	Be able to give a good response to what others feel.	47, 51*, 54, 55	-	4
7.	Have a great heart	a.	Be able to forgive the mistakes made by others against him without leaving resentment.	46	45*, 50*, 53*	4
8.	Happy to serve	a.	Feel please to be able to help others.	58, 62*	59	3
		b.	Be aware that his/her presence tended to give meaning to others and the environment.	57*, 60	61	3

^{*}Item invalid

B. Subject of Research

The subject of research is a major source of research data that have data on the variables being studied and will be subject to the conclusion from the results of the study.

a. Population

Population is the generalization region consisting of objects or subjects that have a certain quantity and characteristics defined by the researchers to study and then drawn the conclusions. As for the population in this study were all students of the Faculty of Ushuluddin and Humaniora of UIN Walisongo Semarang period 2013, with the number of students 294 consisting of 50 students from the Akidah Filsafat Department, 146 students of Tafsir Hadith Department, 19 students of the Perbandingan Agama Department, and 58 students of Tasawuf and Psychotherapy Department.

b. Sample

Sample according to Sugiyono is part of the number and characteristics possessed by the population. What is learned from the sample, the conclusion will be applied to the population. Samples taken from the population should be representative that truly reflect the population.⁷ In the

⁶ Sugiyono, *Statistik untuk Penelitian*, Bandung: CV. Alfabeta, 2007, p. 61

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⁷ Sugiyono, *Metode Penelitian Pendidikan; Pendekatan Kuantitatif, Kualitatif, dan R&D*, Bandung: Alfabeta, 2008, p. 62

sampling should use more appropriate ways and scientifically accountable. In the study if the subject is less than 100 better taken all so that the research is population research. However, if the number of subject is large, it can be taken between 10-15% or 20-25% or more.⁸

In this study, the sampling technique used is simple random sampling, which is random sampling without regarding to the strata that exist in the population.

C. Method of Instrument Analysis

1. Validity Test

According Sugiono, valid Instrument means the measuring instruments used to obtain data (measures) is valid. Valid means the instrument can be used to measure what should be measured.⁹

While according to Azwar, validity means how far is the precision and accuracy of a measuring instrument in doing measuring function. The test instrument can be said to have high validity if the instrument is running the measuring function, or provide consistent measuring results with the intent of these measurements. ¹⁰

⁹ Sugiono, Metode Penelitian Kuantitatif, Kualitatif, dan Kombinasi (Mixed Methods), op. cit., p. 168.

⁸ Suharsimi Arikunto, *Prosedur Penelitian: Suatu Pendekatan Praktik*, Jakarta: PT. Melton Putra, 1991, p. 107

¹⁰ Saefudin Azwar, *Reliabilitas dan Validitas*, Yogyakarta: Pustaka Pelajar Offset, 1997, p. 5

The validity test of the instrument is done by testing this instrument to 50 students of Ushuluddin and Humaniora Faculty of UIN Walisongo on May 16, 2016. The analysis of the validity of each item is done by using Pearson product moment correlation and the calculations is using SPSS 16.0 program.

Based on the validity test conducted on 62 items at the significance 0.05 obtained 19 invalid item those are item number 3, 7, 11, 13, 26, 29, 30, 32, 39, 40, 42, 43, 45, 50, 51, 52, 53, 57, and 62, while 43 other items are valid. The correlation coefficient of invalid items ranges from -0187 up to 0270, while the correlation coefficient of valid items ranges from 0.284 up to 0.596.

2. Reliability Test

Reliability is generally defined as the consistency of the measurement results of the same thing if done in the context of a different time. Reliability refers to the consistency and stability of the measurement results whenever certain measurements performed on the same thing. An instrument is said to be reliable if the instrument is used several times to measure the same object would generate the same data.

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Jonathan Sarwono, Metode Riset Skripsi Pendekatan Kuantitatif (Menggunakan Prosedur SPSS), Jakarta: PT Elex Media Komputindo, 2012, p. 84

Items that have been proven valid further tested the reliability using Chronbach's Alpha formula and calculated by using SPSS 16.00. The scale is declared reliable if the first, Chronbach's Alpha value is positive and should not be negative. Second, Chrobach's Alpha calculation result value equal to or greater than 0.8. Reliability test results of Cronbach's Alpha by using SPSS 16.00 program are as follows:

Table 3: Result of Instrument Reliability Analysis

Reliability Statistics		
Cronbach's Alpha	N of Items	
.901	43	

From the above table it is known that the instrument reliability test results of Chronbach's Alpha is 0.901, which means that the scale of is declared as reliable instrument.

3. Data Analysis

Once the instrument is valid and reliable then can be used to research the subject. After accumulating the data of the subject, the data will be analyzed to test the hypothesis. Analysis of the data used in this study is a statistical analysis. Statistical analysis is used because statistics is a scientific method that is prepared to collect, organize, present, and analyze data in form of numbers, besides the

¹² *Ibid.*, p. 86

statistics are objective and universal in the sense that it can be used in almost all fields of study.

The methods of data analysis in hypothesis testing will be used in this research is T-test analysis with the help of SPSS 16:00 program. T test is a method used to determine whether the means of two groups are statistically different from each other. ¹³

¹³ Jonathan Sarwono, Metode Riset Skripsi Pendekatan Kuantitatif (Menggunakan Prosedur SPSS), op. cit., p. 150