# CHAPTER IV

# DATA COLLECTION AND DATA PROCESSING

This chapter describes the data collection and processing that used in this study. This step begins with a validation test of the reliability test questionnaire items. Furthermore, data collection and processing are carried out using AMOS software.

## 4.1. Questionnaire Test

Test item questionnaire is a step used to determine the validity of the statement that will be submitted to the respondent. In this test there are 43 data were obtained from the number of respondents who had answered. In Table 4.1 shows the data used in this test.

Table 4. 1 Respondent Data

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 2 | 3 | 2 | 4 | 4 | 3 | 4 | 2 | 3 | 3 | 4 | 4 |
| **2** | 3 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **3** | 5 | 5 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 |
| **4** | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 |
| **5** | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 4 |
| **6** | 5 | 5 | 4 | 2 | 2 | 2 | 2 | 5 | 5 | 5 | 4 | 3 |
| **7** | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **8** | 2 | 3 | 2 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 |
| **9** | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 4 | 3 | 4 | 4 |
| **10** | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 4 |
| **11** | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 |
| **12** | 5 | 4 | 5 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **13** | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| **14** | 4 | 3 | 5 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| **15** | 4 | 2 | 4 | 3 | 2 | 5 | 5 | 4 | 4 | 4 | 4 | 3 |
| **16** | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 5 | 5 |
| **17** | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **18** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| **19** | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 5 | 4 | 4 | 3 | 3 |
| **20** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 3 | 3 |
| **21** | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 3 |
| **22** | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5 | 5 |
| **23** | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 |
| **24** | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| **25** | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 |
| **26** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **27** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **28** | 4 | 4 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 |
| **29** | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **30** | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **31** | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 |
| **32** | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 |
| **33** | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 |
| **34** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 |
| **35** | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| **36** | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| **37** | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 3 |
| **38** | 2 | 3 | 3 | 5 | 1 | 3 | 1 | 1 | 4 | 4 | 1 | 2 |
| **39** | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 |
| **40** | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 2 |
| **41** | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 |
| **42** | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 |
| **43** | 2 | 4 | 3 | 1 | 1 | 4 | 5 | 2 | 2 | 3 | 3 | 3 |

From the 116 data obtained from these respondents, then validity testing, and also reliability testing will be performed. The minimum requirements used in testing are 30 respondents (Ghozali, 2014).

### 4.1.1 Validity Testing

This test is done to find out the validity of the statement. Questionnaires that have been distributed to respondents were tested using SPSS software. If there is an invalid statement, then it will be corrected. The intended improvement is in the form of a statement or omitting the statement. Table 4.2 is the result of the validity test that has been carried out.

Table 4. 2 Validity Test

| | | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| EK1 | Pearson Correlation | 1 | .628** | .662** | .184 | .302* | .062 | .059 | .126 | .154 | .048 | .332* | .209 | .536** |
| | Sig. (2-tailed) | | .000 | .000 | .238 | .049 | .691 | .708 | .422 | .324 | .762 | .030 | .178 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| EK2 | Pearson Correlation | .628** | 1 | .512** | .078 | .157 | -.047 | -.098 | -.076 | -.033 | .059 | .222 | .296 | .370* |
| | Sig. (2-tailed) | .000 | | .000 | .618 | .316 | .766 | .533 | .628 | .832 | .708 | .153 | .054 | .015 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| EK3 | Pearson Correlation | .662** | .512** | 1 | .187 | .149 | .204 | .144 | .127 | .237 | .210 | .246 | .256 | .551** |
| | Sig. (2-tailed) | .000 | .000 | | .231 | .341 | .189 | .357 | .416 | .126 | .177 | .112 | .098 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| EA1 | Pearson Correlation | .184 | .078 | .187 | 1 | .676** | .500** | .378* | .043 | .404** | .312* | .241 | .365* | .633** |
| | Sig. (2-tailed) | .238 | .618 | .231 | | .000 | .001 | .012 | .782 | .007 | .042 | .120 | .016 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| EA2 | Pearson Correlation | .302* | .157 | .149 | .676** | 1 | .439** | .453** | .263 | .219 | .218 | .562** | .633** | .734** |
| | Sig. (2-tailed) | .049 | .316 | .341 | .000 | | .003 | .002 | .089 | .158 | .161 | .000 | .000 | .000 |

| | | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| ECK1 | Pearson Correlation | .062 | -.047 | .204 | .500** | .439** | 1 | .826** | .120 | .204 | .237 | .274 | .334* | .617** |
| | Sig. (2-tailed) | .691 | .766 | .189 | .001 | .003 | | .000 | .442 | .190 | .126 | .075 | .029 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| ECK2 | Pearson Correlation | .059 | -.098 | .144 | .378* | .453** | .826** | 1 | .176 | .151 | .225 | .397** | .370* | .608** |
| | Sig. (2-tailed) | .708 | .533 | .357 | .012 | .002 | .000 | | .259 | .335 | .147 | .008 | .015 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| BE1 | Pearson Correlation | .126 | -.076 | .127 | .043 | .263 | .120 | .176 | 1 | .564** | .615** | .470** | .346* | .502** |
| | Sig. (2-tailed) | .422 | .628 | .416 | .782 | .089 | .442 | .259 | | .000 | .000 | .001 | .023 | .001 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| BE2 | Pearson Correlation | .154 | -.033 | .237 | .404** | .219 | .204 | .151 | .564** | 1 | .684** | .228 | .325* | .546** |
| | Sig. (2-tailed) | .324 | .832 | .126 | .007 | .158 | .190 | .335 | .000 | | .000 | .141 | .033 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| BE3 | Pearson Correlation | .048 | .059 | .210 | .312* | .218 | .237 | .225 | .615** | .684** | 1 | .310* | .369* | .565** |
| | Sig. (2-tailed) | .762 | .708 | .177 | .042 | .161 | .126 | .147 | .000 | .000 | | .043 | .015 | .000 |

| | | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 | TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| BT1 | Pearson Correlation | .332* | .222 | .246 | .241 | .562** | .274 | .397** | .470** | .228 | .310* | 1 | .800** | .706** |
| | Sig. (2-tailed) | .030 | .153 | .112 | .120 | .000 | .075 | .008 | .001 | .141 | .043 | | .000 | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| BT2 | Pearson Correlation | .209 | .296 | .256 | .365* | .633** | .334* | .370* | .346* | .325* | .369* | .800** | 1 | .732** |
| | Sig. (2-tailed) | .178 | .054 | .098 | .016 | .000 | .029 | .015 | .023 | .033 | .015 | .000 | | .000 |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |
| TOTAL | Pearson Correlation | .536** | .370* | .551** | .633** | .734** | .617** | .608** | .502** | .546** | .565** | .706** | .732** | 1 |
| | Sig. (2-tailed) | .000 | .015 | .000 | .000 | .000 | .000 | .000 | .001 | .000 | .000 | .000 | .000 | |
| | N | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 | 43 |

2

From Table 4.2 it can be seen the calculated R value in the column Corrected Item-Total Correlation. To find out the validity or not the statement on the questionnaire is used how to compare the calculated R value with R table. To find out the value of R table is obtained from DF = N-2 with a probability of 0.05. Where N is the number of respondents used. Value of DF (43) or R table with a probability of 0.05 that is 0.301. From these calculations, it can be explained that R count> R table. From the results that have been tested, it can be concluded that all data is valid.

### 4.1.2 Reliability Testing

In addition to validity testing, there is another test that is required, namely reliability testing. Figure 4.1 is the result of the reliability test that has been carried out. Measurement can be said to be reliable if the measurements made produce the same data. Conversely, if the measurements made produce different data, then the measurements are not reliable.

**Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .829 | 12 |

Figure 4. 1 Reliability Testing

Reliability test results are shown by the Cronbach's Alpha column in Figure 4.1. For N of Item shows the number of indicators used in testing. The number of indicators used is 12. For the reliability test results of each indicator can be seen in Figure 4.1. To find out the value of R table is obtained from DF = N-2 with a probability of 0.05. The value of DF (43) or R table with a probability of 0.05 is 0.301. From these calculations, the results obtained are 0.829 which shows that R counts> R table. This means that the statements tested are reliable and can be used in research.

## 4.2 Data Retrieval

Data collection conducted in this study uses an online questionnaire in the form of google form. The data used in this study has been tested the validity of each item of statement. Questionnaires submitted to respondents totalled 12 statements. The number of respondents in this questionnaire amounted to 116 consumers who familiar or knew about Starbucks Coffee products. Characteristics and responses of respondents who filled out the questionnaire can be seen in Table 4.3 and Table 4.4.

Table 4. 3 Respondent Characteristic

| Variable | quantity | Percentage |
|---|---|---|
| **Gender** | | |
| Male | 41 | 35,3% |
| Female | 75 | 64,7% |
| **Age** | | |
| 17 - 20 yo | 14 | 12,1% |
| 21 - 24 yo | 100 | 86,2% |
| 25 - 28 yo | 1 | 0,9% |
| > 28 yo | 1 | 0,9% |
| **Occupation** | | |
| Job seeker | 6 | 5,2% |
| Employee | 4 | 3,4% |
| Student | 101 | 87,1% |
| teacher | 1 | 0,9% |
| Fresh graduate | 1 | 0,9% |
| entrepreneur | 3 | 2,6% |

Table 4. 4 Respondent Answer

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1** | 2 | 3 | 2 | 4 | 4 | 3 | 4 | 2 | 3 | 3 | 4 | 4 |
| **2** | 3 | 3 | 2 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **3** | 5 | 5 | 4 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 4 | 4 |
| **4** | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 |
| **5** | 4 | 4 | 4 | 2 | 3 | 2 | 2 | 2 | 3 | 4 | 4 | 4 |
| **6** | 5 | 5 | 4 | 2 | 2 | 2 | 2 | 5 | 5 | 5 | 4 | 3 |
| **7** | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
| **8** | 2 | 3 | 2 | 5 | 5 | 5 | 5 | 4 | 4 | 5 | 5 | 5 |
| **9** | 5 | 5 | 5 | 5 | 4 | 3 | 3 | 2 | 4 | 3 | 4 | 4 |
| **10** | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 4 | 4 | 4 |
| **11** | 5 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 |
| **12** | 5 | 4 | 5 | 4 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **13** | 2 | 2 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| **14** | 4 | 3 | 5 | 2 | 2 | 4 | 4 | 4 | 4 | 4 | 3 | 3 |
| **15** | 4 | 2 | 4 | 3 | 2 | 5 | 5 | 4 | 4 | 4 | 4 | 3 |
| **16** | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 5 | 5 |
| **17** | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **18** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| **19** | 2 | 3 | 2 | 2 | 2 | 1 | 1 | 5 | 4 | 4 | 3 | 3 |
| **20** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 3 | 3 |
| **21** | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 3 | 4 | 3 | 3 | 3 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **22** | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5 | 5 |
| **23** | 3 | 3 | 2 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 |
| **24** | 2 | 3 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| **25** | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 2 | 2 | 4 | 2 |
| **26** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **27** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **28** | 4 | 4 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 5 | 5 | 4 |
| **29** | 4 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |
| **30** | 3 | 3 | 3 | 3 | 3 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **31** | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 |
| **32** | 3 | 4 | 3 | 2 | 2 | 2 | 2 | 3 | 3 | 4 | 4 | 4 |
| **33** | 3 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 |
| **34** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 4 |
| **35** | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| **36** | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| **37** | 4 | 4 | 4 | 3 | 3 | 2 | 2 | 3 | 3 | 3 | 4 | 3 |
| **38** | 2 | 3 | 3 | 5 | 1 | 3 | 1 | 1 | 4 | 4 | 1 | 2 |
| **39** | 4 | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 5 |
| **40** | 4 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 3 | 2 |
| **41** | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 |
| **42** | 2 | 3 | 2 | 2 | 2 | 1 | 2 | 2 | 3 | 3 | 3 | 3 |
| **43** | 2 | 4 | 3 | 1 | 1 | 4 | 5 | 2 | 2 | 3 | 3 | 3 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **44** | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| **45** | 5 | 5 | 4 | 5 | 5 | 4 | 4 | 5 | 5 | 5 | 5 | 5 |
| **46** | 4 | 4 | 3 | 5 | 4 | 2 | 2 | 3 | 4 | 4 | 4 | 4 |
| **47** | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| **48** | 3 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 3 | 4 | 4 | 4 |
| **49** | 5 | 5 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| **50** | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 3 |
| **51** | 5 | 5 | 4 | 5 | 5 | 3 | 5 | 3 | 4 | 4 | 4 | 3 |
| **52** | 5 | 4 | 2 | 3 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 4 |
| **53** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 4 |
| **54** | 4 | 4 | 3 | 2 | 2 | 1 | 1 | 4 | 4 | 4 | 4 | 4 |
| **55** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 |
| **56** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 |
| **57** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 1 | 2 | 2 |
| **58** | 5 | 5 | 5 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **59** | 4 | 3 | 1 | 2 | 4 | 1 | 4 | 3 | 2 | 3 | 2 | 2 |
| **60** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **61** | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 |
| **62** | 2 | 2 | 2 | 2 | 2 | 1 | 2 | 4 | 5 | 5 | 4 | 4 |
| **63** | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| **64** | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 3 |
| **65** | 4 | 4 | 4 | 5 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **66** | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 3 | 3 |
| **67** | 4 | 3 | 2 | 3 | 3 | 3 | 2 | 4 | 3 | 3 | 4 | 2 |
| **68** | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **69** | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 4 | 4 | 4 |
| **70** | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 |
| **71** | 5 | 3 | 3 | 3 | 4 | 4 | 3 | 2 | 4 | 3 | 4 | 4 |
| **72** | 5 | 3 | 4 | 2 | 5 | 2 | 4 | 4 | 3 | 2 | 4 | 3 |
| **73** | 4 | 4 | 3 | 3 | 3 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **74** | 3 | 4 | 5 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 3 |
| **75** | 3 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 4 | 3 | 3 |
| **76** | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 3 | 3 | 4 |
| **77** | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 4 | 3 | 4 | 3 | 3 |
| **78** | 1 | 1 | 1 | 2 | 2 | 1 | 2 | 4 | 4 | 5 | 3 | 3 |
| **79** | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 5 | 4 | 4 |
| **80** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **81** | 3 | 2 | 2 | 2 | 4 | 2 | 2 | 4 | 4 | 4 | 3 | 3 |
| **82** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 |
| **83** | 5 | 5 | 3 | 1 | 1 | 1 | 1 | 5 | 5 | 5 | 5 | 5 |
| **84** | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **85** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 4 | 3 | 3 | 2 |
| **86** | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 5 | 4 | 5 | 5 | 5 |
| **87** | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 4 | 4 | 5 | 4 | 4 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **88** | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 2 | 3 | 3 | 4 | 4 |
| **89** | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| **90** | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 3 |
| **91** | 2 | 2 | 3 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 |
| **92** | 2 | 2 | 2 | 3 | 3 | 1 | 1 | 3 | 3 | 5 | 4 | 4 |
| **93** | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **94** | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 3 |
| **95** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **96** | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| **97** | 3 | 3 | 1 | 2 | 4 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **98** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **99** | 5 | 3 | 4 | 3 | 2 | 2 | 2 | 5 | 5 | 5 | 4 | 4 |
| **100** | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 2 | 2 |
| **101** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| **102** | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **103** | 3 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 4 | 4 |
| **104** | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 5 |
| **105** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 4 |
| **106** | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **107** | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 5 | 3 | 3 |
| **108** | 4 | 3 | 3 | 4 | 2 | 4 | 3 | 2 | 4 | 3 | 3 | 2 |
| **109** | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |

| No | EK1 | EK2 | EK3 | EA1 | EA2 | ECK1 | ECK2 | BE1 | BE2 | BE3 | BT1 | BT2 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **110** | 4 | 3 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 3 | 3 |
| **111** | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 4 | 4 |
| **112** | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **113** | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| **114** | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 |
| **115** | 5 | 5 | 5 | 5 | 5 | 3 | 4 | 5 | 3 | 5 | 5 | 5 |
| **116** | 4 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 5 | 4 | 5 | 5 |

## 4.3 Data Processing

This study uses Structural Equation Modelling (SEM) analysis. The software used for this research is IBM SPSS AMOS 21. The theoretical models that have been described in the path diagram will be analysed based on the data obtained.

### 4.3.1 Measurement Model Testing

Measurement model test is to examine the relationship between indicators with latent variables. Combining the structural model and measurement tests allows researchers to test measurement error as an integral part of SEM and perform factor analysis along with hypothesis testing (Bollen, 1989). In the measurement model test, the Chi-square results obtained were 86,987, Degrees of freedom were 44 and Probability level was 000. The results of the measurement test can be seen in Figure 4.2.

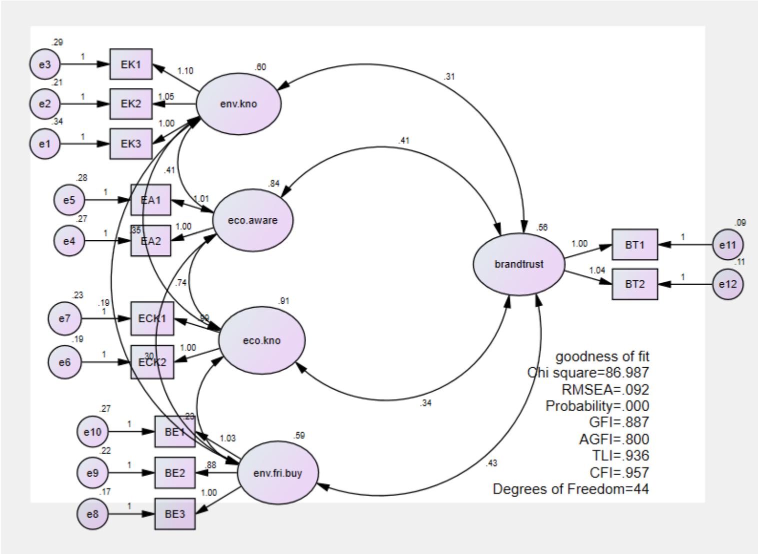


Figure 4. 2 Model Measurement Testing

Test of the model hypothesis shows that this model is in accordance with the data or fit to the data used in this study. Although the Chi-Square value is quite large at 86,897, the Chi-Square value is affected by the degree of freedom. In this study the degree of freedom is 44. If the degree of freedom is smaller, the Chi-Square value will decrease.

### 1.3.2 Structural Model Evaluation Testing

A. Structural Model Testing

The structural model is the relationship between latent variables (variables that cannot be measured directly and require several indicators to measure them) independent and dependent (Bollen, 1989). The results of the structural test model can be seen from Figure 4.3.

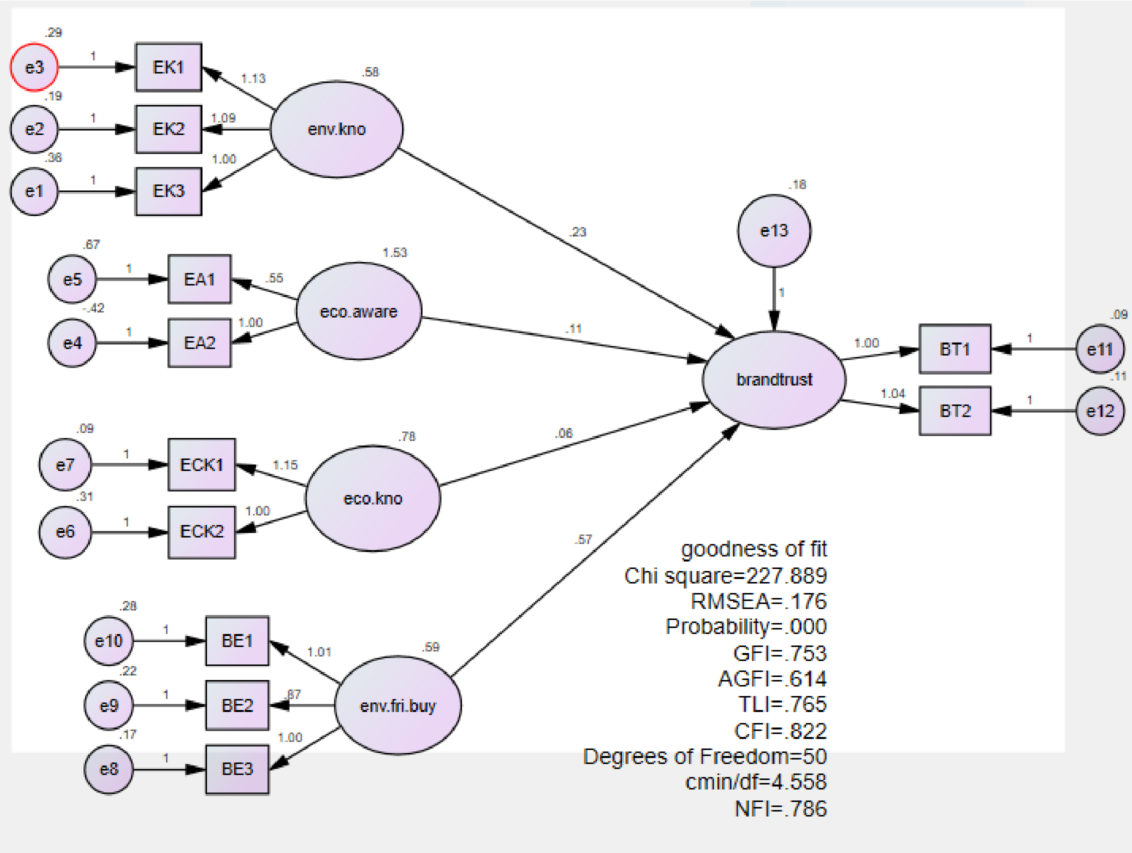


Figure 4. 3 Structural Model Testing

Test of the model hypothesis shows that this model is in accordance with the data or fit to the data used in this study. Although the Chi-Square value is quite large at 227,889, the Chi-Square value is affected by the degree of freedom. In this study the degree of freedom is 50. If the degree of freedom is smaller, the Chi-Square value will decrease.

## B. Normality Data Testing

Data normality evaluation was carried out using the value of critical ratio skewness value of ± 2.58 at a significance level of 0.01 (1%). Data are said to be normally distributed if the critical ratio skewness value is below ± 2.58 (Ghozali, 2005). Assessments of normality data can be seen in Table 4.5.

Table 4. 5 Assessment of Normality

| Variable | min | max | skew | c.r. | kurtosis | c.r. |
|---|---|---|---|---|---|---|
| BT2 | 1.000 | 5.000 | -.605 | -2.659 | .383 | .841 |

| Variable | min | max | skew | c.r. | kurtosis | c.r. |
|---|---|---|---|---|---|---|
| BT1 | 1.000 | 5.000 | -.978 | -4.301 | 1.802 | 3.963 |
| BE1 | 1.000 | 5.000 | -.724 | -3.186 | .494 | 1.087 |
| BE2 | 1.000 | 5.000 | -.634 | -2.788 | 1.112 | 2.444 |
| BE3 | 1.000 | 5.000 | -.955 | -4.199 | 1.675 | 3.682 |
| ECK1 | 1.000 | 5.000 | -.236 | -1.038 | -.649 | -1.426 |
| ECK2 | 1.000 | 5.000 | -.278 | -1.220 | -.593 | -1.303 |
| EA1 | 1.000 | 5.000 | -.266 | -1.168 | -.508 | -1.116 |
| EA2 | 1.000 | 5.000 | -.475 | -2.087 | -.418 | -.920 |
| EK1 | 1.000 | 5.000 | -.542 | -2.382 | -.220 | -.484 |
| EK2 | 1.000 | 5.000 | -.459 | -2.020 | .187 | .411 |
| EK3 | 1.000 | 5.000 | -.479 | -2.105 | -.112 | -.247 |
| Multivariate | | | | | 62.844 | 18.463 |

The results showed that the value of critical ratio skewness value of all indicators showed that the data was not normally distributed because there were several values above ± 2.58, this indicates that the univariate distribution of data was considered abnormal and could be used for further estimation. Analysis of abnormal data can result in refraction of interpretation because the chi square value of the analysis tends to increase so that the probability level will decrease. The data used in this study is data that is presented as is from research derived from primary data based on respondents' answers that are so diverse that it is difficult to obtain data that follows perfectly normal distribution.

## C. Outlier Evaluation

Outlier evaluation is done to see the observation conditions of a data that has unique characteristics that look very different from other observations and appear in extreme forms, both for a single variable or combination variables (Hair *et al* in Ghozali, 2004).

Outlier detection is done to see both univariate outliers and multivariate outliers. To see multivariate outliers is done by looking at the value of *malahanobis* distance. *Malahanobis* distance can be seen in Table 4.6.

Table 4. 6 *Mahalanobis* distance

| Observation number | *Mahalanobis* d-squared | p1 | p2 |
|---:|---:|---:|---:|
| 38 | 49.172 | .000 | .000 |
| 43 | 43.107 | .000 | .000 |
| 59 | 40.699 | .000 | .000 |
| 72 | 33.140 | .001 | .000 |
| 67 | 29.920 | .003 | .000 |
| 49 | 29.747 | .003 | .000 |
| 15 | 29.603 | .003 | .000 |
| 52 | 27.562 | .006 | .000 |
| 25 | 25.768 | .012 | .000 |
| 83 | 25.260 | .014 | .000 |
| 51 | 24.849 | .016 | .000 |
| 71 | 24.810 | .016 | .000 |
| 92 | 22.980 | .028 | .000 |
| 14 | 22.217 | .035 | .000 |
| 107 | 21.618 | .042 | .000 |
| 74 | 21.485 | .044 | .000 |
| 13 | 20.955 | .051 | .000 |
| 91 | 20.911 | .052 | .000 |

| Observation number | *Mahalanobis* d-squared | p1 | p2 |
|---:|---:|---:|---:|
| 108 | 20.655 | .056 | .000 |
| 99 | 19.956 | .068 | .000 |
| 5 | 19.751 | .072 | .000 |
| 28 | 19.261 | .082 | .000 |
| 115 | 19.121 | .086 | .000 |
| 6 | 18.938 | .090 | .000 |
| 8 | 17.889 | .119 | .002 |
| 9 | 17.666 | .126 | .002 |
| 16 | 17.401 | .135 | .003 |
| 85 | 17.229 | .141 | .003 |
| 57 | 17.119 | .145 | .002 |
| 116 | 16.860 | .155 | .003 |
| 97 | 16.142 | .185 | .018 |
| 81 | 16.138 | .185 | .011 |
| 19 | 15.581 | .211 | .038 |
| 78 | 15.519 | .214 | .028 |
| 76 | 15.411 | .220 | .025 |
| 1 | 15.159 | .233 | .034 |
| 96 | 14.853 | .250 | .055 |
| 62 | 14.507 | .270 | .098 |
| 46 | 14.140 | .292 | .171 |

| Observation number | *Mahalanobis* d-squared | p1 | p2 |
|---|---|---|---|
| 104 | 14.108 | .294 | .135 |
| 77 | 14.011 | .300 | .125 |
| 12 | 13.506 | .333 | .286 |
| 64 | 12.875 | .378 | .601 |
| 110 | 12.515 | .405 | .745 |
| 29 | 12.078 | .439 | .888 |
| 40 | 11.889 | .455 | .912 |
| 33 | 11.493 | .487 | .969 |
| 58 | 11.264 | .506 | .982 |
| 50 | 11.228 | .510 | .976 |
| 21 | 11.111 | .519 | .977 |
| 48 | 11.007 | .528 | .977 |
| 75 | 10.680 | .557 | .992 |
| 100 | 10.378 | .583 | .998 |
| 3 | 10.237 | .595 | .998 |
| 31 | 9.884 | .626 | 1.000 |
| 42 | 9.819 | .632 | 1.000 |
| 34 | 9.699 | .642 | 1.000 |
| 88 | 9.422 | .667 | 1.000 |
| 37 | 9.299 | .677 | 1.000 |
| 11 | 9.051 | .699 | 1.000 |

| Observation number | *Mahalanobis* d-squared | p1 | p2 |
|---|---|---|---|
| 66 | 8.874 | .714 | 1.000 |
| 39 | 8.794 | .720 | 1.000 |
| 63 | 8.505 | .745 | 1.000 |
| 79 | 8.440 | .750 | 1.000 |
| 87 | 7.965 | .788 | 1.000 |
| 65 | 7.879 | .795 | 1.000 |
| 23 | 7.841 | .797 | 1.000 |
| 86 | 7.743 | .805 | 1.000 |
| 69 | 7.722 | .806 | 1.000 |
| 32 | 7.717 | .807 | 1.000 |
| 35 | 7.557 | .819 | 1.000 |
| 54 | 7.448 | .827 | 1.000 |
| 22 | 7.297 | .837 | 1.000 |
| 68 | 7.016 | .857 | 1.000 |
| 36 | 6.900 | .864 | 1.000 |
| 10 | 6.747 | .874 | 1.000 |
| 103 | 6.712 | .876 | 1.000 |
| 45 | 6.641 | .880 | 1.000 |
| 47 | 6.517 | .888 | 1.000 |
| 53 | 6.393 | .895 | 1.000 |
| 90 | 6.378 | .896 | 1.000 |

| Observation number | *Mahalanobis* d-squared | p1 | p2 |
|---:|---:|---:|---:|
| 2 | 6.348 | .898 | 1.000 |
| 56 | 6.347 | .898 | 1.000 |
| 4 | 6.085 | .912 | 1.000 |
| 89 | 5.976 | .917 | 1.000 |
| 105 | 5.485 | .940 | 1.000 |
| 20 | 5.244 | .949 | 1.000 |
| 93 | 4.880 | .962 | 1.000 |
| 24 | 4.878 | .962 | 1.000 |
| 82 | 4.669 | .968 | 1.000 |
| 41 | 4.436 | .974 | 1.000 |
| 70 | 4.411 | .975 | 1.000 |
| 109 | 4.375 | .976 | 1.000 |
| 111 | 4.072 | .982 | 1.000 |
| 55 | 3.968 | .984 | 1.000 |
| 61 | 3.863 | .986 | 1.000 |
| 112 | 3.803 | .987 | 1.000 |
| 18 | 3.793 | .987 | 1.000 |
| 7 | 3.774 | .987 | 1.000 |
| 94 | 3.767 | .987 | 1.000 |

If the value of a *malahonobis* distance is greater than the chi-square value means there is a multivariate outlier problem (Ferdinand, 2006). Based on these provisions, in this study the chi-square result is 227.889 and the largest value at *malahanobis* distance is 49,172. Therefore, it can be concluded that in this study there were no multivariate outlier problems. In the absence of multivariate outliers, the data is suitable for use.

D. Goodness-of-fit-Model Test Results

Testing using the SEM model is done step by step. If the right model is not yet obtained, the model proposed originally needs to be revised. The need for revision of the SEM model arises from the problems that arise from the analysis. The problem that might arise is the problem of the inability of the model developed to produce unique estimates. If these problems arise in SEM analysis, it indicates that the research does not support the structural model that is formed. Thus, the model needs to be revised by developing existing theories to form a new model. Analysis of the results of data processing in the full SEM model is carried out by conducting conformity tests and statistical tests. Goodness-of-fit model test results are described in Table 4.7.

Table 4. 7 Test results for the Goodness-of-fit model

| No | Index | Cut-off Value | Result | Model Evaluation |
|---|---|---|---|---|
| 1 | Chi Square | Near to 0 | 227,889 | Poor |
| 2 | CMIN/DF | < 2 (Byrne, 1998) | 4,558 | Poor |
| 3 | RMSEA | < 0,08 (Browne & Cudeck, 1993) | 0,176 | Poor |
| 4 | CFI | > 0,95 (Bentler, 1990) | 0,558 | Poor |
| 5 | GFI | > 0,90 (Miles & Shelvin, 1998) | 0,753 | Marginal |
| 6 | AGFI | > 0,90 (Miles & Shelvin, 1998) | 0,614 | Poor |
| 7 | TLI | > 0,95 (Sharma, Mukkherjee, Kumar, & Dillon, 2005) | 0,765 | Marginal |
| 8 | Probability | ≥ 0,05 | 0,000 | Poor |
| 9 | NFI | > 0,90 (Hu & Bentler, 1999) | 0.786 | Marginal |

There are four measures that can be used as a basis to indicate that a model is fit is to use the normed chi square test, CFI, GFI and RMSEA. These results indicate that the model used is acceptable. Normed Chi Square Test is the value of CMIN / DF that is equal to 4.558. The RMSEA measurement index which is in the expected range of values below 0.5 is called close fit, while the values below 0.08 are called good fit. In this model there is a RMSEA value of 0.176 which means that the value can be accepted as ac close fit. Even though the GFI, TLI and NFI value is marginally accepted. Of several model feasibility tests, the model is said to be feasible if at least one of the model feasibility tests is fulfilled Hair et al, (1998). In an empirical study, a researcher is not required to fulfil all the criteria of goodness of fit but depends on the judgment of each researcher. The Chi-Square value in this study was 227,889. (Joreskog & Sorbom, 1996) said that Chi-Square cannot be used as the only measure of the overall suitability of the model, one reason is because chi-square is sensitive to sample size. When the sample size increases, the chi-square value will increase and lead to rejection of the model even though the value of the difference between the sample covariance matrix and the model covariance matrix is minimal or small. Chi square is also closely related to the degree of freedom, if the degree of freedom is greater, it will affect the Chi Square value. The degree of freedom value in the study is large enough that it affects the chi square value. From the output model results in Table 4.5 for the model suitability test criteria, some criteria are at marginal value. Marginal value is the suitability condition of the measurement model under the criteria of absolute fit and incremental fit measures, but can still be forwarded to further analysis because it is close to the criteria of good fit (Fitriyana, 2013).

### 4.3.3 Modification Model

The last stage is interpreted by the model and modifies the model that does not meet the testing requirements. After the model is estimated, the residual must be small and close to zero and the frequency distribution of the residual covariance must be symmetric. In case the amount of residuals is greater than 5% of all the covariance variables produced by the model, then a modification needs to be considered with a theoretical basis. Cut off value with a range of -2.58 to 2.58 can be used to assess the significance of the residuals generated by the model. Standardized residual covariances data processed with the AMOS program can be seen in Table 4.8 below:

*Table 4. 8 Standardized Residual Covariances*

| | BT2 | BT1 | BE1 | BE2 | BE3 | ECK1 | ECK2 | EA1 | EA2 | EK1 | EK2 | EK3 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BT2 | 1.863 | | | | | | | | | | | |
| BT1 | 2.066 | 1.900 | | | | | | | | | | |
| BE1 | 1.210 | 1.925 | .000 | | | | | | | | | |
| BE2 | 1.253 | 1.206 | -.023 | .000 | | | | | | | | |
| BE3 | 1.222 | 1.140 | -.004 | .019 | .000 | | | | | | | |
| ECK1 | 4.044 | 3.705 | 2.290 | 3.230 | 2.399 | .000 | | | | | | |
| ECK2 | 3.967 | 4.289 | 2.761 | 2.395 | 2.501 | .000 | .000 | | | | | |
| EA1 | 4.130 | 3.695 | 2.474 | 3.825 | 3.942 | 7.529 | 6.916 | .000 | | | | |
| EA2 | 3.798 | 3.486 | 3.708 | 2.991 | 3.226 | 6.549 | 7.492 | .000 | .000 | | | |
| EK1 | 2.066 | 2.568 | 2.509 | 2.510 | 1.794 | 3.524 | 3.439 | 4.067 | 4.626 | .000 | | |
| EK2 | 3.223 | 2.726 | 2.478 | 2.380 | 2.790 | 3.679 | 3.368 | 4.459 | 4.230 | -.012 | .000 | |
| EK3 | 2.681 | 2.621 | 2.616 | 2.789 | 2.525 | 5.234 | 4.866 | 5.395 | 4.507 | .087 | -.044 | .000 |

Due to the outliers and standardized residual covariances values that are greater than 5% or outside the interval between -2.58 and 2.58, there is a possibility that it affects the fit model of this research. The fit model test almost does not show a fit model. Therefore, it is important to note the index modification suggested by the analysis tool. The table presents the things that must be corrected, which after doing this will reduce the chi square value. The following modifications are meant in the Table 4.9.

Table 4. 9 Covariances

| | | | M.I. | Par Change |
|---|---|---|---|---|
| eco.kno | <--> | env.fri.buy | 8.615 | .204 |
| eco.aware | <--> | env.fri.buy | 8.571 | .221 |
| eco.aware | <--> | eco.kno | 29.921 | .465 |
| env.kno | <--> | env.fri.buy | 9.036 | .184 |
| env.kno | <--> | eco.kno | 20.140 | .308 |
| env.kno | <--> | eco.aware | 16.176 | .301 |
| e10 | <--> | eco.aware | 7.431 | .152 |
| e10 | <--> | e11 | 4.047 | .045 |
| e7 | <--> | e9 | 7.908 | .086 |
| e6 | <--> | eco.aware | 17.466 | .238 |
| e6 | <--> | e9 | 4.129 | -.061 |
| e5 | <--> | eco.kno | 13.229 | .216 |
| e5 | <--> | env.kno | 4.087 | .106 |
| e5 | <--> | e10 | 13.078 | -.141 |

| | | | M.I. | Par Change |
|---|---|---|---|---|
| e5 | <--> | e9 | 4.505 | .072 |
| e5 | <--> | e8 | 5.606 | .079 |
| e5 | <--> | e7 | 16.304 | .162 |
| e5 | <--> | e6 | 4.647 | -.086 |
| e4 | <--> | e10 | 13.506 | .136 |
| e4 | <--> | e7 | 5.861 | -.093 |
| e4 | <--> | e6 | 15.272 | .148 |
| e3 | <--> | eco.aware | 4.527 | .126 |
| e3 | <--> | e12 | 5.162 | -.058 |
| e3 | <--> | e4 | 6.028 | .097 |
| e2 | <--> | e12 | 5.376 | .052 |
| e1 | <--> | eco.kno | 12.804 | .203 |
| e1 | <--> | e5 | 7.160 | .115 |

In the modification of the covariance model can be done by giving a relation to the covariance in question. As can be seen in the table 4.8 covariance relation relationships have an M.I. value. which means that if both ovariances are connected, they will decrease the chi square value by the value of the M.I. Thus, it is expected that if the chi sqaure value falls, the probability value will rise, so that it can exceed the 0.05 value. Below is a path diagram model that has been modified in the figure 4.4.

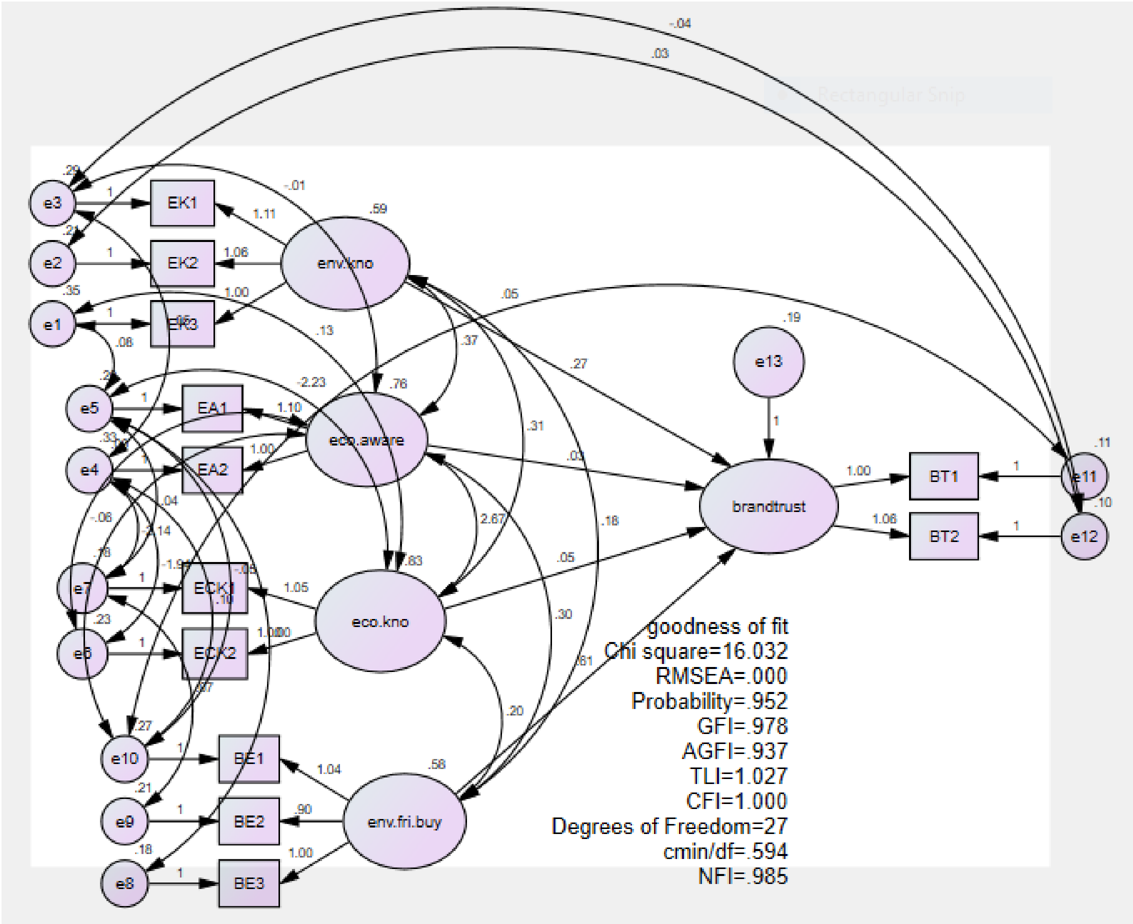


Figure 4. 4 Modification Model

A. Goodness of Fit Modification Model Test

Analysis of the results of data processing in the full SEM model is carried out by conducting conformity tests and statistical tests. Goodness-of-fit modification model test results are described in Table 4.10.

Table 4. 10 Test results for the Goodness-of-fit model

| **No** | **Index** | **Cut-off Value** | **Result** | **Model Evaluation** |
|---|---|---|---|---|
| 1 | Chi Square | Near to 0 | 16,032 | Poor |
| 2 | CMIN/DF | < 2 (Byrne, 1998) | 0,594 | Good |
| 3 | RMSEA | < 0,08 (Browne & Cudeck, 1993) | 0,000 | Good |

| No | Index | Cut-off Value | Result | Model Evaluation |
|---|---|---|---|---|
| 4 | CFI | > 0,95 (Bentler, 1990) | 1,000 | Good |
| 5 | GFI | > 0,90 (Miles & Shelvin, 1998) | 0,978 | Good |
| 6 | AGFI | > 0,90 (Miles & Shelvin, 1998) | 0,937 | Good |
| 7 | TLI | > 0,95 (Sharma, Mukkherjee, Kumar, & Dillon, 2005) | 1,027 | Good |
| 8 | Probability | ≥ 0,05 | 0,953 | Good |
| 9 | NFI | > 0,90 (Hu & Bentler, 1999) | 0.985 | Good |

These results indicate that the model used is acceptable. CMIN / DF value of 0.594 shows a good structural equation model. The RSMEA measurement index is in the expected range of ≤ 0.08, which is 0,000. Likewise, the values of GFI, AGFI, TLI, CFI and NLI are in accordance with the specified cut-off value limit.

B. Validatity and Reliability Testing

There is a mandatory requirement that is fulfilled to find out whether an indicator is valid or not. The requirement is that the loading factor is required to be significant and the standardized loading estimate is mandatory ≥ 0.50. Likewise, in order to know the construct reliability there are two methods that can be used. These methods namely construct reliability and variance extracted. The cut-off value of cpnstrust reliability is ≥ 0.70 and the cut-off value of variance extracted is ≥ 0.50. In the table below is validity and reliability testing in table 4.11.

Table 4. 11 Validity and Reliability Testing

| No | Variable | Indicator | Standard Loading | Standard Loading2 | Measurement Error | Construct Reliability | Variance Extracted |
|---|---|---|---|---|---|---|---|
| 1 | Environmental Knowledge | EK1 | 0.848 | 0.719 | 0.281 | | |
| | | EK2 | 0.873 | 0.762 | 0.238 | 0.876 | 0.703 |
| | | EK3 | 0.792 | 0.627 | 0.373 | | |
| | | ∑ | 2.513 | 2.108 | 0.892 | | |
| | | ∑2 | 6.315 | 4.446 | 0.795 | | |
| 2 | Eco-label Awareness | EA1 | 0.906 | 0.821 | 0.179 | | |
| | | EA2 | 0.834 | 0.696 | 0.304 | 0.862 | 0.758 |
| | | ∑ | 1.740 | 1.516 | 0.484 | | |
| | | ∑2 | 3.028 | 2.299 | 0.234 | | |
| 3 | Eco-label Knowledge | ECK1 | 0.915 | 0.837 | 0.163 | | |
| | | ECK2 | 0.883 | 0.780 | 0.220 | 0.894 | 0.808 |
| | | ∑ | 1.798 | 1.617 | 0.383 | | |
| | | ∑2 | 3.233 | 2.614 | 0.147 | | |
| 4 | Belief in Environmentally Buying | BE1 | 0.835 | 0.697 | 0.303 | | |
| | | BE2 | 0.834 | 0.696 | 0.304 | 0.885 | 0.719 |
| | | BE3 | 0.874 | 0.764 | 0.236 | | |
| | | ∑ | 2.543 | 2.157 | 0.843 | | |
| | | ∑2 | 6.467 | 4.651 | 0.711 | | |
| 5 | Brand Trust | BT1 | 0.917 | 0.841 | 0.159 | | |
| | | BT2 | 0.928 | 0.861 | 0.139 | 0.920 | 0.851 |
| | | ∑ | 1.845 | 1.702 | 0.298 | | |
| | | ∑2 | 3.404 | 2.897 | 0.089 | | |

According to the results of the standardized loading estimate output contained in the table, the loading value of the entire indicator has fulfilled the requirements of ≥ 0.50, so that it can be concluded that the exogenous and endogenous construct constructing indicators used are valid. In the variable of Environmental Knowledge, the dominant indicator is EK2, while the dominant indicator from variable Ecolabel Awareness is EA1, and the dominant indicator from variable of Ecolabel Knowledge is ECK1, and the dominant indicator from variable of Belief in Environmentally Buying variable is BE3, and in the dominant indicator Brand Trust is BT2. And it can be known if the value of construct reliability is above> 0.70, which means that the reliable instrument and the variance extracted value has exceeded the requirements, namely ≥0.50, which means that if the indicator used is observed above, it can explain the exogenous and endogenous variables the shape.

C. Hypothesis Test Analysis

Criteria for goodness of fit structural models estimated can be fulfilled, then the next step is an analysis of the structural model relationships (hypothesis testing) as shown in Figure 4.4 earlier. The relationship between constructs in hypotheses is shown by regression weights values Hair et al, (1988). To analyse more clearly about the effect of Eco-label Toward Brand Trust with ecolabel variable which are Environmental Knowledge, Ecolabel Awareness, Ecolabel Knowledge and Environmentally Buying can be seen in Figure 4.5.

| | | | Estimate | S.E. | C.R. | P | Label |
|---|---|---|---|---|---|---|---|
| brandtrust | <--- | env.kno | .270 | .095 | 2.831 | .005 | par_8 |
| brandtrust | <--- | eco.aware | .027 | .033 | .838 | .402 | par_9 |
| brandtrust | <--- | eco.kno | .049 | .088 | .560 | .575 | par_10 |
| brandtrust | <--- | env.fri.buy | .610 | .090 | 6.779 | *** | par_11 |

Figure 4. 5 Regression Weight

1. The Effect of Environmental Knowledge toward Brand Trust

Based on the results of the study the CR value between environmental knowledge and brand trust is 2.831 (p= 0.005 ≤ 0.05). it means that Ho is rejected and Ha is accepted, it means that there is a positive effect between environmental knowledge and brand trust. H1 hypothesis, environmental knowledge effecting brand trust.

2. The Effect of Ecolabel Awareness toward Brand Trust

Based on the results of the study the CR value between eco-label awareness and brand trust is 0.838 ($p= 0.402 \geq 0.05$). it means so Ho is accepted and Ha is rejected, meaning that there is no a positive effect between ecolabel awareness and brand trust. H2 hypothesis, ecolabel awareness does not affect brand trust.

3. The Effect of Ecolabel Knowledge toward Brand Trust

Based on the results of the study the CR value between eco-label knowledge and brand trust is 0.560 ($p= 0.575 \geq 0.05$). it means so Ho is accepted and Ha is rejected, meaning that there is no a positive effect between ecolabel knowledge and brand trust. H3 hypothesis, ecolabel knowledge does not affect brand trust.

4. The Effect Belief in Environmentally Buying toward Brand Trust

Based on the results of the study the CR value between belief in environmentally friendly buying and brand trust is 6.779 ($p= 0.001 \leq 0.05$). it means so Ho is rejected and Ha is accepted, it means that there is a positive effect between belief in environmentally buying and brand trust. H4 hypothesis, belief in environmentally buying effecting brand trust.