CHAPTER III

RESEARCH METHOD

3.1. Type of Research Method

This research will be classified as a quantitative study as it will take numerical data which will be used into useable statistics. In addition, the data sources will consist of both primary and secondary data. The primary data will be obtained directly through questionnaire from the respondents and will be analyzed to examine students' corruptive behavior perceptions. Meanwhile, the secondary data will be obtained through students' academic database in which will be analyzed to measure students' academic performance.

3.2. Population and Sample

This research will focus on the undergraduate business students of Universitas Islam Indonesia in Yogyakarta who are registered as active students in the odd semester 2018/2019 academic year. The researcher will limit the population by using purposive sampling technique. Purposive sampling is a technique which presents the advantages of choosing sample according to specific characteristics and situations (Ellahi & Manarvi, 2010). The characteristics established for the technique are as follows:

1. The students are active students of Accounting and Management Department, Faculty of Economics in Universitas

Islam Indonesia that are currently registered in the odd semester 2018/2019 academic year.

2. The students are those who have already completed the ethics subjects (Islamic Economics, Shariah Entrepreneurship).

3. The students are those who have already completed the religion subjects (Islam for Scholar, Islam Rahmatan Lil 'Alamin).

3.3. Data Collection Method

For the purpose of this research, survey will be used to collect the required data. The researcher will design an online questionnaire as well as a paper-based questionnaire which will be distributed directly to the students of Accounting and Management Department at Faculty of Economics in Universitas Islam Indonesia. The respondents will be asked to voluntarily participate in this research by filling out the questions presented in the questionnaire.

3.4. Variables and Measurement

3.4.1. Independent Variable

3.4.1.1. Academic Performance in Grade Point Average (GPA)

Students' academic performance in GPA represent student's academic achievement which is accumulated based on the grades received from all of subjects they have undertaken. It is commonly measured in a four-scale grade point average (GPA) achieved. GPA measurement which will be applied in this sample is:

$$GPA = \frac{\sum(cp_{sbj} \ x \ gw)}{tcp}$$

cp_{sbj} : Credit point of subject n

gw : Grade weight (if A=4, B=3, C=2, D=1)

tcp : Total credit point achieved

GPA and grade weight will be measured according to the system grade that is currently applied in Universitas Islam Indonesia as described below.

A	=	4.00	C+	=	2.25
A-	=	3.75	C	=	2.00
A/B	=	3.50	C-	=	1.75
B+	=	3.25	C/D	=	1.50
B	=	3.00	D+	=	1.25
B-	=	2.75	D	=	1.00
B/C	=	2.50	E	=	0.00

Source: Peraturan Rektor Universitas Islam Indonesia Nomor 05/PR/REK/BPA/III/2014, 2018

3.4.1.2.   Academic Performance in Ethics Subjects

Students' academic performance in ethics subjects is defined as the grade achieved in the ethic subjects as listed in Table 3.1.

Table 3.1 Ethic Subjects' Credit Point

No.	Subject	Credit Points
1.	Islamic Economics	3
2.	Shariah Entrepreneurships	2
	Total credit points	5

Source: http://fecon.uii.ac.id/program/sarjana-s1-akuntansi, 2018

The formula to measure the variable is as follows:

$$Apes = \frac{\sum_{n=1}^{n=2}(gw \; x \; cp^{es})}{5}$$

Apes : *Academic performance in the ethic*

subjects

gw : *Grade weight in ethic subjects*

cp^{es} : *Credit point in ethic subjects*

3.4.1.3. Academic Performance in Religion Subjects

Students' academic performance in religion subjects is defined as the grade achieved in the religion subjects as listed in Table 3.2.

Table 3.2 Religion Subjects' Credit Point

No.	Subject	Credit Points
1.	Islam for scholar	3
2.	Islam Rahmatan Lil 'Alamin	3
	Total credit points	6

Source: http://fecon.uii.ac.id/program/sarjana-s1-akuntansi, 2018

The formula to measure the variable is as follows:

$$Aprs = \frac{\sum_{n=1}^{n=2}(gw \; x \; cp^{rs})}{6}$$

Aprs   : Academic performance in the religion

subjects

gw   : Grade weight in religion subjects

cp^{rs} : Credit point in religion subjects

3.4.1.4.   Student's Department

Student's department is defined as the academic division of a university student's specialized area of study. Dichotomy approach will be used to measure students' department. This method will be conducted in order to distinguish students' corruptive behavior perceptions between Accounting and Management Department. Higher number of courses related to ethics and religion implemented in the academic curriculum is expected to promote better ethical behavior of the students. Thus, the department which is predicted to have higher corruptive behavior perceptions will be rated as 1. Meanwhile, the department which is predicted to have lower corruptive behavior perceptions will be rated as 0.

Accounting Department = 1

Management Department = 0

3.4.2. Dependent Variable

3.4.2.1. Corruptive Behavior Perceptions

In this research, corruptive behavior perceptions are defined as the value beliefs of the students of Accounting and Management Department at Faculty of Economics and Business in Universitas Islam Indonesia about the academic misconduct that are commonly found in academic setting (Suwaldiman & Tyas, 2017). By adapting the prior research, these variables were measured based on the students' tolerance level to academic misconducts which will be classified in the following students' attitude:

1. turning in work done by someone else as one's own, or not collaborating in a team assignment;

2. a false excuse to obtain an extension on a due date or falsified medical certificate to get permission of leaving class;

3. working on an individual exam/test/assignment with others;

4. copying on test from another without their permission;

5. using unapproved materials to complete an exam or assignment;

6. plagiarizing a paper (wholly or partially from printed resources or internet).

The students' corruptive behavior perceptions of academic misconducts mentioned above will be measured by adapting a measurement of the previous research done by Mishekary and Lawrence (2009) in which each of the statement asked the respondents to rate the unethical actions (not right or wrong answers) on a four-point Likert-type scale (Mirshekary & Lawrence, 2009). In this study, the researcher will record and analyze the data from (1) "never acceptable," to (4) "always acceptable." Thus, lower mean score will represent better ethical orientation, meanwhile higher mean score will represent lower ethical orientation. This type of measurement will be stated in Table 3.3.

Table 3.3 Measurement of Students' Corruptive Behavior Perceptions

Score	Corruptive Behavior Perceptions
1	Never Acceptable
2	Unacceptable
3	Acceptable
4	Always Acceptable

3.5. Technique of Data Analysis

3.5.1. Reliability and Validity Test

Reliability refers to the consistency of measurement over time or stability of measurement over a variety of conditions (Drost, 2004). In this research, the reliability test will be used to measure the reliability of the respondents' answers in the questionnaire. It will be conducted by using Cronbach Alpha statistical test. A variable is said to be reliable if the value of Cronbach Alpha > 0.60, otherwise it will not be reliable.

Validity concerned with the extent to which the scores from a measure represent the variable they are intended to (Drost, 2004). This research will use validity test in order to measure the validity of the respondents' answers to the questionnaire. The validity test will be done by using the correlation test. The correlation test will use the formula from Pearson:

$$r_{XY} = \frac{\frac{1}{n}\sum(X - \bar{X})(Y - \bar{Y})}{\sqrt{\frac{\sum(X - \bar{X})^2}{n}}\sqrt{\frac{\sum(Y - \bar{Y})^2}{n}}}$$

$\bar{X}$: *Average variable of X*

$\bar{Y}$: *Average variable of Y*

n : *Number of observations*

The test is done by comparing the significance and the Alpha (α). If the significance is less than α, the indicator is valid. In contrast, if the significance is more than α, the indicator is invalid.

3.5.2. Structural Equation Modelling

In this research, Structural Equation Modelling (SEM) will be used to analyze students' corruptive behavior perceptions. The variables which affect students' corruptive behavior perceptions are students' academic performance in GPA, students' academic performance in ethics subjects and students' academic performance in religion subjects.

Once the model has been estimated, the researcher will then evaluate how well the model is built based on the obtained sample data. Model estimation delivers empirical measures of the relationships between the indicators and the constructs, as well as between the constructs. There are two evaluations of the PLS-SEM model, which are evaluation of measurement model (outer model) and structural model (inner model).

3.5.2.1. Outer Model

The outer model displays the relationship between the construct and the indicator variables. The outer model evaluation consists of:

1. Indicator Reliability

   Indicator reliability is based on the outer loading. If the value of outer loading is more than 0.7, the indicator variable needs to be maintained for confirmatory research. Meanwhile, for exploratory research the value is between 0.5-0.7, and if it is less than 0.5 the indicator variable must be omitted.

2. Discriminant Validity

   Discriminant validity is the extent to which a construct is truly distinct from other constructs. Cross loading indicator variables and Fornell-Larcker is used to evaluate discriminant validity. Cross loading of an indicator on its assigned latent variable should be higher than its loading on all other latent variables. For Fornell-Larcker, the root of AVE of a latent variable must be higher than the squared correlations between the latent variable and all other variables. Cross loading is a loose criterion while Fornell-Larcker is a conservative criterion.

3. Internal Consistency

   Composite reliability (ρ_c) and Cronbach's Alpha (α) will be used to evaluate internal consistency. It is used to measure the reliability of a set of indicators. A value

of 0.7 is regarded acceptable at early phase of a research. However, the threshold should be higher than 0.7 at later phase.

4. Convergent Validity

Convergent validity is the extent to which a measure correlates positively with alternative measure of the same construct. Average Variance Extracted (AVE) is used to evaluate convergent validity. The value of AVE should exceed 0.5 to suggest adequate convergent validity.

3.5.2.2. Inner Model

The inner model displays the relationship between the construct. It consists of two evaluation steps:

1. Significance and Magnitude of The Influence of Independent Latent Variables

This test is used to find out whether independent latent variables affect the dependent latent variables through the use of t-test. Moreover, it can also evaluate the magnitude of the influence of each independent latent variable by looking at the path coefficient.

2. Coefficient of Determination (R^2)

The coefficient of determination is used to measure the variance of the dependent latent variable explained

by independent latent variables. Higher levels indicate higher levels of predicting accuracy.

3.5.3. Research Model

The relationship between dependent and independent variables in this SEM model can be drawn by using path analysis. Partial least squares structural equation method (PLS-SEM) will be used to estimate the model. Figure 3.1 shows the estimated path analysis model.

Based on Figure 3.1., the latent dependent variable is corruptive behavior perceptions (CBP) and is measured by 6 indicators. Each of the indicators represents students' various attitudes of academic misconduct (CBP1-CBP6). The first independent variable which is expected to influence CBP is academic performance in GPA (APGPA) which is measured by students' GPA. The second independent variable is academic performance in ethics subjects (APES) which is measured by students' average grade of ethics subjects (ETHSUB). The third independent variable is academic performance in religion subjects (APRS) which is measured by students' average grade of religion subjects (REGSUB). Additionally, students' department (SD) is added in order to distinguish students' corruptive behavior perceptions between Accounting and Management Department.

Notes:
APGPA = Academic performance in GPA
APES = Academic performance in ethics subjects
APRS = Academic performance in religion subjects
SD = Students' Department
GPA = Grade Point Average
ETHSUB = Average grade of ethics subjects (Islamic Economics and Shariah Entrepreneurship)
REGSUB = Average grade of religion subjects (Islam for Scholar and Islam Rahmatan Lil 'Alamin)
STUDPT = Accounting and Management students
CBP = Corruptive Behavior Perceptions
CBP1 = turning in work done by someone else as one's own, or not collaborating in a team assignment
CBP2 = a false excuse to obtain an extension on a due date or falsified medical certificate to get permission of leaving class
CBP3 = working on an individual exam/test/assignment with others
CBP4 = copying on test from another without their permission
CBP5 = using unapproved materials to complete an exam or assignment
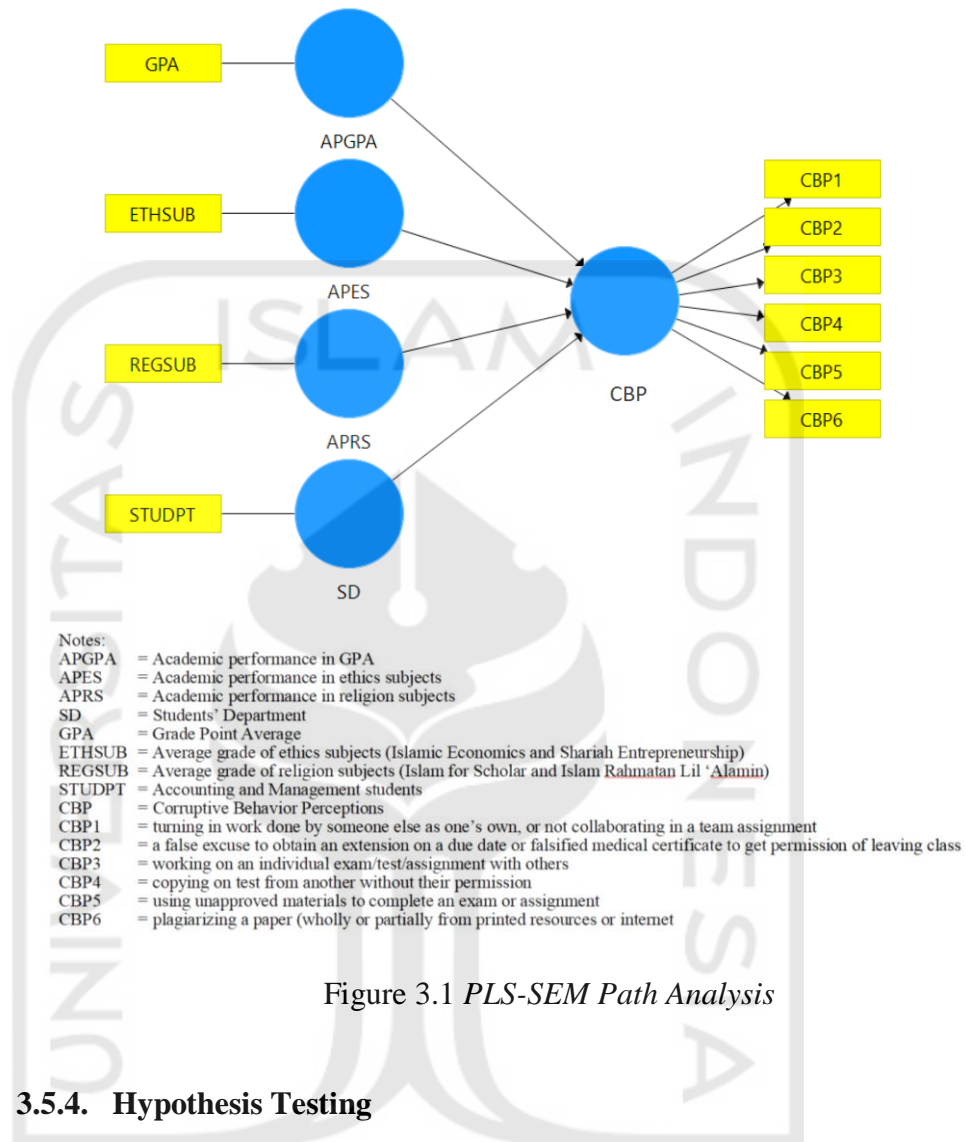CBP6 = plagiarizing a paper (wholly or partially from printed resources or internet

Figure 3.1 *PLS-SEM Path Analysis*

3.5.4. Hypothesis Testing

Hypothesis testing is used to test about the impact of students' academic performance in GPA, and students' academic performance in ethics and religion subjects toward their corruptive behavior perceptions. The hypotheses will be tested using *Paired Sample t-test* with 5% significance level ($\alpha = 0.05$). T-test is conducted to find out the impact of independent variables on the dependent variable.

Testing criteria:

Hypothesis is supported if *p-value* < 0.05.

Hypothesis is not supported if *p-value* > 0.05.