CHAPTER IV

DATA ANALYSIS AND DISCUSSIONS

This chapter presents the research findings and discussions related with the data that had been collected during the research. The data were obtained from questionnaire and students' academic database. The data was analyzed using IBM SPSS Statistics 23 and SmartPLS 3.0. The results of the analysis were used to determine whether the research hypothesis was suported or not supported in accordance with the purpose of this study, which was to find out the impact of business school students' academic performance in GPA, ethics and religion subjects on their corruptive behavior perceptions as well as to determine whether Accounting students' corruptive behavior perceptions were different compared to those of Management students.

4.1. Data Descriptions

The data needed for this research are quantitative data. The primary data were collected by distributing online and paper-based questionnaire to business students of Faculty of Economics, Universitas Islam Indonesia. The respondents consist of 59 Accounting students and 60 Management students, therefore the total respondents were 119.

4.2. Reliability and Validity Test

In this research, reliability test was used to measure whether or not the primary data obtained were reliable. The primary data was obtained by distributing questionnaires that used multiple Likert scale. A questionnaire

is said to be reliable if the respondent's answer is consistent or stable over time (Drost, 2004). The reliability test was calculated using the Cronbach Alpha statistical test. A variable is said to be reliable if the value of Cronbach Alpha > 0.60 or higher, otherwise it will not be reliable. By using IBM SPSS Statistics 23, the result of Cronbach Alpha is shown on Table 4.1 below.

Table 4.1 Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.924	.927	6

Source: Primary data processed, 2019

Based on the Table 4.1 above, the value of Cronbach's Alpha is 92.7% or 0.927. This indicates that the research instrument has high reliability. Hence, the items of questions can be used as a reliable measuring tool.

Additionally, validity test was also used in order to measure whether or not the respondents' answers in the questionnaire are valid. A questionnaire is considered valid if the questions in the questionnaire are able to reveal something that will be measured by the questionnaire (Drost, 2004). The validity test is calculated by using the correlation test which uses the formula from Pearson. A variable is said to be valid if the significance value is less than Alpha (α), conversely, if the significance

value is more than α, the variable is invalid. By using IBM SPSS Statistics 23, the result of correlation test is shown in Table 4.2.

Table 4.2 Correlations

		Quest A	Quest B	Quest C	Quest D	Quest E	Quest F	Corruptive Behavior Perceptions
Quest A	Pearson Correlation	1	.697**	.781**	.674**	.754**	.643**	.881**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119
Quest B	Pearson Correlation	.697**	1	.661**	.629**	.728**	.553**	.820**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	119	119	119	119	119	119	119
Quest C	Pearson Correlation	.781**	.661**	1	.653**	.738**	.647**	.870**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	119	119	119	119	119	119	119
Quest D	Pearson Correlation	.674**	.629**	.653**	1	.745**	.590**	.826**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	119	119	119	119	119	119	119
Quest E	Pearson Correlation	.754**	.728**	.738**	.745**	1	.719**	.920**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	119	119	119	119	119	119	119
Quest F	Pearson Correlation	.643**	.553**	.647**	.590**	.719**	1	.821**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	119	119	119	119	119	119	119
Corruptive Behavior Perceptions	Pearson Correlation	.881**	.820**	.870**	.826**	.920**	.821**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	119	119	119	119	119	119	119

**. Correlation is significant at the 0.01 level (2-tailed).

Source: Primary data processed, 2019

Table 4.3 Summary of Validity Test Result

No		r-count	r-table	Explanation
1	Quest. A (Questions sub indicator A)	0.881	0.179	Valid
2	Quest. B (Questions sub indicator B)	0.820	0.179	Valid
3	Quest. C (Questions sub indicator C)	0.087	0.179	Valid
4	Quest. D (Questions sub indicator D)	0.826	0.179	Valid
5	Quest. E (Questions sub indicator E)	0.920	0.179	Valid
6	Quest. F (Questions sub indicator F)	0.821	0.179	Valid

Source: Primary data processed, 2019

Table 4.3 above shows that all of the single question represented in the sub indicator used in this research has a correlated coefficient value above r-table, 0.179 (r-table value for n = 117). Thus, all of the questions used in this research were considered valid.

4.3. Structural Equation Modelling (Outer Model)

There are two sub models in a structural equation model, namely the outer and inner model. The outer model, also known as the measurement model, aims to specifies the relationships between the latent variables and its observed indicators (Wong, 2014). In addition, this research used reflective measurement model which assumes that the indicator variables are highly correlated and interchangeable, therefore the reflective measurement model is based on the reliability and validity of the

indicator variables. Figure 4.1 shows the result of PLS algorithm procedure.

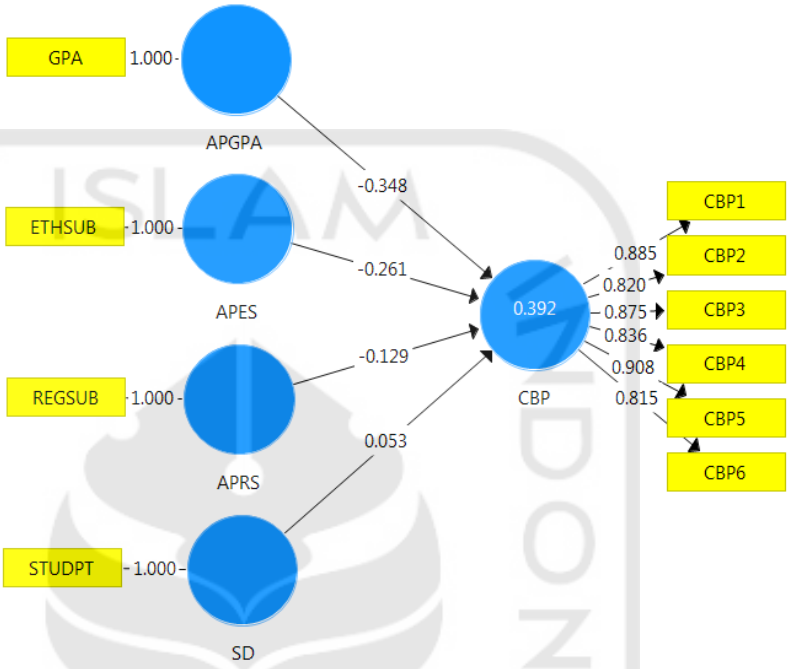

Figure 4.1 *PLS Algorithm Test Result*

4.3.1. Indicator Reliability

The indicator reliability of the measurement model can be seen from the results of the outer loadings. The outer loadings show the relationships between the reflective construct and the measured indicator variables. The value of the outer loadings needs to be above 0.7 or higher for confirmatory research. Meanwhile, for exploratory research the value of outer loadings needs to be between 0.5-0.7. However, if the value is less than 0.5 then the indicator variable needs to be removed (Hulland, 1999). Table 4.4 shows the value of the outer loadings.

Table 4.4 Outer Loadings

	APES	APGPA	APRS	CBP	SD
CBP1				0.885	
CBP2				0.820	
CBP3				0.875	
CBP4				0.836	
CBP5				0.908	
CBP6				0.815	
ETHSUB	1.000				
GPA		1.000			
REGSUB			1.000		
STUDPT					1.000

Source: Secondary data processed, 2019

It can be seen that the value of the outer loadings for each of the indicator variable has met the required threshold of 0.7 and therefore there is no need to remove any indicator variable.

4.3.2. Discriminant Validity

Discriminant validity, or also called as vertical collinearity, is a subjective independence of every indicator on its latent variable (Chin, 1988a). The first approach to assess discriminant validity is by using the cross loading criterion. The result of cross loading between the indicator and the construct can be seen in Table 4.5 below.

Table 4.5 Cross Loading

	APES	APGPA	APRS	CBP	SD
CBP1	-0.435	-0.516	-0.394	0.885	-0.124
CBP2	-0.402	-0.421	-0.440	0.820	-0.291
CBP3	-0.509	-0.533	-0.368	0.875	-0.215
CBP4	-0.456	-0.514	-0.463	0.836	-0.194
CBP5	-0.429	-0.44	-0.377	0.908	-0.187
CBP6	-0.481	-0.585	-0.349	0.815	-0.184
ETHSUB	1	0.662	0.480	-0.531	0.431
GPA	0.662	1	0.671	-0.591	0.319
REGSUB	0.480	0.671	1	-0.464	0.461
STUDPT	0.431	0.319	0.461	-0.230	1

Source: Secondary data processed, 2019

Cross loading is the highest loading correlation in a construct compared to other constructs. For example, the value of cross loading for CBP1 with CBP construct is 0.885, for CBP2 is 0.820, for CB3 is 0.875, for CBP4 is 0.836, for CBP5 is 0.908 and for CBP6 is 0.815. The value of these 6 variable indicators are higher than other cross loading value of other dependent variables (APES, APGPA, APRS and SD). The same results are also shown in other constructs with each indicator. The reason why the cross loading value of APES, APGPA, APRS and SD is 1.0 was because each value has only one indicator variable.

Another approach to assess discriminant validity is by using Fornell Larcker. The value of Fornell Larcker is the root of average variance extracted (AVE). It is suggested that the square root of AVE of each latent variable should be greater than the correlations

among the latent variables (Fornell & Larcker, 1981). Table 4.6 below shows the value of Fornell Larcker.

Table 4.6 Fornell Larcker

	APES	APGPA	APRS	CBP	SD
APES	1				
APGPA	0.662	1			
APRS	0.480	0.671	1		
CBP	-0.531	-0.591	-0.464	0.857	
SD	0.431	0.319	0.461	-0.230	1

Source: Secondary data processed, 2019

Based on the Table 4.6 above, the result indicates that discriminant validity is well established.

4.3.3. Internal Consistency

Internal consistency is assessed using Dhillon-Goldstein Rho, also known as the Composite Reliability (ρ). It measures the reliability of the indicators. The value of composite reliability needs to be above 0.7 or higher for confirmatory research and above 0.6 for exploratory research (Wong, 2014). The result of composite reliability is shown in the Table 4.7.

Table 4.7 Composite Reliability

	Composite Reliability
APES	1
APGPA	1
APRS	1
CBP	0.943
SD	1

Source: Secondary data processed, 2019

From the Table 4.7 above, such values are shown to be larger than 0.7 which indicates that the reflective latent variable have been demonstrated to have a high levels of internal consistency reliability.

4.3.4. Convergent Validity

The convergent validity of the measurement model can be assessed using Average Variance Extracted (AVE). AVE measures the level of variance captured by a construct versus the level due to measurement error. Values above 0.7 are considered very good, whereas, the level of 0.5 is acceptable (Bagozzi & Yi, 1988). The result of convergent validity is shown in Table 4.8.

Table 4.8 Average Variance Extracted (AVE)

	Average Variance Extracted (AVE)
APES	1
APGPA	1
APRS	1
CBP	0.735
SD	1

Source: Secondary data processed, 2019

Based on the AVE results, all of the values for each of the variable is found to be greater than the acceptable threshold of 0.5 and thus the measurement instrument is valid.

4.4. Structural Equation Modelling (Inner Model)

The next evaluation is the inner model, also known as the structural model. It specifies the relationships between the independent and dependent latent variables (Wong, 2014). The measurement of the PLS

SEM structural model can be assessed using the path coefficients and coefficient of determination (R^2).

Figure 4.2 shows the result from a bootstrapping procedure. In this procedure, a large number of subsamples are taken from the original sample with replacement to give bootstrap standard errors, which in turn gives approximate *T*-values for significance testing of the structural path. The Bootstrap result approximates the normality of the data.

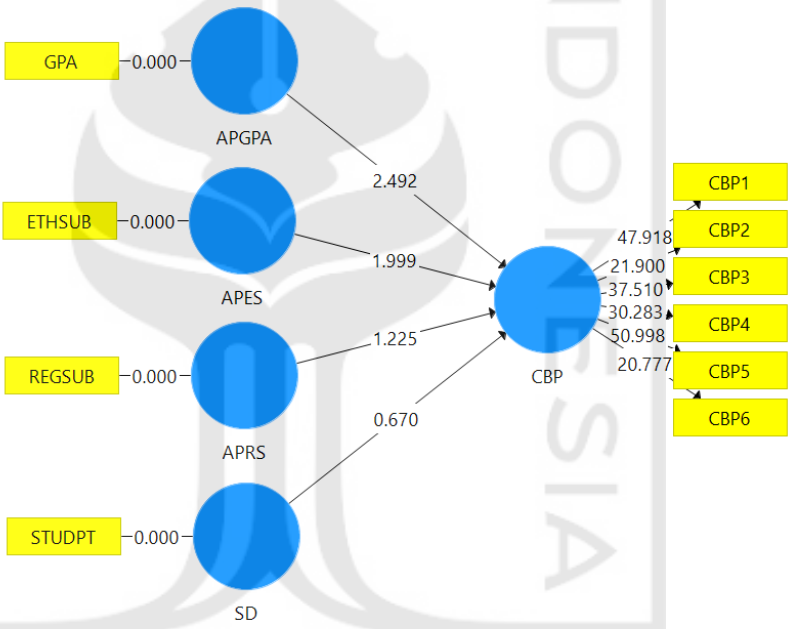

Figure 4.2 *Bootstrapping Test Result*

4.4.1. Significance and Magnitude of the Influence of Independent Latent Variables

Table 4.9 below shows the result of path coefficients with its probability value.

Table 4.9 Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
APES -> CBP	-0.261	-0.260	0.131	1.999	0.046
APGPA -> CBP	-0.348	-0.345	0.140	2.492	0.013
APRS -> CBP	-0.129	-0.124	0.105	1.225	0.221
SD -> CBP	0.053	0.047	0.079	0.670	0.503

Source: Secondary data processed, 2019

Based on Table 4.9, academic performance in ethics subjects (APES) and academic performance in grade point average (APGPA) significantly affect corruptive behavior perceptions (CBP). However, academic performance in religion subjects (APRS) and students' department (SD) do not significantly affect corruptive behavior perceptions (CBP).

4.4.2. Coefficient of Determination

Table 4.10 R-squared

	R Square	R Square Adjusted
CBP	0.392	0.371

Source: Secondary data processed, 2019

Based on Table 4.10 above, the result of statistical computation using SmartPLS 3.0 for coefficient of determination was 0.392 which can be interpreted that 39.2% of corruptive behavior perceptions (CBP) can be explained by academic performance in grade point average (APGPA), academic performance in ethics subjects (APES) and academic performance

in religion subjects (APRS) variable. Meanwhile, 60.8 % of corruptive behavior perceptions (CBP) was influenced by other predictor variables that were not examined in this research.

4.5. Hypothesis Testing

After conducting partial least square algorithm using SmartPLS 3.0, hypothesis testing can be done in order to test whether the proposed hypotheses were supported or not supported. Hypothesis testing was done by using a *Paired Sample t-test* with 5% significance level (α = 0.05). If *p-value* (Sig.) < 0.05, hence, the hypothesis was supported and if the *p-value* (Sig.) > 0.05, the hypothesis was not supported. The summary of hypothesis testing is shown in Table 4.11.

Table 4.11 Hypothesis Testing Results of Structural Model

Hypothesis	Relationship	Original Sample (O)	*T-value*	*P-value*	Decision
H1	APGPA -> CBP	-0.348	2.492**	0.013	Supported
H2	APES -> CBP	-0.261	1.999**	0.046	Supported
H3	APRS -> CBP	-0.129	1.225	0.221	Not supported
H4	SD -> CBP	0.053	0.670	0.503	Not supported

***p < 0.05*

Source: Secondary data processed, 2019

The results of hypothesis testing in this study are elaborated as follows:

1. **H_1: Students' academic performance in grade point average (GPA) have a negative impact on their corruptive behavior perceptions.**

   Based on the statistical analysis that has been conducted, path coefficient shows the value of -0.348 for the relation between

academic performance in grade point average (APGPA) with corruptive behavior perceptions (CBP). This indicates that there was a negative relation between students' academic performance in GPA and their corruptive behavior perceptions. In addition, it also shows 0.013 (< 0.05) for its *p-value* and 2.492 for its *t-value*, which means that students' academic performance in GPA significantly affect their corruptive behavior perceptions. Therefore, it can be concluded that the first hypothesis which stated "students' academic performance in grade point average have a negative impact on their corruptive behavior perceptions" was supported and that it was supported statistically by the results of this research.

2. **H_2: Students' academic performance in ethics subject have a negative impact on their corruptive behavior perceptions.**

Based on the statistical analysis that has been conducted, path coefficient shows the value of -0.261 for the relation between academic performance in ethics subjects (APES) with corruptive behavior perceptions (CBP). This indicates that there was a negative relation between students' academic performance in ethics subjects and their corruptive behavior perceptions. In addition, it also shows 0.046 (< 0.05) for its *p-value* and 1.999 for its *t-value* which means that students' academic performance in ethics subjects significantly affect their corruptive behavior perceptions. Therefore, it can be concluded that second hypothesis which stated "students' academic

performance in ethics subjects have a negative impact on their corruptive behavior perceptions" was supported and that it was supported statistically by the results of this research.

3. **H_3: Students' academic performance in religion subjects have a negative impact on their corruptive behavior perceptions.**

   Based on the statistical analysis that has been conducted, path coefficient shows the value of -0.129 for the relation between academic performance in religion subjects (APRS) with corruptive behavior perceptions (CBP). This indicates that there was a negative relation between students' academic performance in religion subjects and their corruptive behavior perceptions. However, it shows a value of 0.221 (> 0.05) for its *p-value* and 1.225 for its *t-value* which means that students' academic performance in religion subjects does not significantly affect their corruptive behavior perceptions. Therefore, it can be concluded that the third hypothesis which stated "students' academic performance in religion subjects have a negative impact on their corruptive behavior perceptions" was not supported and that it was supported statistically by the results of this research.

4. **H_4: Accounting students' corruptive behavior perceptions is different from those of Management students.**

   Based on the statistical analysis that has been conducted, *p-value* shows 0.503 (> 0.05) which means that student's department does not significantly affect their corruptive behavior perceptions.

Therefore, it can be concluded that the fourth hypothesis which stated "Accounting students' corruptive behavior perceptions is different from those of Management students" was not supported and that it was supported statistically by the results of this research.

4.6. Discussions

4.6.1. The Impact of Business School Students' Academic Performance in Grade Point Average (GPA) on Their Corruptive Behavior Perceptions

The results from separated test among independent variables showed that academic performance in Grade Point Average (GPA) had negative and significant impact on corruptive behavior perceptions, with path coefficient of -0.348 and significance value of $0.013 < 0.05$ from the data that involved 119 students. It indicated that students with lower GPA has lower ethical value which was represented by the high mean score of their corruptive behavior perceptions. In contrast, students with higher GPA has better ethical value which was represented by the low mean score of their corruptive behavior perceptions.

Grade point average (GPA) is a standard way of measuring students' academic achievement. A high GPA means that students are doing well in their studies and have met the expectations of understanding the lessons taught in each course taken. It is believed that if a student has a high GPA, it would reflect to the way the student

behaves including their perceptions on corruptive behavior. In this research, students' corruptive behavior perceptions are represented by their likelihood to perform academic misconducts. Thus, the result of this hypothesis points out that students with higher GPA tend to avoid engaging in academic misconduct. Therefore, it can be concluded that students with higher GPAs tend to have better behavior due to their corruptive behavior perceptions. This result was in line with the previous study conducted by McCabe and Trevino (1997) which stated that students with higher GPAs were reported to less likely perform academic dishonesty.

4.6.2. The Impact of Business School Students' Academic Performance in Ethics Subjects on Their Corruptive Behavior Perceptions

The results from separated test among independent variables showed that academic performance in ethics subjects (Islamic Economic and Shariah Entrepreneurships) had negative and significant impact on corruptive behavior perceptions, with path coefficient of -0.261 and significance value of $0.046 < 0.05$ from the data that involved 119 students. It indicated that students with lower academic performance in ethics subjects has lower ethical value which was represented by the high mean score of their corruptive behavior perceptions. Conversely, students with higher academic performance in ethics subjects has better ethical value which was

represented by the low mean score of their corruptive behavior perceptions.

The main purpose of incorporating ethics courses in higher education is to influence students' ethical attitudes. It is believed that students who performed well in the ethics courses is expected to show stronger ethical norms including their tolerance level toward academic misconduct. Thus, the result of this hypothesis points out that students with higher academic performance in ethics subjects tend to avoid engaging in academic misconduct. Therefore, it can be concluded that students with higher academic performance in ethics subjects tend to have better behavior due to their corruptive behavior perceptions. This result was consistent with the previous study conducted by Bloodgood et al., (2008) which stated that cheating among students was significantly reduced if such students had taken a course in business ethics.

4.6.3. The Impact of Business School Students' Academic Performance in Religion Subjects on Their Corruptive Behavior Perceptions

The results from separated test among independent variables showed that academic performance in religion subjects (Islam Ulil Albab and Islam Rahmatan Lil 'Alamin) had negative impact on corruptive behavior perceptions, with path coefficient of -0.129. However, the impact was not significant as the significance value

shown was 0.221 > 0.05 from the research that involved 119 students. It indicated that academic performance in religion subjects could not influence students' corruptive behavior perceptions.

According to the theory of planned behavior (TBP) studies, one of the most important determinants of cheating behavior is individual's attitude toward cheating itself. One of the factors which influence students' action, including cheating behavior, is student's religiosity. In academic context, it is believed that students who performed well in religion courses is expected to show better ethical attitudes. However, the result of this hypothesis points out that academic performance in religion subjects does not always reflect students' tolerance level towards their corruptive behavior perceptions. One of the possible reasons which might have caused academic performance in religion subjects to have insignificant effect on students' corruptive behavior perceptions was the inconsistency response, both partially and wholly, from the respondents when filling out the questionnaire. Additionally, the average grade of the selected religion subjects used in this research does not represent the overall measurement as there were other religion related subjects which could not be included since it had no credit point (Islamic Character Building, Leadership and Da'wah Training and Quranic Personal Development). This result was inconsistent with previous studies

conducted by McCabe and Trevino (1997) and Rettinger & Jordan (2005).

4.6.4. Business School Students' Corruptive Behavior Perceptions: Comparison among the departments

The results from separated test among independent variables showed that student's department (Accounting and Management) had insignificant impact on corruptive behavior perceptions, with significance value of 0.503 > 0.05 from the research that involved 119 students (59 Accounting students and 60 Management students). It indicated that student's department could not influence students' corruptive behavior perceptions.

Based on previous researches, various factors such as personal, situational and contextual have been used to compare students' cheating behavior between multiple institutions. Therefore, one of the possible reasons which might explain student's department to have an insignificant effect on students' corruptive behavior perceptions was the contextual environment, such as the teaching method and the policies of academic integrity implemented within the university. Since all of the sample used in this research were Accounting and Management students from Universitas Islam Indonesia, the contextual environment between both departments might be comparatively similar. As a result, the finding of this hypothesis points out that there was an insignificant difference

between Accounting students' corruptive behavior perceptions and from those of Management students.