

AN ANALYSIS OF COLLEGE STUDENTS ABILITY TO DETECT FRAUD USING THE ASTIN I-E-O MODEL

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Abstract

This study aims to determine the ability of students to detect fraud by using the variables of student motivation, academic achievement, involvement in Auditing lectures, and the ability to detect fraud. The population in this study were 139 students of the Accounting Study Programme, Faculty of Economics and Business, Al-Qur'an University of Science class of 2019. This study used the total sampling method and was collected through a questionnaire with the help of the Google Forms platform, obtaining a total of 75 students who responded. The analysis technique used is path analysis with the help of SPSS software version 25. The results of this study indicate that student motivation has a positive effect on Auditing lecture involvement, and academic achievement has no effect on Auditing lectures. Meanwhile, Auditing lecture involvement has a positive effect on the ability to detect fraud, and student motivation and academic achievement do not affect the ability to detect fraud.

Keywords: *Ability to detect fraud, Auditing lecture involvement, Academic Achievement, Student Motivation.*

INTRODUCTION

Increasing economic development has various impacts, one of which is the increase in fraud cases. The Association of Certified Fraud Examiners (ACFE) classifies fraud into three forms based on actions, namely misuse of assets, fraud in financial statements, and acts of corruption.

Corruption cases have developed and become a trend in Indonesia. Corruption cases do not only occur in the public sector but also occur in the private sector. From 2018 - 2022 corruption cases handled by Law Enforcement Officials (APH) have increased every year. In

2022 the cases handled were 579 cases with 1,396 suspects. With a state loss value of IDR 42.747 trillion (Indonesian Corruption Watch, 2023).

The number of frauds that occur indicates the need for a way to detect and prevent fraud. This encourages a public accountant to improve his performance as much as possible to produce audit results that can be relied on by parties in need. To improve their performance, an accountant must have expertise and experience in doing audit work. Therefore, universities as educational institutions must be able to equip their accounting graduates with adequate knowledge, competencies, and skills.

The IEO model theory developed by Alexander Astin explains the relationship between input, environment, and outcome. This model is often used as a conceptual guide in assessment activities in higher education. Input relates to the characteristics that students initially bring to an educational program. Environment relates to the actual experiences of students during the education program. The outcome relates to the competencies obtained after the education program (Astin & Antonio, 2012).

By looking at the existing phenomena, researchers are interested in exploring these problems in accounting students at the Faculty of Economics and Business, UNSIQ, who are respondents or participants in this study by conducting pre-research. The pre-research method used is to use a questionnaire as a data collection tool.

Based on pre-research questionnaires distributed to several students of the Accounting Department of the Faculty of Economics and Business, Universitas Sains Al-Quran class of 2019 who have taken auditing courses consisting of Auditing 1, Auditing 2, and Audit Practicum, it is found that the practice received by students is still minimal while theory dominates lectures. Based on data on the implementation of the internship program FY. 2022-2023 there were no students majoring in accounting in the 2019 batch who carried out internships in audit offices (FEB UNSIQ, 2022). Thus, the practice of applying the knowledge gained from lectures, especially in terms of fraud detection sensitivity, is still minimal. When they are required to become an auditor, the skills they have must still be improved through the experience gained in carrying out audit tasks. This study will look at

how the Auditing lectures that have been attended by students can contribute to their skills and knowledge.

This research replicates Widhiastuti & Kumalasari (2020) which uses the Astin IEO model theory. Inputs in this study include student motivation and academic achievement. The outcome of this study is the ability to detect fraud. Meanwhile, to connect between inputs and outcomes, this study uses Auditing lecture involvement as an intervening variable. The difference between Widhiastuti & Kumalasari's research (2020) and this research lies in the location used. Where Widhiastuti & Kumalasari's (2020) research was conducted at Mahasaraswati University in Denpasar, while this research was conducted at Al-Quran Science University in Wonosobo. By using different samples, this study will reinforce the reliability of the variables of motivation and academic achievement about the phenomenon under study.

LITERATURE REVIEW

Astin I-E-O Model Theory

The IEO model theory developed by Alexander Astin explains the relationship between input, environment, and outcome. This model is often used as a conceptual guide in assessment activities in higher education. Input relates to the characteristics that students initially bring to an educational program. Environment relates to the actual experiences of students during the education program. The outcome relates to the competencies gained after attending the education program (Astin & Antonio, 2012).

Involvement Theory

Astin's Involvement theory (1999) explains about a person's involvement in a condition. Involvement theory Astin (1999) in Ulfa (2016) explains that involvement refers to the amount of involvement of physical energy and psychological strength of students used to gain academic experience.

Ability to Detect Fraud

The ability to detect fraud is the ability of an auditor to recognize and identify fraud contained in financial statements (Widhiastuti & Kumalasari, 2020). The ability to detect fraud can be defined as the ability to identify or discover intentional illegal actions, which have the potential to cause false or misleading presentations in financial reporting.

Student Motivation

Robbins & Judge (2013) define motivation as a process that explains the intensity, direction, and persistence of an individual to achieve a goal.

Academic Achievement

Academic achievement is an indicator of one's success in an educational program. This indicator can be described in a quantitative form specifically prepared for the evaluation process, such as grades, courses, exams, and so on (Azwar, 2013).

Auditing Lecture Involvement

Auditing lecture involvement is the active participation of students both physically and psychologically in attending Auditing lectures.

THEORETICAL FRAMEWORK

The Effect of Student Motivation on Auditing Lecture Involvement

Robbins & Judge (2013) define motivation as a process that explains the intensity, direction, and persistence of an individual to achieve a goal. The main goal of students attending lectures is to graduate with good achievement and become a professional and qualified accountant. This motivation encourages students to be more active in attending lectures. When students have a strong motivation to improve their knowledge in the field of auditing, they will be more actively involved in Auditing lectures. Students with weak motivation tend to have a higher potential to not be actively involved in lectures, and can even disengage from lecture activities (Widhiastuti & Kumalasari, 2020).

The results of research conducted by Ulfa (2016), Widhiastuti & Kumalasari (2020) prove that motivation as an input in education has a positive effect on student involvement in Auditing courses. Likewise, Anderson's research (2020) proves that there is a significant correlation between motivation and involvement.

Based on the previous description, it can be concluded that the stronger the student motivation, the higher the level of student activeness in Auditing lectures. So that the following hypothesis can be prepared:

H1: Student motivation has a positive effect on Auditing lecture involvement.

The Effect of Academic Achievement on Auditing Lecture Involvement

Academic achievement is an indicator of student success in the education program. Those who have a high GPA have a strong correlation with the seriousness and seriousness in attending all lectures, one of which is auditing lectures (Widhiastuti & Kumalasari, 2020).

Research conducted by Yanto et al., (2011) shows that academic achievement has a positive effect on involvement in lectures. This is different from the research conducted by Ulfa, (2016) and Widhiastuti & Kumalasari, (2020) which proves that academic achievement does not affect auditing lectures.

Based on the previous description, it can be concluded that the increasing academic achievement marked by the increase in GPA value will strengthen the level of student involvement in Auditing lectures. So that the following hypothesis can be prepared:

H2: Academic achievement has a positive effect on the involvement of Auditing lectures.

The Effect of Auditing Lecture Involvement on Fraud Ability

Involvement theory explains that involvement refers to the amount of physical and psychological energy students use to gain academic experience (Astin, 1999 Ulfa, 2016). Thus, the more increasing or increasing student involvement both physical and psychological, the more experience the student will get. The same applies to student involvement in Auditing lectures, where the more or more student involvement, the more experience and knowledge they get from Auditing lectures, one of which is the sensitivity to detect fraud in financial statements (Romandhon, 2019).

Research conducted by Yanto (2011), Ulfa (2016), and research by Widhiastuti & Kumalasari, (2020) prove that the involvement of Auditing lectures has a positive effect on students' ability to detect fraud.

Based on the previous description, it can be concluded that the increasing level of student activeness in Auditing lectures will further improve students' ability to detect fraud. So that the following hypothesis can be prepared:

H3: Auditing lecture involvement has a positive effect on the ability to detect fraud.

The Effect of Student Motivation on the Ability to Detect Fraud

Robbins & Judge (2013) define motivation as a process that explains the intensity, direction, and persistence of an individual to achieve a goal. Students who are motivated only to pass a course will certainly carry out learning activities that are different from students who want to master the material as preparation for entering the world of work (Anas & Aryani, 2014). The increasing efforts made by students in lectures will further increase the experience and knowledge gained. One of them is the knowledge to detect fraud.

Research conducted by Ulfa (2016) proves that student motivation has a positive effect on students' ability to detect fraud. This is different from Widhiastuti & Kumalasari's research (2020) proving that student motivation does not affect students' ability to detect fraud.

Based on the previous description, it can be concluded that the stronger the student's motivation, the more the student's ability to detect fraud will increase. So that the following hypothesis can be prepared:

H4: Student motivation has a positive effect on the ability to detect fraud.

The Effect of Academic Achievement on the Ability to Detect Fraud

Academic achievement is an indicator of one's success in an educational program. Individuals who have good academic achievement tend to have a strong foundation of knowledge and a deep understanding of aspects related to knowledge to detect fraud. They have a better understanding of fraud risks, detection methods, and potential indicators of fraud in business processes or financial reporting.

Research conducted by Yanto et al. (2011) proves that academic achievement has a high and significant correlation with student competence. This is in contrast to research conducted by Widhiastuti & Kumalasari (2020) proving that student motivation has no effect on students' ability to detect fraud.

Based on the previous description, it can be concluded that the increase in academic achievement, which is indicated by the increase in GPA value, will further improve students' ability to detect fraud. So that the following hypothesis can be prepared:

H5: Academic achievement has a positive effect on the ability to detect fraud.

The Effect of Student Motivation on the Ability To Detect Fraud With Auditing Lecture Involvement as an Intervening Variable

Student motivation is an encouragement or belief to move someone to achieve goals. The main goal of students attending lectures is to graduate with good achievements and become professional and qualified accountants. They achieve this motivation by being more actively involved in lectures (Widhiastuti & Kumalasari, 2020). The more effort students make in lectures, the more experience and knowledge they will gain. One of them is the knowledge to detect fraud.

Research conducted by Ulfa (2016) proves that Auditing lecture involvement can mediate the effect of student motivation on students ability to detect fraud.

Based on the previous description, it can be concluded that the stronger the student motivation, which is indicated by the more actively involved in Auditing lectures, the more it will improve the student's ability to detect fraud. So that the following hypothesis can be prepared:

H6: Auditing lecture involvement can become an intervening variable in the influence of student motivation on the ability to detect fraud.

The Effect of Academic Achievement on the Ability to Detect Fraud with Auditing Lecture Involvement as an Intervening Variable

Academic achievement is an indicator of student success in the education process. Those who have a high GPA have a strong correlation with the seriousness and seriousness in attending all lectures (Widhiastuti & Kumalasari, 2020). The more effort students put into

Auditing lectures, the more experience and knowledge they will gain. One of them is the knowledge to detect fraud.

Research conducted by Ulfa (2016) proves that Auditing lecture involvement is unable to mediate the effect of academic achievement on students' ability to detect fraud.

Based on the previous description, it can be concluded that the more academic achievement increases, which is indicated by the increase in student GPA scores in Auditing lectures, the more it will improve students' ability to detect fraud. So that the following hypothesis can be prepared:

H7: Auditing lecture involvement can become an intervening variable in the influence of academic achievement on the ability to detect fraud.

Based on the previous description, the following research model can be made:

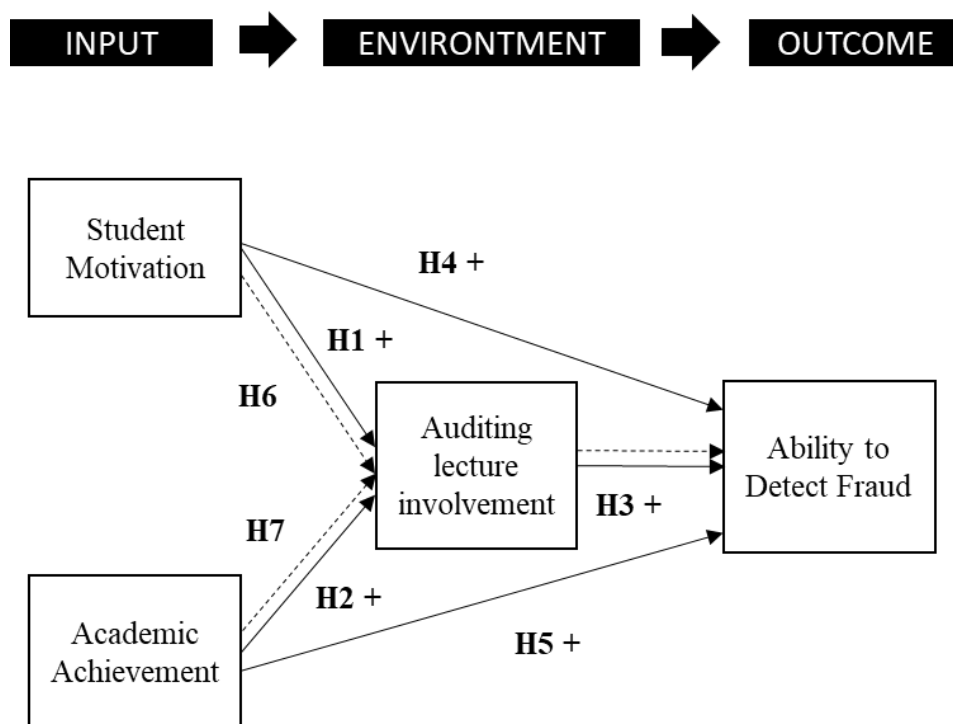


Figure 1
Research Model

RESEARCH METHODOLOGY

Data Collection Method

The data collection method used in this research is a questionnaire. The questionnaire was distributed via Google Forms with the following link <https://forms.gle/GGVpx1g1eSXJfTkM9>.

The variables used in this study include 4 variables consisting of two independent variables, namely student motivation and academic achievement, one intervening variable, namely Auditing lecture involvement, and one dependent variable, namely the ability to detect fraud.

Student Motivation (X1)

Robbins & and Judge (2013) define motivation as a process that explains the intensity, direction, and persistence of an individual to achieve a goal. Student motivation in this study is measured by a questionnaire consisting of indicators: expectancy, intrinsic instrumentally, extrinsic instrumentally, intrinsic valence, and extrinsic valence (Chiang and Jang, 2008), which are poured into 15 statement items using a 5-point Likert scale to answer questions; namely 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 = strongly agree.

Academic Achievement (X2)

Academic achievement can be defined as the final result achieved by students as an indicator of success or failure in pursuing education. Academic achievement in this context is measured using the cumulative grade point average (GPA) which reflects the final grade obtained by students during the lecture program. cumulative grade point average (GPA) is calculated by dividing the total number of quality points by the total number of semester credit units (Meuthia & Andriani, 2012). The GPA value uses the following grading scale:

Table 1
GPA Assessment Reference

GPA Score	Quality Value	Score
4,0	A	5
3,0-3,9	B	4
2,0-2,9	C	3
1,0 -1,9	D	2
0	E	1

Source: FEB UNSIQ, 2023.

Auditing Lecture Involvement (Z)

Auditing Lecture Involvement is the active participation of students in the lecture program, both physically and psychologically. This variable is measured using one of the components of student engagement, namely active learning (AUSSE, 2010), which consists of the following indicators:

1. How much student activeness in attending each lecture?
2. How much student activeness in asking questions or contributing to class discussions?
3. How many students are active in studying hard both inside and outside the classroom?
4. How much student activeness during discussions or group assignments?

These indicators are poured into 15 statement items that use a 5-point Likert scale to answer questions; namely 1 = never, 2 = rarely, 3 = sometimes, 4 = often, and 5 = always.

Ability to Detect Fraud (Y)

The ability to detect fraud is the ability of an auditor to identify and detect fraud contained in financial statements. This variable is measured by statements of fraud detection techniques according to Tuanakotta (2014) which consists of the following indicators:

1. The use of audit techniques performed by internal and external auditors in auditing financial statements, but more deeply and broadly.
2. The use of investigative audit techniques in organized crime, income tax manipulation, and manipulation of the wealth of state officials.
3. Tracing the flow of money.
4. Application of analytical techniques in the field of law.
5. Use of investigative audit techniques to uncover fraud in procurement.
6. Use of computer forensics.
7. Use of interrogative techniques.
8. Use of undercover operations.
9. Utilisation of whistleblowers.

These indicators are outlined in 12 statement items that use a 5 Likert scale to answer questions; namely 1 = very poor, 2 = poor, 3 = sufficient, 4 = good, and 5 = very good.

Data Analysis Technique

The analytical technique used in this research is multiple linear regression analysis using the IBM SPSS 25 program to determine the direct effect and path analysis to determine the indirect effect. Before the regression analysis, descriptive statistical analysis was carried out to provide information about the standard deviation, average, and theoretical range of each statement and the actual range of answers from each respondent. Then the data quality test is carried out, namely the validity test and reliability test. Instrument testing aims to ensure that the instrument used can measure what should be measured and if it is used to measure the same object, the results will not be much different. Then a classic assumption test is carried out to ensure that the model obtained fulfills the basic assumptions in regression analysis consisting of 1) a normality test using a one-sample Kolmogorov-Smirnov, 2) a multicollinearity test seen from the tolerance value and Variance Inflation Factor (VIF) value and 3) heteroscedasticity test seen with the Glejser test.

RESULT AND DISCUSSION

Descriptive Analysis of Variables

Table 2
Statistical Description of Research Variables

Variables	Std. Deviation	Actual Average	Actual Range	Theoretical Range	Theoretical Average
Student Motivation	8,117	60,31	44-75	15-75	45
Academic Achievement	0,273	3,92	3-4	1-5	3
Auditing Lecture Involvement	8,628	57,23	39-75	15-75	45
Ability to Detect Fraud	6,563	47,37	33-60	12-60	36

Source: Primary data processed, 2023.

Table 2 provides information about the standard deviation, mean, and theoretical range of each statement and the actual range of answers from each respondent.

Data Quality Test

Validity Test

Table 3
Validity Test Results

Student Motivation			Auditing Lecture Involvement			Ability to Detect Fraud		
Indikator	<i>Corrected Item- Total Correlation</i>	Ket	Indikator	<i>Corrected Item-Total Correlation</i>	Ket	Indikator	<i>Corrected Item- Total Correlation</i>	Ket
X1_1	0,505	Valid	Z_1	0,314	Valid	Y_1	0,764	Valid
X1_2	0,618	Valid	Z_2	0,318	Valid	Y_2	0,681	Valid
X1_3	0,576	Valid	Z_3	0,506	Valid	Y_3	0,468	Valid
X1_4	0,626	Valid	Z_4	0,440	Valid	Y_4	0,657	Valid
X1_5	0,470	Valid	Z_5	0,463	Valid	Y_5	0,599	Valid
X1_6	0,389	Valid	Z_6	0,504	Valid	Y_6	0,625	Valid
X1_7	0,603	Valid	Z_7	0,582	Valid	Y_7	0,632	Valid
X1_8	0,578	Valid	Z_8	0,705	Valid	Y_8	0,756	Valid
X1_9	0,678	Valid	Z_9	0,778	Valid	Y_9	0,643	Valid
X1_10	0,629	Valid	Z_10	0,682	Valid	Y_10	0,650	Valid
X1_11	0,759	Valid	Z_11	0,651	Valid	Y_11	0,747	Valid
X1_12	0,630	Valid	Z_12	0,351	Valid	Y_12	0,601	Valid
X1_13	0,710	Valid	Z_13	0,633	Valid	Academic Achievement		
X1_14	0,457	Valid	Z_14	0,747	Valid	X1_1	1,000	Valid
X1_15	0,622	Valid	Z_15	0,631	Valid			

Source: Primary data processed, 2023.

Table From table 3 shows that the corrected item-total correlation value on all variable indicators has a value greater than 0.3. This shows that all indicators in this study are valid.

Reliability Test

Table 4
Reliability Test Results

Variables	<i>Cronbach's Alpha</i>	Description
Student Motivation	0,903	Reliable
Academic Achievement	1,000	Reliable
Auditing Lecture Involvement	0,889	Reliable
Ability to Detect Fraud	0,912	Reliable

Source: Primary data processed, 2023.

From Table 4, overall the reliability test conducted in this study has shown satisfactory results. This can be seen from the Cronbach's Alpha value on each variable has a value greater than 0.7. So all statements related to the variables of student motivation, academic achievement, involvement in Auditing lectures, and the ability to detect fraud in this study.

Classical Assumption Test

Normality Test

Table 5
Normality Test Results

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		75
Normal Parameters ^{a,b}	Mean	,0000000
	Std. Deviation	3,91378247
Most Extreme Differences	Absolute	,051
	Positive	,048
	Negative	-,051
Test Statistic		,051
Asymp. Sig. (2-tailed)		,200 ^{c,d}
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Source: Primary data processed, 2023.

From Table 5, it can be seen that the results of the normality calculation using the One-Sample Kolmogorov-Smirnov Test have a probability of a significance level above the $\alpha =$

0.05 level, namely 0.200. This means that in the regression model, there are residual or confounding variables that are normally distributed.

Multicollinearity Test Tabel

Table 6
Multicollinearity Test Results

Variables	Tolerance	VIF	Description
Student Motivation	0,807	1,238	No Multicollinearity
Academic Achievement	0,995	1,005	No Multicollinearity
Auditing Lecture Involvement	0,811	1,234	No Multicollinearity

a. Dependent Variable: Ability to Detect Fraud

Source: Primary data processed, 2023.

Based on table 6, shows that all independent variables have a tolerance value of more than 0.1, then the VIF calculation results also show that all variables have a VIF value of less than 10. So it can be concluded that the regression model used in this study is free from multicollinearity symptoms.

Table 7
Multicollinearity Test Results

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	- 2,281	4,911		-,465	,644
Student Motivation	-,014	,040	-,044	-,342	,733
Academic Achievement	1,585	1,063	,174	1,491	,140
Auditing Lecture Involvement	-,002	,037	-,007	-,051	,960

a. Dependent Variable: ABS_22

Source: Primary data processed, 2023.

In Table 7 of the Glejser test, it can be seen that the variables of academic achievement, student motivation, and Auditing lecture involvement have a significant level > 0.05. So it can be concluded that the regression model used in this study is free from symptoms of heteroscedasticity.

Hypothesis Test

First Regression Equation

Table 8
Hypothesis Test Results - First Regression Equation

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	25,673	15,222		1,687	,096
Student Motivation	,464	,113	,436	4,102	,000
Academic	,918	3,358	,029	,273	,785

Achievement					
R Square= 0,435					
Adjusted R Square = 0,167					
Std. Error of the Estimate = 7,875					
a. Dependent Variable: Auditing Lecture Involvement					

Source: Primary data processed, 2023.

Based on table 8, the linear regression equation can be made as follows:

$$Z = 25.673 + 0.464 MM - 0.918 PA + 7.875$$

The regression equation has the following meaning:

- a. The constant value of 25.673 (positive) indicates that without being influenced by the independent variables, namely student motivation and academic achievement, the accounting students sampled in this study have the potential to have good enthusiasm for attending Auditing lectures.
- b. Based on Table 8, the influence of student motivation on the involvement of Auditing lectures (H1) has a coefficient of 0.464 and a significance of 0.000. Because it has a significance level of less than 0.05, it can be concluded that H1 which states that student motivation has a positive effect on the involvement of Auditing lectures is "accepted". This means that the stronger the student motivation, which is characterized by studying hard and diligently, will increase student involvement in Auditing lectures. Assuming other variables are constant.
- c. Based on Table 8, the effect of academic achievement on Auditing lecture involvement (H2) has a coefficient of 0.918 and a significance of 0.785. Because it has a significance level of more than 0.05, it can be concluded that H1 which states that academic achievement has a positive effect on the involvement of Auditing lectures is "rejected". This means that there is no influence between academic achievement variables on the involvement of Auditing lectures.
- d. Based on table 8 shows the R Square value of 0.435, this indicates that the Auditing lecture involvement variable is explained by the academic achievement variable and

student motivation by 43.5% while the remaining 56.5% is caused by other factors not examined in this study. Meanwhile, the value of e_1 can be found by the formula $e_1 = \sqrt{(1-0.435)} = 0.75$

Second Regression Equation

Table 9
Hypothesis Test Results - Second Regression Equation

Coefficients					
Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	15,335	7,874		1,948	,055
Keterlibatan Perkuliahan Auditing	,588	,060	,772	9,826	,000
Motivasi Mahasiswa	,050	,064	,062	,783	,436
Prestasi Akademik	-1,171	1,705	-,049	-,687	,494
R Square= 0,644 Adjusted R Square = 0,629 Std. Error of the Estimate = 3,996					
a. Dependent Variable: Kemampuan Mendeteksi Fraud					

Source: Primary data processed, 2023.

Based on table 8, the linear regression equation can be made as follows:

- a. The constant value of 15.335 (positive) indicates that without being influenced by the independent variables, namely student motivation, academic achievement, and Auditing lecture involvement, the accounting students sampled in this study have the potential to have a good ability to detect Fraud.
- b. Based on table 8, for the effect of Auditing lecture involvement on the ability to detect fraud (H3) has a coefficient of 0.588 and significance at 0.000. Because it has a significance level of less than 0.05, it can be concluded that H3 which states that Auditing lecture involvement has a positive effect on the ability to detect fraud is "accepted". This means that the more enthusiastic students are in Auditing lectures which are characterized by actively asking questions and contributing to learning, it will improve students' ability to detect fraud. Assuming other variables are constant.
- c. Based on Table 8, the effect of student motivation on the ability to detect fraud (H4) has a coefficient of 0.062 and a significance of 0.436. Because it has a significance level of more than 0.05, it can be concluded that H4 which states that student motivation has a positive effect on the involvement of Auditing lectures is "rejected".

This means that student motivation does not affect student's ability to detect fraud. Assuming other variables are constant.

- d. Based on Table 8, the effect of academic achievement on student's ability to detect fraud (H5) has a coefficient of -1.171 and a significance of 0.494. Because it has a significance level of more than 0.05, it can be concluded that H5 which states that academic achievement has a positive effect on the ability of students to detect fraud is "rejected". This means that academic achievement does not affect the ability to detect fraud. Assuming other variables are constant.
- e. Based on Table 8, shows the R Square value of 0.644, this indicates that the variable is explained by the variable student motivation, academic achievement, and Auditing lecture involvement by 64.4% while the remaining 35.6% is caused by other factors not examined in this study. Meanwhile, the value of e2 can be found by the formula $e2 = \sqrt{1-0.639} = 0.59$.

From Table 7 and Table 8, the Standardized Coefficients Beta value of each dependent variable on the independent variable can be obtained. Thus a path diagram can be made as follows:

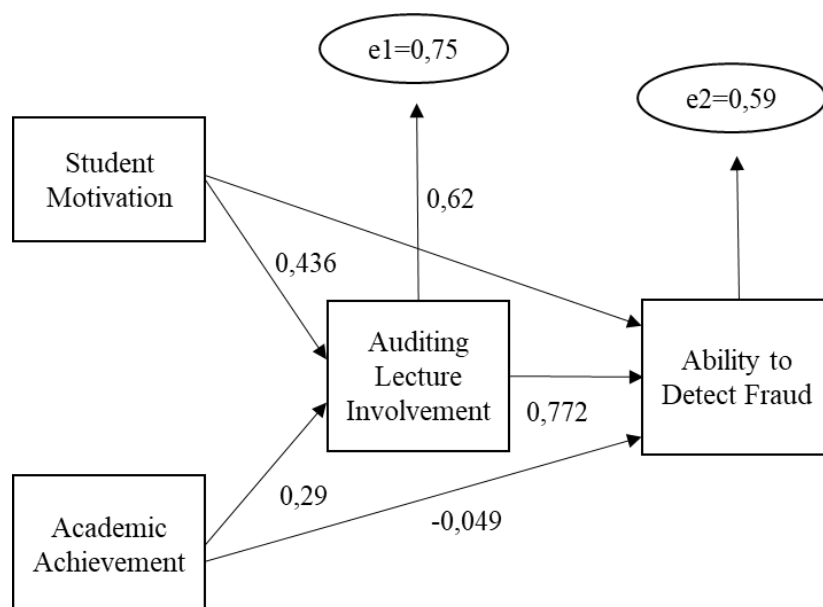


Figure 2

Path Diagram

Intervening Test

Based on the Figure 2 path diagram, the intervening test results shown in Table 10 can be obtained as follows:

Table 10
Intervening Test Results

No	Independent Variable	Dependent Variable	Intervening	Pengaruh			Description
				Direct	Indirect	Total	
1	Student Motivation (X1)	Ability to Detect Fraud (Y)	Auditing Lecture Involvement (Z)	0,062	$0,436 \times 0,772 = 0,336$	0,398	Intervening
2	Academic Achievement(X2)	Ability to Detect Fraud (Y)	Auditing Lecture Involvement (Z)	- 0,049	$0,029 \times 0,772 = 0,022$	-0,027	No Intervening

Source: Primary data processed, 2023.

- a. Based on Table 10, for the effect of motivation on the ability to detect fraud through the involvement of Auditing lectures as an intervening variable H6 has a direct effect of 0.062 and an indirect effect of 0.336. Because the direct effect is smaller than the indirect effect, it can be concluded that the Auditing lecture involvement variable becomes an intervening variable for the effect of student motivation on the ability to detect fraud "accepted". This means that the Auditing lecture involvement variable can mediate the effect of student motivation on the ability to detect fraud.
- b. Based on Table 10, for the effect of academic achievement on the ability to detect fraud through the variable involvement of Auditing lectures as an intervening variable H7 has a direct effect of -0.049 and an indirect effect of 0.022, while based on Table 6 which shows the effect of academic achievement on the involvement of Auditing lectures (H2) has a significance level of more than 0.05 which means it has no effect. Because the direct effect is smaller than the indirect effect with a note that the effect of academic achievement as an independent variable on the involvement of Auditing lectures as an intervening variable is not significant or has no effect, it can be concluded that the variable involvement of Auditing lectures as an intervening variable on the effect of academic achievement on the ability to detect fraud is "rejected". This means that the

Auditing lecture involvement variable is not able to mediate the effect of academic achievement on the ability to detect fraud.

The Effect of Student Motivation on Auditing Lecture Involvement

Table 8 shows that the student motivation variable has a positive effect on the involvement of Auditing lectures. The results of this study are in line with previous research conducted by Widhiastuti & and Kumalasari (2020) which proves that student motivation has a positive effect on Auditing course involvement. This is also supported by Anderson (2020) who proves that there is a significant correlation between motivation and Auditing lecture involvement.

The results of this study prove that student motivation has a positive effect on the involvement of Auditing lectures. This means that the stronger the student motivation, which is characterized by studying hard and diligently, will increase student involvement in Auditing lectures.

The results of this study prove that student motivation as input in the Astin I-E-O model theory can affect the involvement of Auditing lectures as an environment.

The Effect of Academic Achievement on Auditing Lecture Involvement

Table 8 shows that the academic achievement variable does not affect the involvement of Auditing lectures. The results of this study are in line with previous research conducted by Ulfa (2016) and Widhiastuti (2020) which prove that academic achievement has no effect on the involvement of Auditing lectures, but this is not in line with research conducted by Yanto et al., (2011) which proves that academic achievement affects the involvement of Auditing lectures.

The results of this study prove that academic achievement does not affect the involvement of Auditing lectures. This means that a decrease or increase in academic achievement, which is characterized by an increase or decrease in GPA value, will not strengthen or weaken student involvement in Auditing lectures.

The results showed a discrepancy between the research results and the Astin IEO model. This may be because the GPA value, which is used as an indicator of academic achievement, is not a determining factor for students in increasing their involvement in Auditing lectures. Involvement in attending Auditing lectures as stipulated in the curriculum and academic guidelines is an obligation for students.

The Effect of Auditing Lecture Involvement on the Ability to Detect Fraud

Table 9 shows that the Auditing lecture involvement variable has a positive effect on Auditing lecture involvement. The results of this study are in line with previous research conducted by Ulfa (2016) and Widhiastuti (2020) which prove that the involvement of Auditing lectures has a positive effect on the ability to detect fraud.

The results of this study prove that the involvement of Auditing lectures has a positive effect on the ability to detect fraud. This means that the more students are involved in Auditing lectures which are characterized by activeness in discussing, asking questions, and contributing inside or outside lectures, will increase students' ability to detect fraud.

The results of this study are in line with the Involvement theory which explains that if a student has an increasing or increasing level of involvement in Auditing lectures both physically and psychologically, student knowledge and skills will increase, one of which is the ability to detect fraud.

The Effect of Student Motivation on the Ability to Detect Fraud

Table 9 shows that the student motivation variable does not affect the ability to detect fraud. The results of this study are in line with previous research conducted by Widhiastuti (2020) which proves that student motivation does not affect the ability to detect fraud, but this is not in line with research conducted by Ulfa (2016) which proves that student motivation has a positive effect on the ability to detect fraud.

The results of this study prove that student motivation does not affect the ability to detect fraud. This means that stronger student motivation, which is characterized by increased discipline, thoroughness, and a sense of responsibility, will not strengthen or weaken the ability of students to detect fraud.

The results of this study are not in line with the Astin IEO model theory. This is most likely due to the strong and weak motivation does not directly affect a person's ability to detect fraud.

The Effect of Academic Achievement on the Ability to Detect Fraud

Table 9 shows that the student motivation variable does not affect the ability to detect fraud. The results of this study are in line with previous research conducted by Widhiastuti (2020) which proves that student motivation does not affect the ability to detect fraud, but this is not in line with research conducted by Ulfa (2016) which proves that student motivation has a positive effect on the ability to detect fraud.

The results of this study prove that academic achievement has a negative effect on Auditing lecture involvement. This means that a decrease or increase in academic achievement, which is characterized by an increase or decrease in GPA value, will not strengthen or weaken the ability of students to detect fraud.

The results of this study are not in line with the Astin IEO model theory, most likely because GPA (cumulative achievement index) has no direct influence on a person's ability to detect fraud. The ability to detect fraud depends more on knowledge, analytical skills, understanding of audit principles, and practical experience in dealing with fraud situations.

The Effect of Student Motivation on the Ability to Detect Fraud with Lecture involvement as an Intervening Variable

Table 10 shows that the Auditing lecture involvement variable can mediate the effect of student motivation on the ability to detect fraud. Research conducted by Ulfa (2016) proves that the involvement of Auditing lectures can mediate the influence of student motivation on student's ability to detect fraud.

The results of this study prove that Auditing lectures can mediate the effect of student motivation on the ability to detect fraud. This means that student motivation does not directly affect the ability of students to detect fraud but requires involvement in Auditing lectures. In other words, the stronger the student motivation, which is characterized by

studying hard and diligently, will increase student involvement in Auditing lectures so that student sensitivity and knowledge in detecting fraud will increase.

The Effect of Academic Achievement on the Ability to Detect Fraud with Lecture Involvement as an Intervening Variable

Table 10 shows that the Auditing lecture involvement variable is unable to mediate the effect of academic achievement on the ability to detect fraud. Research conducted by Ulfa (2016) proves that the involvement of Auditing lectures is unable to mediate the effect of academic achievement on students' ability to detect fraud.

The results of this study prove that the involvement of Auditing lectures is unable to mediate the effect of academic achievement on the ability to detect fraud. This means that the involvement of Auditing lectures is not able to strengthen or weaken academic achievement which is characterized by an increase or decrease in GPA value on the ability to detect fraud.

CONCLUSION

1. Student motivation has a positive effect on Auditing lecture involvement. This means that H1 is accepted. This means that the stronger the student motivation, which is characterized by studying hard and diligently, the more it will increase student involvement in Auditing lectures.
2. Academic achievement does not affect the involvement of Auditing lectures. This means that H2 is rejected. This means that a decrease or increase in academic achievement, which is characterized by an increase or decrease in GPA value, will not strengthen or weaken student involvement in Auditing lectures.
3. Auditing lecture involvement has a positive effect on the ability to detect fraud. This means that H3 is accepted. This means that the more students are involved in Auditing lectures which are characterized by activeness in discussing, asking questions, and contributing inside or outside lectures, will increase students' ability to detect fraud.
4. Student motivation does not affect the ability to detect fraud. This means that H4 is rejected. This means that the stronger the student's motivation, which is characterized by increased discipline, thoroughness, and sense of responsibility, will not strengthen or weaken the student's ability to detect fraud.

5. Academic achievement does not affect Auditing lecture involvement. This means that H5 is rejected. This means that a decrease or increase in academic achievement, which is characterized by an increase or decrease in GPA value, will not strengthen or weaken students' ability to detect fraud.
6. Auditing lecture involvement can mediate the effect of student motivation on the ability to detect fraud. This means that H6 is accepted. This means that student motivation does not directly affect the ability of students to detect fraud but requires involvement in Auditing lectures.
7. Auditing lecture involvement is not able to mediate the effect of academic achievement on the ability to detect fraud. This means that H7 is rejected. This means that the involvement of Auditing lectures is not able to strengthen or weaken academic achievement which is characterized by an increase or decrease in GPA value on the ability to detect fraud.

SUGGESTION

Based on the above conclusions, to improve student's ability to detect fraud, the following are suggested:

1. There is a need for additional Forensic Audit courses for Accounting Study Program students at the Faculty of Economics and Business, Al-Quran University of Science.
2. There is a need to increase student activeness in Auditing lectures which can be done by maximizing all facilities, conditions, and activity processes and policies so that they are directed at creating maximum learning activities for students.

FUTURE RESEARCH AGENDA

Based on the research limitations contained in this study, improvements that can be made for future researchers include:

1. Future research needs to carry out interview or interview techniques so that the data obtained can better describe the actual situation in the population and sample studied.

2. Future research needs to add other variables such as self-efficacy, emotional intelligence, and spiritual intelligence. So that lecture involvement can mediate the input and output produced better.
3. Future research needs to use the Sobel Test to determine the level of significance of the indirect effect of student motivation variables on the ability to detect fraud.

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