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INFLUENCE OF LECTURER COMPETENCE, LEARNING ENVIRONMENT, AND MOTIVATION ON STUDENT ACHIEVEMENT OF INFORMATICS BUSINESS INSTITUTE (IBI) BOGOR UNITY OF WEST JAVA PROVINCE

(Case Study of IBI Financial Management Study Program Unit Bogor)

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ABSTRACT

Student achievement is a form of student achievement after going through various stages in the learning process and can be used to find out the extent of student success and failure in learning. Based on the observations showed that the achievements of students of the Institute of Business Informatics Unity (IBIK) Bogor West Java Province has not been optimal. This is allegedly because it is influenced by lecturer competence, learning environment, and motivation. Therefore, universities must have good lecturer competence, a learning environment and students have high motivation, so that it will be able to improve student achievement.

This study aims to explain whether there is a significant influence between lecturer competence, learning environment, and motivation on student achievement of IBI Kesatuan Bogor, as well as to find out which is the most dominant and influential among the three variables dependent on lecturer competency (X_1), learning environment (X_2) and Motivation (X_3) on student achievement (Y).

This study used quantitative methods with a population of 114 students and sampled as many as 89 students where samples were determined through the Solvin Formula with a standard error of 0.1. The data collection technique used is to use questionnaires. While the data analysis technique used in this study is a multiple linear regression method with the help of SPSS 20.0 software for windows.

The results showed that 1). The competence of lecturers has a positive and significant effect on the achievements of IBI Kesatuan Bogor 2). students. The level of learning environment has a positive and significant effect on the achievements of students of IBI Kesatuan Bogor. 3). Motivation has a positive and significant effect on the achievements of students of IBI Kesatuan Bogor. 4). Lecturer competency, learning environment and motivation together have a positive and significant effect on the achievements of IBI Kesatuan Bogor students.
Keywords: Lecturer competence, Learning environment, Motivation, student achievement.

INTRODUCTION

Students at the Institute of Informatics Business Association every year experience an increase in both students and achievements of students. Increasing the number of students and increasing student achievement, still need to experience intensive mentoring for the achievement of independent, resilient, and qualified Bogor Unity IBI students in order to have the ability to solve problems both for themselves and society in general. The development of students in Indonesia, especially in Bogor continues to grow and continues to increase, especially the ability of human resources. The existence of lecturer competence, learning environment and motivation is the key to the success of a learning achievement for students. Students need the existence of competence of qualified lecturers, a good learning environment and high motivation for students to improve the ability to academic and non-academic scientists.

College education is a system that claimed independent and disciplined learning, then in every learning activity is always based on the wishes of individuals in line with the vision of the mission of universities. Student achievement is not only influenced by the competence of lecturers aja, but there are other things that influence the learning environment and motivation. The state of the learning environment that is not good in a person will cause students to become lazy and not interested in doing activities resulting in a decrease in interest in learning. A learning interest is a person's interest in lessons. Interest in learning is a tool that encourages a person to have motivation in learning. Learning motivation is influenced by two aspects, namely intrinsic aspects and extrinsic aspects. Intrinsic aspects describe a person's internal motivation to do something in order to achieve his goals, for example a management student will learn because he/she is happy with the lesson. Extrinsic aspects describe a person's motivation to get something because it is influenced by rewards or punishments, for example a student will learn because he/she must get good grades, so researchers are interested in researching the relationship between lecturer competence, learning environment and motivation to the achievements of students of the First Semester Financial Management Study Program of IBI Kesatuan Bogor in 2020,(In Grades 1B, 1D and 1F). The objectives of this research are as follows:

a. To find out the influence of lecturer competence, learning environment, and motivation simultaneously on the achievements of IBI Students Unity Bogor.
b. To know the influence of lecturer competence, learning environment, and partial motivation on the achievements of IBI Kesatuan Bogor students.

THEORETICAL FRAMEWORK

1**. Competence**:
a. The term Competence according to Webster's Dictionary began to appear in 1596. The term is derived from the Latin word "competere" which means "to be suitable". Then this substantially changed with the entry of various issues and discussions on the concept of competence from various literatures. According to the Decree of the Head of state personnel agency No. 46 A year 2003 which states that competence is the ability and characteristics possessed by a civil servant in the form of knowledge, skills, and attitudes

of behavior required in the implementation of his duties, so that the civil servant can carry out his duties professionally, effectively and efficiently.

b. Spencer (in Wibowo, 2007:111) explains that there are five types of competency characteristics, namely the following: 1. Motive is something that is consistently thought or desired by the person who causes the action. 2. Traits are physical characteristics and consistent responses to situations or information. 3. The concept of self is one's attitude, values, or self-image. 4. Knowledge is information that a person has in a specific field. 5. Skill is the skill of doing certain physical or mental tasks[1].

c. According to Hutapea and Thoha (2008:28) explained that competence is as follows: "Ability and willingness to perform a task with effective and efficient performance to achieve the company's objectives." [2]

d. According to Wibowo (2012:324) explained that competence is as follows: "An ability to carry out a job based on skill and knowledge and supported by the attitude of work required by the work." [3]

e. Based on the above understanding, it can be concluded that competence is the ability in work by integrating knowledge, skills, abilities and personal values based on experience and learning in order to carry out their duties professionally, effectively and efficiently.

2. **Environment**

a. Nasution S, (2011:41) Education is very important for the life of every human being. Because education is a conscious and planned effort to realize the atmosphere of learning and learning process so that learners actively develop their potential to have spiritual strength, noble moral intelligence and skills needed in themselves and society. Education includes the teaching of specific skills as well as something that cannot be seen.. The education process starts from the training of noble morals by giving Uswah Al Hasanah, then continued with the development of reasoning and skills that support the future. With regard to education, the environment is very influential in personality development, and the educational environment is known as three education centers.[4]

b. Fudyartanta (1990:39), Tripusat education is an educational concept put forward by Ki Hajar Dewantara founder of Taman Siswa which is recognized as the Father of National Education. Tripusat education intended here is this educational environment includes "education in the family environment, education in the college / school environment, and education in the community / youth" Every human being who will always be and experience development in the three educational environments. In general we know three educational environments. These three neighborhoods are called three education centers. Three education centers is three centers responsible for the implementation of education, namely in families, schools and communities. [5]

c. In Law No. 20 of 2003 on the National education system in article 13 paragraph 1 it is stated that the education path consists of formal, non-formal and informal education that can complement each other and enrich each other. [6]

d. In the teachings of Islam has been stated by the Prophet Muhammad in his words which means: "Every child is born on the basis of fitrah, then indeed both parents who make him Majusi, Jew, and Christian." The hadith explains that it is the parents who play an

important role in shaping the personality of the protégé. The child born in a holy state is the responsibility of the parents to educate him. [7]

e. Rulam Ahmadi,(2014 :171), There are some interesting things in Ki Hajar Dewantara's description of Tripusat Pendidikan, including: a. Keinsyafan Ki Hajar Dewantara that the goal of Education is impossible to achieve only through one line b. The three education centers must be closely related and harmonious. c. Family nature remains the most important center of education and provides ethical education, religion, and social practice. d. College as wiyata hall that provides science and performance education. E. The nature of youth (which is now expanded into the environment / community nature) as a place where the child practices forming his character or character and personality. F. The rationale of Ki Hajar Dewantara is an effort to revive, add and give the child a feeling of social. [8]

f. Novan Ardy Wiyani, Barnawi,(2012: 90). The three education centers both play an important role in the success of education and are basically all interconnected and cooperative with each other. All three have indirectly conducted close coaching in educational practice. The relation of the three can be seen from: a. Parents carry out their obligations to educate children in the family. B. Because of the limitations of parents in educating children at home, and finally the educational process is submitted in school. c. The community will be a facilitator for learners to actualize their skills. [9]

g. Djumransjah and Abdul Malik Karim Amrullah,(2007). In addition to the leaders, all members of the community must also take part in the responsibility of fostering and improving public education by inviting the ma''ruf and preventing the mun''kar. And among you is he who enhorses virtue, enhorses the good and forbids the evil. [10]

3. Motivation

a. John Eschols and Hasan Shadily, (2003 :386). Motivation is the root of the Latin movore, which means motion or drive to move.1 Motivation in English comes from the word motive which means impulse or reason. [10]

b. According to Mc. Donald (Oemar Hamalik, 2011: 106), motivation is a change in energy in a person that is characterized by the onset of feelings and reactions to achieve goals. [11]

c. According to Sardiman A.M (2010: 75) in motivational learning activities can be said as the overall driving force in the student that gives rise to learning activities, so that the desired goals by the subject can be achieved. [12]

d. According to M. Dalyono (2009: 57) learning motivation is a driving force or encouragement owned by human beings to do a job that is learning. [13]

e. According to Hamzah B. Uno (2011: 23) the nature of learning motivation is an internal and external motivation in students who are learning to make changes in behavior, generally with several indicators or elements that support. [14]

f. Frederick j.MC. Donald, Educational Psychology, (Tokyo: Overseas Publication LTD,1959)
Frederick Herzberg (1959), a professor of life sciences at the University in Cleveland, Ohio, presented Herzberg's Two Factors Motivation Theory. According to Frederick

Herzberg (1996) in Robbins (2008: 218) there are two types of factors that affect work motivation, namely intrinsic and extrinsic factors. [15].

g. Mullins (Kiruja E. K., 2013), states that motivating employees effectively is one of the most important functions of a manager. There is evidence to suggest that organizations face challenges in retaining employees due to limited opportunities for organizational advancement and today's competitive labor market[16]
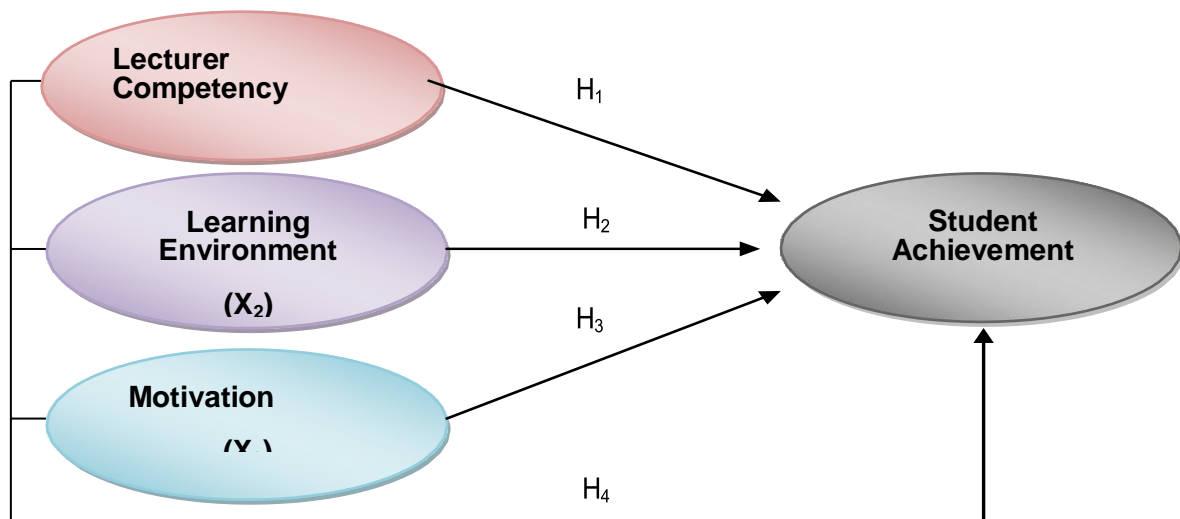
Conceptual Framework of Research

Figure 1. Conceptual Framework

Research Hypothesis

H1 : It is suspected that lecturer competence has a positive and significant effect on student achievement at IBI Kesatuan Bogor

H2 : It is suspected that the level of learning environment has a positive and significant effect
on student achievement in IBI Kesatuan Bogor.

H3 : Alleged motivation has a positive and significant effect on student achievement in IBI Kesatuan Bogor.

H4 : Alleged competence of lecturers, learning environment, and motivation have a positive and significant effect on student achievement in IBI Kesatuan Bogor.

METHODS

The population in this study was a Student of Financial Management Study Program of IBI Unity bogor Province of West Java sample in the study is IBI Unity Bogor West Java Province. The sampling technique used is Random Sampling, which is a simple random sampling method. The target population of students of IBI Kesatuan Bogor Financial

Management Study Program Class 1B number of students 39, grade 1D number of students 37 and 1F the number of students 38 so that amounts to 114 students.
Calculates the number of samples using the Slovin formula, as follows:
Calculates the number of samples using the Slovin formula, as follows:

$$n = \frac{N}{Nd^2 + 1}$$

Description:
n = Number of Samples
N = Population
d = Set error standard

$$\frac{114}{(114x0,05^2) + 1}$$
$$n = \frac{114}{(114x0,0025\ ) + 1}$$

$$= \frac{114}{(0,285) + 1}$$
$$= \frac{77}{1,285}$$
$$n = 88,70$$

(Rounded up to 89 employees)
Obtained the number of samples = 89 employees.

The primary data in this study is data collected by spreading questionnaires and supported by the results of interviews with respondents and secondary data of this study. The population in this study were all students of Financial Management Study Program Class 1B, 1D and 1F IBI Kesatuan Bogor. The sampling technique selected in this study is by using Stratified Random Sampling method. The number of population taken in this study was 114 employees and the sample number of 89 students who were students with purposive sampling method.

The data collection methods used in this study are interviews, observations, and questionnaires. This study used multiple linear regression data analysis techniques. The hypothesis in this study was tested using simultaneous test (F-test) and partial test (t-test) to determine the influence between variables. The classic assumption tests used in this study are normality test, heterocysticity test, and multicolinearity test

Multiple Linear Regression, multiple linear regression analysis is a common statistical method used to examine the relationship between a dependent variable and several independent variables. The formula for multiple regression analysis methods according to Rangkuti (2011: 66-67) is as follows:

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$$

Dimana :
Y   = Student achievement
X_1 = Lecturer competence

X_2 = Learning environment
X_3 = Motivation
A = Constant
$b_{1,2,3}$= Regression Coefficient
 e = error

Hypothesis Testing
Simultaneous Regression Test (Test F)
The F test was conducted to determine the effect of independent variables simultaneously on dependent variables. The result of F test on SPSS output can be seen in ANOVA table. To know the variables independently simultaneously affect dependent variables, do by comparing p-values in the sig column. With the signification rate used is 0.05. If the p-value is less than 0.05 then Ha is accepted and Ho is rejected, on the contrary if the p-value is greater than 0.05 then Ha is rejected and Ho is accepted (Nugroho, 2005)[17]

Partial Regression Test (t Test)
T-tests are performed to determine the amount of influence each individual independent variable has on dependent variables. The results of this t test on SPSS output can be seen in the table Coefficientsα. To find out whether or not each individual independent variable affects dependent variables, it is done by comparing p-values in the Sig column. Each independent variable with a significant rate used is 0.05. If the p-value is less than 0.05 then Ha is accepted and Ho is rejected. Conversely if the p-value is greater than 0.05 then Ha is rejected and Ho is accepted (Nugroho, 2005)

DISCUSSIONS

Table 1 shows that all indicators used to measure the variables used in this study had correlation values greater than 0.3.

Table 1. Validity Test And Reliability Test

Tabel 1. Uji Validitas Dan Uji Reliabilitas

Variabel	Statement	Sig	Status	Cronbach Alpha	Status
Lecturer competence (X1)	X1.1	0,003	Valid	0,635	Reliabel
	X1.2	0,005	Valid		Reliabel
	X1.3	0,003	Valid		Reliabel
	X1.4	0,002	Valid		Reliabel
	X1.4	0,001	Valid		Reliabel
Learning	X2.1	0,001	Valid	0,757	Reliabel

environment (X2)					
	X2.2	0,000	Valid		Reliabel
	X2.3	0,000	Valid		Reliabel
Motivation (X3)	X3.1	0,005	Valid	0,713	Reliabel
	X3.2	0,000	Valid		Reliabel
	X3.3	0,031	Valid		Reliabel
	X3.4	0,000	Valid		Reliabel
Student achievement (Y)	Y1.1	0,797	Valid	0,661	Reliabel
	Y1.2	0,001	Valid		Reliabel
	Y1.3	0,797	Valid		Reliabel

Source: SPSS data processing, 2020

The results show that all of these indicators are valid. Table 1 shows that all variables have an alpha coefficient greater than 0.60 so it can be said that all gauges of each variable of the questionnaire are variables.

Multiple Regression Analysis
Coefficients[a]

Table 2. Multiple Regression

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-4.841	6.260		-.773	.442		
	X1	.466	.225	.305	2.056	.046	.972	1.025
	X2	.174	.237	.107	.727	.472	.963	1.036
	X3	.281	.138	.303	2.042	.047	.967	1.035

a. Dependent Variable: Y   Source: SPSS data processing, 2020

Table 2 can be created multiple linear regression equations as follows:
$$Y=-4841+0.466X1+-0.174X2+0.281X3$$
Based on the results of the analysis states that:
1. If the Competency of Lecturers (X1) increases by one-unit, Student Achievement (Y) will tend to increase by 0.466 units.
2. If the Learning Environment (X2) increases by one-unit, Student Achievement (Y) will tend to increase by 0.174 units.
3. If the Motivation (X3) increases by one-unit, Student Achievement (Y) will tend to increase by 0.281 units.

Constant value of -4,841 means that if lecturer competency, learning environment, and motivation are not applied or equal to zero (0) then Student Achievement (Y) is -4,841 units.

Multicolenearity Analysis

In table 2 it appears that VIF has a value of 1.025. This value indicates that the output is around the number 1 (one). Then there is no multicolinearity. Based on output on coeficients model is said not to occur multikolinier because VIF value < 10

Analysis of Coefficients of Determination.
Model Summary[b]
Table 3. Coefficient Analysis of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.403[a]	.164	.098	1.622	1.401

a. Predictors: (Constant), X3, X1, X2   Source: SPSS data processing, 2020
b. Dependent Variable: Y

The number R Square (coefficient of determination) is 0.164. This means 16.3% of the influence of lecturer Competence, Learning Environment and Motivation on Student Achievement, while the remaining 83.7% (100% - 16.2%) caused by other factors.

Table 4. Partial Test (Test t)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-4.843	6.262		-.773	.444		
	X1	.467	.227	.305	2.056	.045	.974	1.028
	X2	.284	.138	.303	1.702	.044	.966	1.033
	X3	.283	.139	.304	2.043	.045	.967	1.034

a. Dependent Variable: Y   Source: SPSS data processing, 2020

The Relationship between Lecturer Competency and Student Achievement
Spss calculation results obtained t count (2,056) > t table (1,681) then the competence of lecturers t affect student achievement is only 2,056 or 20.6%. This is in accordance with the significant figure of 0.045< 0.05 which means there is a significant influence between lecturer competencies on student achievement.

The Relationship between The Learning Environment and Student Achievement
Spss calculation results obtained t count (1,702) > t table (1,681), then the learning

environment has a significant effect on student achievement of 1,702 or 17.02%. This is in line with the significant figure of 0.044< 0.05 which means there is a significant influence between the learning environment on Student Achievement.

The Relationship between Motivation and Student Achievement

Spss calculation results obtained t count (2043)> t table (1,681), then Motivation there is a significant influence on Student Achievement is 2,043 or 20.4%. This is in line with the significant figure of 0.045 < 0.05 which means there is a significant influence between Motivation on Student Achievement.

Table 5. Simultaneous Test (Test F)

ANOVA [b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	19.921	3	6.641	2.527	.072[a]
	Residual	102.543	39	2.629		
	Total	122.465	42			

a. Predictors: (Constant), X3, X1, X2   Source: SPSS data processing, 2020
b. Dependent Variable: Y

The calculation result obtained calculated F number (2,527) > F table (1,483) so that H0 was rejected and H1 received. That is, lecturer Competence, Learning Environment and Motivation simultaneously have a significant effect on Student Achievement in IBI Unity Bogor City West Java Province.

CONCLUSION

The conclusions of this study are:

This study aims to find out the influence of lecturer competence, learning environment and motivation on student achievement at the Informatiak Business Institute of Bogor City Unity, West Java Province. After reviewing and analyzing the research data so that the results of research and discussion can be obtained, then the conclusions can be drawn as follows:

1. The competence of lecturers partially affects the positive and significant impact on student achievement at the Informatiak Business Institute of Bogor City Unity.
2. The learning environment partially affects the positive and significant impact on student achievement at the Informatiak Business Institute of Bogor City Unity.
3. Motivation partially affects positive and significant student achievement at the Institute of Business Informatiak Unity Bogor City
4. Lecturer competence, learning environment and motivation simultaneously or together have a positive and significant effect on student achievement at the Informaticatiak Business Institute of Bogor City Unity

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