The Influence of Lecturer Competences on Students Learning Achievement of Faculty of Literature, Islamic University of North Sumatra

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Abstract

The purpose of this study was to determine the influence of the four lecturer competences on student learning achievement. In Law of the Republic of Indonesia No. 14/2005 on teachers and lecturers, lecturer competences are divided into four, namely pedagogic competence, personality competence, competence, and professional social competence. These four competences will be the independent variable (X) and students learning achievement becomes the independent variable (Y). The samples of this research were students of Faculty of Literature, Islamic University of North Sumatra Medan in odd semester 2016-2017. The questionnaire was taken from lecturer competence questionnaire, State University of Padang. This research used quantitative research. Data analysis techniques are multiple linear regression, determination coefficient, t-test, and F-test. Before conducting multiple linear regression analysis, the required condition test: normality test, multicollinearity test, and heteroscedasticity (Ghozali, 2005) had done. The study used the analysis of variance (ANOVA). In F-test, F=1.012 $F_{table}=2.42$, $F < F_{table}$. It meant that there was no influence of competence simultaneously on students' learning achievement. In T-test, t-test < t_{table} , so results showed that there was no significant influence between lecturer's competences individually. In multi linear regression analysis, the higher lecturer's pedagogic and social competence, the higher the students' learning achievement, and the lower lecturer's personality and professional competence, the lower the students' learning achievement. The findings is there is no influence between lecturer's competences to students' learning achievement each and simultaneously.

Keywords: influence, lecturer's competences, student's learning achievement.

Introduction

Sagala (2009) states that competence is a blend of mastery, knowledge, skills, values and attitudes are reflected in the habit of thinking and acting in carrying out tasks/ work. Armstrong and Murlis in Ramelan (2003, p. 47) say that competence as the fundamental characteristics of individuals who are causally related to the effectiveness or performance is very good.

According to Law No. 14/2005 on Teachers and Lecturers and Government Regulation No. 37/2009 on Lecturers, it states that lecturers are professional

educators and scientists with the main task of transforming, developing and disseminating science, technology and the arts through education, research, and community service. It is added by Christiani (2013) that lecturer is one component in the learning process that plays a role in the effort of the establishment of potential human resources in the field of development with the knowledge it has and can make the students become smart people.

Based on the exposure, it can be interpreted that the lecturer is a professional educator who becomes a component in the learning process in order to make students become intelligent people and become potential human resources.

According to Law No. 14 Year 2005 on Teachers and Lecturers, competence consists of four, namely:

- 1. Pedagogic competence is the ability to manage learners.
- 2. Personality competence is the ability of a solid personality, noble character, wise, and authoritative and become exemplary learners.
- 3. Professional competence is the ability of mastery of subject matter widely and deeply.
- 4. Social competence is the ability of teachers to communicate and interact effectively and efficiently with learners, fellow teachers, parents / guardians of learners, and the surrounding community.

According to Hakim (2015), pedagogic competence is the ability of a person to exercise or perform a job or task that is based on skills, knowledge, and attitude.

Personality competence regards with the personal ability of self-understanding, self-acceptance, self-direction, and self-realization (Surya, 2003: 138 in Hamidi and Indrastuti, 2012). Then, komara (2007) states that personal competence includes steady, noble, wise and prudent, dignified, stable, mature, honest, becoming role models for students and the community, to objectively evaluate their own performance and develop themselves independently and sustainably.

Gedviliené (2012) states that social competence includes interpersonal and intercultural skills in broad senses. This competence is important as a constructive communication in different environments, having tolerance to different approaches, understanding others, trust in yourself and others.

Social competence is a comprehensive construct with various facets which refer to cognitive, emotional-motivational, and behavioral aspects (Kanning, 2003). Rubin and Rose-Krasnor (1992) state that social competence is the ability to achieve personal goals in social interaction while simultaneously maintaining positive relationships with others over time and across situations.

According to Camelo & Angerami (2013) professional competence can be defined as the acquisition of appropriate skills for the execution of a task, or the ability to decide, using acquired skills and knowledge, to perform in a particular situation synthesis of theoretical aspects, linked to disciplinary contents and current experience.

Prasetio dkk (2017) in the study examined the relation between lecturers' professional competency. The findings from Wamala and Seruwagi (2013) in Uganda suggest that higher teacher competency alone may not directly translate into better academic achievement by students.

The components included in pedagogic, personality, social and professional competence become the questionnaire items in research study.

Based on the exposure above, competence is the ability of lecturer included mastery, knowledge, skills, values, and attitudes reflected in the habit of thinking and acting in an effective and efficient learning process in order to make the students become intelligent people. So, the research question is: is there any influence of the lecturer's competences on the students' learning achievement?

Hypothesis

- 1. There is the influence of the lecturers' pedagogic competence on the students' learning achievement.
- 2. There is the influence of the lecturers' personality competence on the students' learning achievement.
- 3. There is the influence of the lecturers' social competence on the students' learning achievement.
- 4. There is the influence of the lecturers' professional competence on the students' learning achievement.
- 5. There is the influence of the lecturers' competences simultaneously on the students' learning achievement.

Research Method

The research conducted in odd semester 2016-2017 in Faculty of Literature, Islamic University of North Sumatra. The research uses questionnaire consists of the lecturer's competences: pedagogic competence, personality competence, social competence, and professional competence referring to Law No. 14 Year 2005 on teachers and lecturers. The instrument is taken from lecturer competence questionnaire, State University of Padang.

Table 1. Lecturer's competence questionnaire.

No.	Competence	Amount of item		
1	Pedagogic competence	22		
2	Personality competence	12		
3	Social competence	17		
4	Professional competence	14		
	Total	65		

Population is the students of faculty of literature, UISU in odd semester 2016-2017. The entire population becomes the sample.

Table 2. The amount of sample in each subject.

Semester	Subject	Amount of student
1	English Structure	29
1	Indonesian Language	30
3	Public Speaking	28
3	Business English	15
5	Islamic Business	5
5	Sentence Analysis & Transformation	32
7	American Literary Studies	20
7	Creative writing	15

Data collection instrument is drawn up in the form of a Likert scale. The indicator as follows:

Table 3. Likert's Scale.

No	Statement	Value
1	Almost always	5
2	Always	4
3	Sometimes	3
4	Sparsely	2
5	Hardly	1

Before conducting multiple linear regression analysis, it has done: required condition test, for instance: normality test, multicollinearity test, and heteroscedasticity (Ghozali, 2005).

Required Condition Test Normality test

Normality test is a statistic test that uses to figure out the distribution of data. The hypotheses used are:

 H_0 : the sample data are not significantly different than a normal population.

H_a: the sample data are significantly different than a normal population.

So, when testing for normality:

Probabilities > 0.05 mean the data are normal

Multicollinearity test

Multicollinearity is a phenomenon in which two or more independent variables in a multiple regression model are highly correlated. It means that one can be linearly predicted from others with a substantial degree of accuracy.

Multicollinearity can be detected with the help of tolerance and its reciprocal, called variance inflation factor (VIF).

- If the value of tolerance is less than 0.2 or 0.1 and simultaneously, the value of VIF 10 and the above, then the multicollinearity is problematic.
- If the VIF is equal to 1 there is no multicollinearity among factors. But if the VIF is greater than 1, the predictors ma be moderately correlated.

Table 5. Collinearity statistic.

Variable	VIF	Description		
Pedagogic competence	2.420	VIF <10		
Personality competence	3.464	no multicolliniearity		
Social competence	3.600			
Professional competence	2.110			

In SPSS output above, multicoliniearity does not occur where the value of the VIF from each variable at less than 10.

Heteroscedasticity

Heteroscedasticity refers to the circumstance in which the variability of a variable is unequal across the ranges of values of a second variable that predicts it. The inverse of heteroscedasticity is homoscedasticity which indicates that a dependent variable is equal across values of an independent variable.

The basis of decision-making:

- -if significance value > 0.05, it means no heteroscedasticity
- -if significance value < 0.05, it means heteroscedasticity

Table 6. Heteroscedasticity.

Variable	Significance	Description
Pedagogic competence	0.292	Significance > 0.05
Personality competence social	0.906	no heteroscedasticity
competence professional	0.652	
competence	0.355	

In SPSS output above, significance value greater than 0.05, so heteroscedasticity does not occur.

From three required test above, it can be concluded that competences (pedagogic, personality, social, and professional as independent variable) have the right test prerequisites.

Result and Discussion

F-test

F-test is useful to figure out the influence of independent variables simultaneously on dependent variable. Exact "F-tests" mainly arise when the models have been fitted to the data using least square. The study uses the analysis of variance (ANOVA).

Table 7. F-test

Variable	F	F _{tabel}	Significance
competences	1.012	2.42	.403
simultaneously			

X1, X2, X3, X4 on Y - significance value = 0.403

The influence of competence simultaneously on Y is 0.403 > 0.05

F = 1.012 < F table, it means that there is no influence of competence simultaneously on students' learning achievement.

T-test

T-test is useful to figure out the influence of each independent variable on dependent variable by comparing t value and t_{table} .

Table 8. T-test.

Variabel	t _{table}	Т	Hasil
$X_1 - Y$	1.962	1.354	T < t _{table}
X ₂ – Y		-0.730	T < t _{table}
X3 - Y		0.566	T < t _{table}
X ₄ – Y		-1.612	T < t _{table}

Because t value is smaller than t_{table} so we may conclude that there is no influence of lecturers' competence on students' learning achievement.

Multi Linear Regression Analysis

Multi Linear Regression Analysis is a form of predictive modeling technique which investigates the relationship between a dependent and independent variable. In regression analysis, the dependent variable is denoted by Y, and the independent variable is denoted by X. In the research, we have one dependent variable (students' achievement), and four independent variables (pedagogic, personality, social, and professional competence). So, it called as multiple linear regressions.

rable 9. Multi Linear Regression Analysis.					
1	Model	Coefficients			
			Т	Sig	
	(Constant)	76.159	11.760	.000	
	Pedagogic competence (X1)	.145	1.354	.178	
	Personality competence (X2)	150	730	.467	
	Social competence (X3)	.083	.566	.572	
	Professional competence (X4)	240	-1.612	.109	
a. Dependent Variable: students' learning achievement (Y)					

Table 9. Multi Linear Regression Analysis.

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Y = 76.159 + 0.145X1 - 0.15X2 + 0.083X3 - 0.24X4

t_{table} t(a/2; n-k-1)

a = 0.05

k = 4

n = 175

t_{table} t(0.025; 173) = 1.962
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- 1. X1 Y -> sig.= 0.178 > 0.05 and t = 1.354 < 1.962, so it can be concluded that there is no influence between pedagogic competence to students' learning achievement.
- 2. X2 Y -> sig. = 0.467 > 0.05 and t = -0.73 < 1.962, so it , it can be concluded that there is no influence between personality competence to students' *learning* achievement.
- 3. X3 Y -> sig. = 0.572 > 0.05 and t = 0.566 < 1.962, so it can be concluded that there is no influence between social competence to students' learning achievement.
- 4. X4 Y -> sig. = 0.109 > 0.05 and t = -1.612 < 1.962, so it can be concluded that there is no influence between professional competence to students' learning achievement.

From table multi linear regression analysis, we may conclude that:

- 1. The higher lecturer's pedagogic competence, the higher the students' learning achievement.
- 2. The lower lecturer's personality competence, the lower the students' learning achievement.
- 3. The higher lecturer's social competence, the higher the students' learning achievement.
- 4. The lower lecturer's professional competence, the lower the students' learning achievement.

Findings

The findings that we have after analyzing the research is there is no influence between lecturer's competences to students' learning achievement each and simultaneously.

This result is in line with findings from Prasetio et al. (2017) there is also no influence of lecturers' competence to student's academic performance. This study states that lecturer should always develop their professional competency. Lecturer believed to be the important part of the learning process. Their knowledge and positive behavior will certainly add new insights and experience for the student. This result is also in line with the findings from Wamala and Seruwagi (2013). They suggest some factors learning facilities, student' motivation, economic background, family background, parents role, previous education that influence the students' learning achievement.

Conclusion and Recommendation

After analyzing the study, it may conclude that there is no influence between lecturer's four competences to students' learning achievement. It may say that lecturer's competences do not influence students' learning achievement. So, the lecturer may teach the student without using their competences.

It is recommended that lecturer should improve their competences by following some courses about lecturer's competences. The foundation and the rector should give some seminars to increase the lecturer's competences.

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