

The Correlation Between Students' Learning Environment and Their Critical Thinking Skill Development

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ABSTRACT

This research aims to determine if there is a correlation between learning environment and students' critical thinking skill development. Research method that is used is Correlation. The sample in this research is 25 university students of the English Education Department. Instruments used in this research were questionnaires and practice tests. The questionnaire sheet adapted from The Dundee Ready Education Environment Measure (DREEM). it is used to find out students' opinions about their learning environment. Other instrument that is used is the practice test of Critical Thinking Appraisal which was used to determine the level of students' critical thinking ability. In analyzing the data, this research used the product-moment correlation analysis technique. The results shows that there are no correlations between learning environment and the development of students' critical thinking skills. Building a good learning environment is important and can support a good learning process.

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Introduction

In the world of education, especially at the university level, most people think that students are better at conveying their thoughts and arguments in class according to the topics taught by their lecturers, which is commonly called critical thinking. The process of critical thinking is about entails asking questions, doing experiments, and having faith in the information gleaned from this particular experiment (Munandar et al., 2018). The development of critical thinking is very important and has been widely discussed in many studies and the importance of this ability is recognized in various disciplines. Critical thinking skills are also known as one of the Higher Order Thinking Skills (HOTS) where these abilities play an important role in the development of moral, social, mental, cognitive and scientific abilities (Pieterse et al., 2016). In addition, teachers can make students' ability to think critically a reference to see student performance, which is measured by looking at their ability to remember (for certain applications) facts and information that are unrelated and repetitive, seizing opportunities to understand difficult concepts and complex concepts, the way they analyze the emergence of an idea that is classified as new and understands the essence of their form of knowledge.

As the time progress, competition in the world of education is becoming increasingly stringent which demands critical thinking from students because they really need these skills to face the challenges of the 21st-century. In this 21st-century, students are encouraged to be more creative, imaginative, active, innovative and communicative. The 21st-century learning process demands changes in new learning styles by adding four skills: critical thinking, creativity, communication and collaboration (Purnami et al., 2021). The ability to think critically becomes a mental strength that is important for students to have when they are faced with various daily problems. (Darmaji et al., 2020). Critical thinking is also one of the skills students need to deal with the complexities of life in the future, because critical thinking skills include cognitive skills (cutting, analyzing, interpreting, researching, changing, synthesizing, combining, summarizing, arguing, generalizing), and personality skills, such as tolerance, independent thinking, determination, self-confidence, curiosity, motivation, courage to be different, skills, creativity, courage to take risks and continue to interact with each other (Sumarni et al., 2018). The ability to think critically is very important in the world of education to guarantee the truth of news or information. Based on the description above, it can be said that critical thinking is important to help students solve everyday problems, because someone who can develop correct goals, acquire and integrate knowledge, solve various problems and develop attitudes, and so they can compete worldwide in long-term.

However, in reality, the critical thinking skills of Indonesian students are generally still weak. Most students in Indonesia are used to being passive when studying in class, especially in group work, students are still not active in expressing their opinions and thoughts about the learning problems being discussed, and students who are involved in discussions, answer, and provide arguments about problems are just a few of them (Hadisaputra et al., 2020). As a result, students cannot offer any solutions or ideas for the problems they find and this condition can be used as an indicator to show that students' critical thinking skills are still weak. The level of students' ability to think critically is also related to their previous learning experience, including the learning environment. The learning environment mean here is a location of learning activities when external influences are applied to their sustainability (Sutarna, 2016).

Therefore, every educational institution needs to create and build a comfortable, safe and fun learning environment because it is very necessary to develop student learning skills, and also a quality learning environment encourages students to achieve optimal learning outcomes and an effective learning process. A good learning environment can make the students to feel motivated when learning in a positive and fun atmosphere (Amin & Adiansyah, 2018). A supportive and cooperative environment can increase student participation in learning, and students can easily accept the lessons taught, so that students can achieve good academic success. The mental security of students is becoming increasingly important in the educational path so that their potential for learning can develop properly.

The education must be consciously planned and arranged systematically in order to create an optimal learning atmosphere. Education is also the basis for forming better human beings for society, which includes the whole, to form personality and develop creativity and intelligence. According to Bloom in (Anderson, 2009), the environment can affect learning through the cognitive, affective, and psychomotor domains, which manifest as: a) Knowledge, including: understanding, analysis, application, evaluation and synthesis; b) Attitude, including: acceptance, response, awards and obligations, and; c) Practices or Actions. Education that is designed and implemented in accordance with established quality

standards can create a conducive learning environment. To create a good learning environment when designing the desired changes in higher education, it is necessary to develop or improve unsatisfactory components to generate motivation in the learning process (Victor et al., 2017).

Critical thinking skills and learning environment have been studied in several previous studies. The first is research that examines students' critical thinking skills. First, using critical thinking skills, can challenge students' cognitive processes to analyze problems systematically and accurately, distinguish these problems carefully and thoroughly, identify and investigate problems, and teach students to be able to learn to solve problems strategically (Fitriya et al., 2022). Furthermore, the results of (Saputri, 2020) research, explain that students' critical thinking abilities are in the form of reasoning, disclosure, analysis and problem solving which often begins with a person's ability to criticize various phenomena that exist around him, then evaluate from his point of view. The second is the research related to the learning environment.

However, from the studies described above and as long as the researcher have read, the researcher did not found research that discussed about the correlation between the two variables, namely the learning environment and critical thinking skills. Based on the previous explanation, researcher decided to conduct a study to investigate whether there is a relationship between the two variables of learning environment and the development of critical thinking or not.

Method

This study used the correlational method with a quantitative approach. This is used to know whether there is a correlation between one variable and another. In this study, 25 students from the English Education study program at UINFAS Bengkulu was taken as the sample. In taking the research sample, the Simple Random Sampling technique was used because the researcher considered that all populations had the same opportunity to be used as the research samples. Simple random sampling is said to be simple because the sample is taking from the population randomly without regard to the strata in that population. This way is done when members of the population are considered homogeneous (Sugiyono, 2015). In taking the research sample researcher used the lottery method.

The instruments used in this research were questionnaires and practice tests. The questionnaire sheet used was from The Dundee Ready Education Environment Measure (DREEM) used to find out students' opinions about their learning environment. The DREEM questionnaire sheet consists of 50 statements including five indicators about learning environment, are; learning process, teacher, academic achievement, learning atmosphere, and social environment. The practice test sheet called Watson – Glaser Critical Thinking Appraisal which was used to ensure the level of students' critical thinking ability (Watson & Glaser, 2008). Practice test sheet consist of 17 statements including five indicators, are; inference, recognition of assumptions, deduction, interpretation, and evaluation of arguments. For the questionnaire result, researcher used MS. Excel in counting the total score of students' responses. The, for the result of the students critical thinking test, researcher calculated the test score with the provision that the correct answer was given a score of 1, while the wrong answer and no answer was given a score of 0. Furthermore, the number of correct answers obtained by students was converted into a value with a score range of 0-100.

After that, the normality test and correlation test were carried out. The normality test is used to see if both data are normally distributed. This research, used the product-moment correlation analysis technique which is used to determine whether there is a relationship between the two variables. In analyzing the data, researcher used SPSS Statistics 20 program in analyzing all the data results from questionnaire and practice test.

Results and Discussion

The results of data analysis using the normality test produce data as shown in the Table. 1 as follow:

		Unstandardized Residual
N		25
Normal Parameters ^{a,b}	Mean	0E-7
	Std. Deviation	15,59066596
Most Extreme Differences	Absolute	,091
	Positive	,067
	Negative	-,091
Kolmogorov-Smirnov Z		,455
Asymp. Sig. (2-tailed)		,986

Based on the results of the normality test it is known that the significance value is $0.986 > 0.05$, it can be concluded that the residual values are normally distributed.

Next is the product-moment correlation test to see if there is a relationship between the two variables. The following results of the correlation test are in Table. 2:

		Learning environment	Critical thinking
Learning Environment	Pearson Correlation	1	-,191
	Sig. (2-tailed)		,361
	N	25	25
Critical Thinking	Pearson Correlation	-,191	1
	Sig. (2-tailed)	,361	
	N	25	25

Based on the correlation test obtained, the magnitude of the correlation coefficient (r) is equal to 0.361 less than 0.396 with a significant level of 5% for $N = 25$. Thus, it can be concluded that the variable x (learning environment) and variable y (the development of students' critical thinking skills) have no correlation with the degree of relationship is no correlation because the Pearson Correlation value obtained is 0.191, and the form of the relationship is negative.

The results of the study show that in general the learning environment and the development of students' critical thinking skills at UINFAS Bengkulu have no relationship. This means that the two variables do not mutually influence each other. This is different from an opinion that students' ability to learn can be influenced by two factors, namely internal factors such as habits, desires, and learning motivation and external factors such as family and learning environment (Aunurrahman, 2019). However, the research results did not show that. Which means that maybe in fact, these two variables have an influence, however, the effect is not big and significant, only a small number of children may have their critical thinking skills influenced by how the learning environment in which they study. In

addition, even though basically students' abilities in learning, in theory are said to have a relationship, it could be that the learning environment does not affect students' critical thinking skills in learning, but the learning environment can affect other students' learning abilities which are not discussed in this study.

Remember the statement that the 21st century learning process requires changes in new learning styles by adding four abilities, namely critical thinking, creativity, communication and collaboration (Purnami et al., 2021). Thus, based on the results of the research, there are other possibilities where it could be that the student learning environment does not affect the development of students' critical thinking skills, but the learning environment can affect students' learning skills in other aspects, such as their creativity in learning, how they communicate well with their peers. or with the teacher, and how they collaborate in the learning process, for example in doing group assignments. So, the formation of a good learning environment is something that needs attention for a good and comfortable school, because if the educational environment is classified as strict and competitive it tends to inhibit students and reduce their participation in acquiring knowledge in the learning process. and it can be said that creating a safe learning environment for students is very important because a bad learning environment will make students passive and tend to protect themselves from embarrassing situations in learning activities. In addition, an effective social interaction is a prerequisite for creating an environment that is conducive to learning. Every person can establish relationship patterns through good social contact without having anything interfere with them (Arianti, 2019).

The results of further findings in this study also show that the form of the relationship between these two variables is negative. From these results, the researcher draws the conclusion that whether or not the critical thinking skills of English Language Education Program students at UINFAS Bengkulu develop or not are not influenced by external factors, such as the learning environment. That is, in this study, the development or failure of students' critical thinking skills does not depend on the quality of their learning environment, but on other factors, which may come from internal factors, such as how much their learning motivation is in class and how aware they are in learning. As the opinion expressed by some experts, that motivation is seen as a mental impulse that moves and directs human behavior, including learning behavior. In motivation there is a desire that activates, moves, distributes and directs the attitudes and behavior of individual learners. From this explanation, it can be said that internal factors can be factors that influence the formation of students' critical thinking skills.

Whether students' critical thinking skills develop or not also depends on learning patterns and how confident they are in the classroom. If these two things tend to be high then the development of their critical thinking must have developed quite well. In addition, the involvement of lecturers in creating students' critical thinking skills is also important. This is related to the stimulus given to them. The better the stimulus is received by them, it will help them to develop themselves, so that the learning atmosphere becomes active. If the lesson is active, the atmosphere and learning environment for them will be better and more enjoyable. In addition, whether there is or there is no correlation between the two variable (learning environment and the development of critical thinking skill), creating the good atmosphere and health learning environment is necessary to support the students' learning outcome.

Conclusion

Based on the results of correlational data analysis, it shows that the two variables namely variable x and variable y (learning environment and the development of students' critical thinking skills) have no relationship. based on these results, it can be concluded that the relationship between the two variables at UINFAS Bengkulu is negative. Even though the research results show that the two variables have no relationship, educational institutions must still provide a good, comfortable and safe learning environment for students. Because a good learning environment can support a good learning process as well as provide comfort for both students and teachers in carrying out teaching and learning activities. In addition, a good learning environment can also give a good impression of educational institutions, so that people feel that these educational institutions are good with good care of educational institutions that are maintained.

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