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## RESEARCH ARTICLE

# The Effect of Critical Thinking Strategy on Students' Motivation in Efl Speaking Class

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**Abstract:** This research was to analyze the effect of critical thinking strategy on students' motivation in speaking class in the first year of the English Education Department, UIN Alauddin Makassar. It employed a quantitative approach with a true experimental design. Its population was the first-year students of the English Education Department consisting of 20 students as the experimental group and 20 students as the control group. A questionnaire was used to find out the students' motivation to see the effect of critical thinking strategy in speaking class. This research results show that the mean score of students' motivations in the experimental class was categorized into a positive level (80.75) in the pre-questionnaire and a very positive level in post-questionnaire (97) meaning that there was a significant increase in students' motivation in speaking class. Conversely, the students' motivation in the control group was categorized into a very positive level (83.45) in pre-test and a very positive level (88.6) in post-questionnaire meaning that the students' motivation was stable. Moreover, the calculation statistics of the Mann-Whitney U test of students' motivation are valued at  $\text{sig. } 0.020 < 0.050$  figuring out that critical thinking strategy affected the students' speaking motivation in the control group. These findings take into account that the students were to speak comprehensively as a discipline, to maintain speaking achievement as a satisfaction, and to create feeling of safety in the speaking process as a security.

**Keywords:** Critical thinking, Motivation, Speaking, Strategy.

## 1. Introduction

Most countries in the 21st-century world consider skill acquisition for critical thinking has become a need to improve. Beyer (1988) identifies three stages to improve thinking skills: problem-solving, critical thinking, and information processing. Ozden (2000) states that thinking skills include critical thinking, scientific thinking, creative thinking, reading comprehension, and problem-solving. According to Semerci (2003), there are numerous dimensions to think, including critical thinking, reflective thinking, and creative thinking. It is seen that critical thinking, which is generally handled in different dimensions, has many aspects such as reflective, creative, critical, inductive, and analytical as one of the most important skills in the world.

To play an important role in establishing education, CT has a complex structure and contains different approaches has led to the inability to make a clear definition accepted by everyone (Yılmaz, 2021). CT as acceptable and reflective thinking that focuses on deciding what to believe or do within a logical framework. Elder and Paul (1994) describe CT in the simplest strategy as the ability to take responsibility for one's thoughts or to be responsible



for what one thinks. Cuceloglu (1995) defines CT as an effective and orderly mental process that anticipates our thinking processes, considers the thinking processes of others, applies what is learned, and aims at the concept of ourselves and the events around us. With CT being a part of education, it can be said that students become more motivated academically and more helpful, positive, good attitude, and sensitive socially (Kokdemir, 2003).

To enhance students' speaking skills, teachers found some problems such as a lack of motivation, no matter how strong it is to start, will decrease and inhibit in the learning process, subject to many internal and external influences over the course of study or even within the space of one lesson. Most students in speaking activities experience a lack of motivation which causes low ability (Chen, 2022). A lack of motivation affects the students' fundamental step in developing their speaking skills. The fact is that most students who do not have enough motivation to speak becomes an urgent issue and requires serious attention to comprehensively understand and scrutinize it. Over the last twenty years, there have been many different models of speaking instruction, but few of these methods take into account the importance of motivation. It is clear that students who want to learn tend to succeed more than those who do not (Uddiniyah & Efa, 2018).

In line with this finding, a survey in the English Education Department, UIN Alauddin Makassar, showed that the first-year students had low motivation in English speaking class making their speaking skills low as a result. They were apathetic about learning motivation so that it was difficult to carry out the evaluation process in class. Then, they had not been able to master the materials taught to be transformed in doing assignments given. Therefore, critical thinking strategy was reflected to conduct a positive and significant effect as a further solution. Due to this current issue, the researchers found an inspiring sense of curiosity to conduct a research focusing on the effect of critical thinking strategy on students' motivation in speaking class. To gain the expected attainment, this research is addressed to seek for the answers of one research question as follows: Does critical thinking strategy affect the students' motivation in speaking class?

## 2. Literature Review

### 2.1. *Critical thinking strategy in speaking class*

Acknowledging that critical thinking strategy is important for life is fundamental. Critical thinking strategy is applicable whenever people make a decision or resolve a problem since the function of critical thinking is to help people think deeply of all information, so they are able to decide the good information and avoid misinformation, including biased persuasion, prejudice, irrational attitude or idea (Leicester & Taylor, 2010). Therefore, students who apply critical thinking strategy will be more careful in the act and believe in something before making a decision. Vice versa, lack of these strategies can result in unsatisfactory appraisals at their work or poor.

Cottrell (2005) figured out five effects of critical thinking strategy in speaking class, that is (a) improve attention and observation, (b) more focused speaking improves ability to identify the key points in an idea or other message rather than becoming distracted by less important material, (c) improve ability to respond to the appropriate points in a message, (d) knowledge of how to get the key ideas more easily, and (e) skills of analysis that can be selected to be applied in a variety of situations. Critical thinking strategy does not only play a significant role in the dynamic life of work but also in students' learning attitude and motivation specifically in speaking class. Additionally, Murawski (2014) explained that by using this strategy, students tend to expand their perspectives verbally from which they view the world and increase their ability to navigate important learning and life decisions. She also added that this strategy will produce students as both inventors and critics of the new information. Indeed, critical thinking strategy helps students be more accurate and specific in noting what is relevant and what is not. This strategy is requisite in most of all aspects of human life, and the smallest scope is academic environment and workforce.

Critical thinking strategy learned during the academic years have a big impact in speaking class to explain and argue comprehensively because it is transferable. Therefore, students who apply critical thinking in speaking class will find it easier to face every practice.

### *2.2. The stage of critical thinking strategy in speaking class*

Critical thinking strategy is the check of offered solutions with the purpose of determination of the sphere of their possible application. Creative thinking strategy is directed to creation of new ideas, and critical thinking strategy reveals their disadvantages and defects. Critical thinking strategy differs with control ability, determination and sense of purpose. Critical thinking strategy is inextricably linked with logic one, because it provides for formation of conclusions, creation of the logical models concerted, and acceptance of reasonable decisions. The critical thinking strategy provides for estimation that can and must have structurally positive and negative relational expression (Fisher, 2011). Critical thinking strategy not only results but also mental processes, namely the chain of arguments that resulted in new conclusions is estimated. The critical thinking strategy in speaking class is sent to the receipt of the result verbally, that is why it is sometimes called directed. A reflection is an inalienable part of the critical thinking strategy. In the process of reflection information becomes appropriated, it means that it becomes our own knowledge.

The stages of the critical thinking in speaking class are (Paul & Elder, 2007) are five, namely (a) flexibility: it possesses flexibility and independence of thinking, (b) differentiating: considers problems from different points of view, (c) analysis: it fully analyzes the existing problems, (d) contribution: it offers compromise solutions to problem situations, and (e) identification: it anticipates and identifies logical errors. This study elaborated the five stages of CT strategy to gain an effect on students' learning attitude and motivation in speaking class for analysis and identification.

### *2.3. How Motivation is Defined?*

Motivation is a change in energy in a person characterized by intuition. Motivation is a change in energy that occurs in a person which is then marked by the emergence of a "feeling" which is based on a purpose (Ahmed et. al, 2015). Motivation can cause progress, so that this will be inherent in the problem of mental symptoms, emotions, and feelings. Harmer (2007) said that students' motivation refers to "students' willingness, need, desire and compulsion to participate in, and be successful in the learning process. Students who are motivated to engage in school select tasks at the border of their competencies, initiate action when given the opportunity, and exert intense effort and concentration in the implementation of learning tasks. They show generally positive emotions during on-going action, including enthusiasm, optimism, curiosity, and interest (Gross, 2006). Less motivated or disengaged students, on the other hand, "are passive, do not try hard, and give up easily in face of challenges".

Students' motivation is a main impetus that makes someone start learning and the driving force that will sustain the learning process in a sustainable manner (Dornyei & Ryan, 2015). Whereas learning is the basic process of the development of human life, by learning humans make individual changes so that their behavior develops. All activities carried out and the results of each achievement are none other than the results of learning, because someone lives and works according to what they have learned. Learning is defined as not just an inner experience, learning is a process, not a result. Therefore, learning takes place actively by using various forms of action to achieve a result. So, students' motivation is the encouragement of the learning process with the aim of getting the benefits of the learning process.

In speaking activities, the students learn due to the possession of motivation indicated either by their low or high mental strength in the form of desire, attention, or aspiration. It obviously shows that the students' motivation in speaking class is considerable as a mental impulse that moves and directs their learning behavior to speak which exactly depends on

the desire of their activating, moving, channeling, and directing their learning behaviors as well.

#### *2.4. The types of motivation*

In the speaking process, students' motivation is one thing urgent. Little or much at least the students have the motivation to learn because activities will be successful if students have strong motivation. According to Harmer (2007), motivation is divided into two types; intrinsic motivation and extrinsic motivation. Firstly, intrinsic motivation involves the internal motivation to speak because of encouragement of desire or feeling from inside. Intrinsic motivation is perceived to be composed of three elements. These are discipline, satisfaction, and security (Harmer, 2007). Finally, extrinsic motivation is the result of any number of outside factors in speaking activities such as the need to speak comprehensively, the hope of financial reward or the possibility of future travel Harmer (2007). In addition, it is driven by external factors such as parental pressure, the role of teacher, and environment (Gardner, 1985).

Furthermore, Gross (2006) constructs a socio-psychological theory of second or foreign language learning. They express that "the learner's ethnocentric tendencies and his attitudes toward the members of the groups are believed to determine how successful he will be, relatively, in learning the language." Students' motivation in speaking is assumed to be determined by their attitudes and orientations toward the learning task, whether it is integrative or instrumental motivation. Integrative motivation is a reflection of an individual's genuine interest in language learning. An individual who has integrative motivation tends to learn a language because it will help him to get engaged with the native speaker or to learn the language to gain friends who speak the language. Gross (2006) categorized these reasons as integrative reasons, which seems to reflect an interest to become integrated with the people who speak the language. Instrumental motivation is the contrasting form of integrative motivation toward the language learning tasks, which is characterized by a desire to gain social acknowledgment or financial advantages by means of the knowledge of a foreign language. Instrumental motivation reflects the students' interest in language learning which is connected to the practical benefits of language proficiency, such as getting a better job or a higher salary.

Based on the above explanations, the researchers took their eyes into students' intrinsic motivation in speaking class indicated by a sense of discipline, satisfaction, and security to justify the effect of critical thinking strategy in speaking activities.

#### *2.5. The indicators of students' motivation in speaking class*

Harmer (2007) reveals that students' learning motivation in speaking class has several indicators, namely (a) discipline: it is the role of training and educating people. Discipline is a training and education for students to be happy to explain their ideas verbally, (b) satisfaction: it is a feeling that arises from within a student. For example, a student feels satisfaction with what he has achieved and will maintain his speaking achievement, and (c) security: it is very influential on the enthusiasm of students' speaking process because feeling safe will create calm for students. A sense of security is an atmosphere of calm feeling when students speak their arguments.

Additionally, Dornyei & Ryan (2015) divides several indicators of students' motivation in speaking class, they are (a) students' motivation for achievement leads to success in all aspects of life due to an urge to achieve the goals. For example, success in education, success in business, and success in other fields, (b) students' motivation for power leads to the desire so it has influence over others, and (c) students' motivation for affiliation is an indicator that every student has reflected in the desire to be in a friendly situation in one's interactions either in the organization or collaboration with other students.

### 3. Research Method and Materials

To conduct this research, a quantitative approach with true experimental design was employed to gain the required data on the effect of critical thinking strategy on students' motivation at the first-year students of English Education Department, UIN Alauddin Makassar, Gowa Regency, South Sulawesi Province. Furthermore, it used cluster random sampling taking 20 students for the experimental class and 20 students for the control class. Questionnaire using Likert scale in the form of pre-questionnaire and post-questionnaire was to get the data on students' prior motivation in the speaking class and to see the effect of critical thinking strategy after the treatments characterized by three indicators, namely discipline, satisfaction, and security (Harmer, 2007). In addition, the students' motivational scale was validated to measure its content validation reliability (internal consistency reliability) based on the Cronbach Alpha technique.

### 4. Results and Discussion

The findings of this research cover the answers of the research question addressed above, that is does critical thinking strategy affect the students' motivation in English speaking class? The findings are described in the following lines.

#### 4.1. The Result of Students' Motivation through Questionnaire Analysis

Based on the data analysis of the questionnaire, it was found that the mean score of students' motivations in the experimental group was categorized into positive level (80.75) in pre-questionnaire and very positive level in post- questionnaire (97) meaning that there was a significant increase of students' motivation. In the control group, it was categorized into very positive level (83.45) in pre-questionnaire and very positive level (88.6) in post-questionnaire revealing that the students stabilized their motivation score. These data can be described in the table 1.

**Table 1.** The pre- and post-questionnaire score of students' Motivation

Scale	Classification	Experimental Group				Control Group			
		Pre-questionnaire		Post-questionnaire		Pre-questionnaire		Post-questionnaire	
		F	%	F	%	F	%	F	%
81-100	Very Positive	5	25	20	100	12	60	15	75
69-80	Positive	14	70	0	0	6	30	5	25
58-68	Neutral	1	5	0	0	2	10	0	0
46-57	Negative	0	0	0	0	0	0	0	0
35-45	Very Negative	0	0	0	0	0	0	0	0
	Total	20	100	20	100	20	100	20	100

The table 1 shows that the experimental class in pre-questionnaire resulted 5 (25%) students got very positive score, 14 (70%) students got positive score, 1 (5%) student got neutral score, 0 (0%) student got negative score, and 0 (0%) student got very negative score. There were 20 (100%) students got very positive score, 0 (0%) student got positive score, 0 (0%) student got neutral score, 0 (0%) student got negative score, and 0 (0%) student got very negative score in post-questionnaire. The highest students' percentage in pre-questionnaire was positive score, then post-test was very positive score. The lowest students' percentage in pre- questionnaire were negative and very negative score and post-questionnaire were positive, neutral, negative, and very negative score. It meant that, the students' motivation score in pre- questionnaire before giving treatment was positive level. The students' motivation score in post- questionnaire after giving treatment was really positive level meaning that critical thinking strategy had an effect on students' motivation percentage level. The students' score in the control group resulted that 12 (60%) students got very positive score, 6 (30%) students got positive score, 2 (0%) students got neutral

score, 0 (0%) student got negative score, and 0 (0%) student got very negative score in pre-questionnaire. In post-test, 15 (75%) students got very positive score, 5 (25%) students got positive score, 0 (0%) student got neutral score, 0 (0%) student got negative score, and 0 (0%) student got very negative score. The highest students' percentage for both pre- and post- questionnaire was very positive score. The lowest students' percentage in pre-questionnaire were negative and very negative score and post- questionnaire were neutral, negative, and very negative score meaning that students' motivation score for control class was constant percentage level.

**Table 2.** The Mean Score of Pre-and Post- questionnaire

Pre-Test		Post-Test	
Experimental Group	Control Group	Experimental Group	Control Group
80.75	Positive	97	Very Positive
83.45	Very Positive	88.6	Very Positive

Table 2 shows that students' mean score for the experimental group in pre- questionnaire got a positive score (80.75) and in post- questionnaire got very positive score (97) meaning that critical thinking strategy as the treatment successfully affected the students' motivation. The students' mean score for the control group in pre- questionnaire got very positive score (83.45) and in post- questionnaire got very positive score (88.6) meaning that the students in this group did not get an increased score from both pre- and post-questionnaire indicated by the constant mean level of students' motivation.

#### 4.2. The Result of Statical Analysis

Based on the data of statistical analysis, the result of Mann-Whitney U test (0.020) with Wilcoxon W score (325.600) showed that critical thinking strategy had an effect on students' motivation in speaking class described in the table 3.

**Table 3.** The Result of Students' Motivation Normality Test

One-Sample Kolmogorov-Smirnov Test	Gain Score
Most Extreme Differences	Absolute .850
	Positive .000
	Negative -.850
Kolmogorov-Smirnov Z	2.384
Asymp. Sig. (2-tailed)	.011

Table 3 shows that the result of normality test using asymptotic significance 2-tailed was 0.011 in which  $0.011 < 0.050$  meaning that the data was not normally distributed.

**Table 4.** The Result of Students' Motivation Homogeneity Test

Levene Statistics	df1	df2	Sig.
2.325	1	14	.144

Table 4 shows that the result of the homogeneity test using significance was 0.144 in which  $0.144 > 0.05$  meaning that the data was of homogeneous variety.

**Table 5.** The Result of Students' Motivation Mann-Whitney U Test

Mann-Whitney U Test	Gain Score
Mann-Whitney U	16.400
Wilcoxon W	325.600
Asymp. Sig. (2-tailed)	.020

Table 5 reveals the result of Mann-Whitney U test showing that sig. = 0.020 < 0.050 in which Mann-Whitney U is 16.400 and Wilcoxon W is 325.600 meaning that H0 was rejected and H2 was accepted. Therefore, it can be described that there was an effect of

critical thinking strategy on the students' motivation in speaking class at the first year of the English Education Department in UIN Alauddin Makassar.

There were three crucial points to describe the effect of critical thinking strategy on students' motivation in speaking class which found in the experimental group after giving treatments as in the following lines:

a. Students spoke comprehensively as a discipline.

Students' inspiration has alluded to the innate energy and longings for them to draw in and keep up with in an errand (Kwan and Wong, 2015). To be explicit, they make sense that more energy was required to have been spent on undertakings that are undeniable level orientated in a specific circumstance. This meant that in order for students to perform better in a directed goal, they needed to have more motivation and energy to do a sequence of movements in view of their discipline or satisfaction by giving some analysis in a basic manner of their learning behaviors. Fahim and Hajimaghsoodi (2014) likewise bring up that students with higher inspiration typically dominated a more elevated level of decisive reasoning expertise. The students thought that being motivated was a necessary prerequisite for critical thinking strategy. Their inspiration, in short, required decisive reasoning.

b. Students maintained speaking achievement as a satisfaction.

According to Akioka & Gilmore (2013), students' motivation is a psychological condition that motivates them to carry out particular activities in order to accomplish particular objectives. For this situation, the students got the right areas of strength for and to seek after their accomplishment particularly in speaking class. It will serve an element of accomplishing results that were initially startling and impromptu. Moreover, inspiration can give the eagerness to manage the involvement and keep up with the accomplishment. Their inspiration gave a decisive reasoning to reinforce the objective, keep up with accomplishment, and to arrive at fulfillment in talking exercises. In line with this point, Phan (2009) expressed that a decisive reasoning affected students' inspiration in which they with high decisive reasoning skill had high inspiration, they with moderate decisive ability to reason had moderate inspiration, and they with low decisive reasoning skill had low inspiration.

c. Students created feeling safe in the speaking process as a security.

The students were dynamic and handily molded during the speaking activities. It was expressed by Shakirova (2007) that the trait of powerful talking exercises was an association of students truly, intellectually, inwardly, mentally, and actually. It can't be isolated with the impact of decisive reasoning. By reasoning and asking questions, the students secured their place in the speaking class, they were in a prepared position to study and work on their talking expertise, and they took a better position and made basic improvement in speaking class. Additionally, they showed their very much educated limit by dissecting, recognizing, and ordering for each talking task and made mindfulness about the presence of decisive reasoning in arriving at high talking limits (Feng, 2013). Subsequently, they focused on decisive reasoning when they talked, especially in the contending articulation. Likewise, they potentially assessed their own talking and set their standard in view of decisive reasoning impact.

Based on the discussion of several points above, the researchers firmly stated that there was an effect of critical thinking strategy on students' motivation in speaking class. Critical thinking strategy contributed to students' motivation by influencing those three aspects namely discipline, satisfaction, and security. Therefore, students can deeply understand that their motivation to learn in speaking class is suitable with critical thinking strategy.

## 5. Conclusion

There was an effect of critical thinking strategy on students' motivation in speaking class in first year of the English Education Department in UIN Alauddin Makassar which was



described by their eagerness to speak comprehensively as a discipline, to maintain their speaking achievement as a satisfaction, and to create the feeling safe of theirs in speaking process as a security. Besides, it was based on the result of the calculation statistics of the Mann-Whitney U test valued at sig.  $0.020 < 0.050$ .  $H_0$  was rejected and  $H_2$  was accepted.

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