The effect of Discussion Method and Cognitive Style on Students' Reading Comprehension Achievements at One Indonesian University

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Abstract
The purpose of this study is to investigate the effect of discussion method and cognitive style on students' reading comprehension achievement. This research was an experimental study with factorial design. The total number of sample of this study was 50 students selected with claster sampling technique. The data of this study consisted of the scores on reading comprehension either through pre-test and post-test for experimental and control classes and the scores of cognitive style of the pre-test and post-test. Based on data analysis with two way Annova, the value of F-calculated is $=14.40 >$ than the value of F table $=1.64$. So, the hypothesis one "There is significant effect of discussion method on students' reading comprehension achievements" is accepted. Two-way Annova analysis also found that the value of F- calculated on facto b (independent and dependent cognitive style) is $= 0.158 <$ than the value of F- table $= 1.64$. So, the hypothesis which says "There is any significant effect of cognitive style on students' reading comprehension achievements" is rejected (Ha is rejected and Ho is accepted). Then two-way Annova analysis found that the value of F- calculated is $=3.803 >$ than the value of F- table $=1.64$. So, the hypothesis three which says" There is any significant effect on students' reading comprehension achievements" is accepted (Ha is accepted and Ho is rejected). Based on findings, it can be concluded that this research has mixed results.

Keywords: cognitive style discussion method, reading comprehension achievement.

Introduction

Reading activity is useful for human beings to get any kinds of information and to amuse themselves. Through reading activity, students can get more academic information, which aims to widen their academic insights, for instance, when they read the books about linguistics, they will know more about linguistics. It is believed that reading activity functions to develop students' intellectual potentials (Tong, Deacon, Kirby, Cain, & Parrila, 2011; Yuill & Oakhill, 1991;) The information, which is found from reading materials, can increase readers' thinking ability. It means

that students who know more information logically can increase their ability to analyze something. Students' difficulties can be known how they determine a main idea of a paragraph. Here they find problems in catching idea in a topic sentence of a paragraph. Second, they often find some problems (Tong, Tong, & McBride-Chang, 2015) about how to understand technical terms or specific terminologies, which are found in the reading text such as technical words or phrases. Third, sometimes it is not easy for the students to distinguish between a general sentence and specific sentences in case of their meanings. Many of the second year students got low grades at reading comprehension level three. For example, more students got C and D grades. Few of them got B grade. None of them got A. The difficulties in understanding reading comprehension text were experienced by most college students of the second year.

There are several possible causes that make students difficult to understand reading texts. The first cause lies on the students' individual characteristics or individual differences. The second cause lies on how the teachers teach English mainly reading comprehension. The third cause can be influenced by lack of facilities at school, which is known as learning environment. According to Cope and Kalantzis(2015) and Tan and McWilliam (2009), there are many causes why students find more difficulties in understanding reading comprehension. On the other side, Tong et al. (2011) informed that there are reasonable ways that can be applied to overcome students' difficulties in understanding reading texts. One way that the teacher can help students is that the teacher has to use media of teaching professionally. Another way is that education institution has to provide more facilities for the need of teaching and learning process. Finally, the method of teaching constitutes an important factor which can influence students' minds in learning. By using method, the condition and situation of the class can be different.

One of the useful methods of teaching reading is discussion method (Brown, 1994). Through discussion method, each student can involve directly in a group discussion. Moreover, the discussion method trains the students to be brave to express their ideas from small group discussion to panel forum. Therefore, when the students have more opportunities to share information in a group discussion they will understand better about what they focus to study. The success in understanding reading text much more depends on how teacher teaches it. The students will be interested in reading English, if the teacher is able to create teaching and learning atmosphere attractively. Teacher's ability in implementing various methods, strategies, and techniques is often investigated.

In teaching reading comprehension, cognitive style can play important role to increase students' comprehension. A good way to make students easy to understand the reading text is that a teacher should follow cognitive stages or cognitive levels, which are used in Bloom Taxonomy (knowledge, understanding, application, analysis, synthesis, and evaluation). The teacher should guide the students' understanding from the easiest level of cognitive ability to the most difficult level of cognitive ability. In this study, the formulated research questions are:

1. Is there any significant effect of discussion method on students' reading comprehension achievement?
2. Is there any significant effect of cognitive style on students' reading comprehension achievement?
3. Is there any significant interaction effect between discussion method and cognitive style on students' reading comprehension achievement ?

Literature Review

Discussion method in teaching reading

Brown (1994) explained that there are many benefits or advantages of using discussion in teaching reading: (1) emphasis on learning instead of teaching which means that discussion method

concerns to the students' activity in discussion, (2). participation of everybody in discussion forum, (3) development democratic way of thinking, (4) training in reflective thinking. through discussion, (5). training in self-expression, (6) spirit of tolerance is calculated among the groupmembers, (7). learning is made interesting for students. According to Janzen (1996), the discussion method is the strategy for achieving instructional objectives that involves a group of persons, usually in the roles of moderator and participant, who communicate each other by using speaking, nonverbal, and listening processes. In addition, Henning (2008) say that discussion methods is a variety of forums for open-ended, collaborative exchange of ideas among a teacher and students or among students for the purpose of furthering students thinking , learning, problem solving, understanding, or literary appreciation. Majid (2013) claimed that there are many types of discussion method that can be used in teaching process as written in the following points. (1) Class discussion which refers to the process to solve the problem. (2) Small discussion class which means that the students are divided into small group of 3 or 5. (3) Symposium which aims to discuss problem based on point of view. (4) Panel which aims to discuss about the problem, and it is done by 4-5 people in front of the listeners. (5) Seminar which aims to discuss a topic that is attended by many people and it is guided by professional. (6) Workshop which aims to discuss and to follow-up the seminar.

Cognitive styles

Furthermore, cognitive style refers to a recurring pattern of perceptual and intellectual activity. Cognitive style, thinking style is a term used in cognitive psychology to describe the way individuals think, perceive and remember information. Some psychological anthropologists argue that the styles of individuals and of groups can be located between global style and articulated style. People who use a global style tend to view the world holistically, but people who use articulated style want to break up the world into smaller and smaller pieces that can be organized into larger (Witkin & Goodenough, 1981).

Cognitive style develops in accordance with cognitive development. The discussion on the cognitive development will involve the development of brain, Piaget's theory, and Vygotsky's theory. Santrock (2009) explains that the development of brain is indicated by several places as written below. (1) Development of Neurons and Brain Regions. This development is due to myelination in which the process of encasing many cells in the brain with a myelin sheath, increasing the speed at which information travels through the nervous system. (2) Brain development in middle and late children. This development involves corpus callosum where fibers connect the brain's left and right hemispheres; prefrontal cortex in which the highest level in the frontal labels that is involved in reasoning, decision making, and self-control; amygdala where the scat of emotions in the brain; lateralization in which the specialization of function in each hemisphere of the brain.

Piaget's theory in psychology of development as cited by Santrock (2009) explains that there are four Peagetian stages. First, sensorymotor stage which the infant constructs an understanding of the world by coordinating sensory experiences with physical actions. Second, preoperational stage which the child begins to represent the world with words and images. Third, concrete operational stage which the child can now reason logically about concrete events and classify objects into different sets. Forth, it is called formal operational stages. This means that the children of 11 to 15 years of age through adulthood, can think or give reasons in more abstract, idealistic, and logical ways. Vygotsky's Theory in psychology of development as cited by Santrock (2009) claims that there are three Vygotskyian stages. First, the zone of proximal development is the importance of social influences, especially instruction, on children's cognitive development which reflected in his concept of the zone of proximal development. Second, scaffolding which closely linked to the idea of the ZPD is the concept of scaffolding. Third, language and thought which plays an important role in a child's development. Reading is identifying of written or printed words; the process of identifying and understanding the meaning of the characters and words in written or

printed material. According to Mitchel (2003), "Reading may be defined as an individual's total inter-relationship with symbolic information". Reading is a communication process requiring a series of skills. As such reading is a thinking process rather than an exercise in eye movements. Effective reading requires a logical sequence of thinking or thought patterns, and these thought patterns require practice to set them into the mind.

Reading comprehension achievement

Siu and Ho (2015) defined reading comprehension an activate process that involves all the strategies and behaviors Comprehension making meaning from texts (1) Understanding the text (2) Engaging with the text, (3) Critically evaluating the text, (4) Making connections with existing knowledge, (5) Reflecting upon responses Monitoring own understanding making decision about which strategies will help clarify understanding. In reading comprehension so many advantages we can get Such as: from passive to active. It means that reading comprehension skill allow the students to mastery from the basic reading to effective reading. Reading starts from an exercise to analyze the context Bromley (1992) says that reading comprehension is an active cognitive process that requires the construction of meaning from incoming information and prior knowledge. Bromley (1992) informed that reading comprehension is determined as the level of understanding of a text or message. There are three levels of comprehension as written below. The first level is literal level. This is based on actually stated in the reading text. In this case, the text ncludes facts and details, rote learning and memorization, and surface understanding only. The second level is Interpretive or inferential. This is implied or meant, rather than what is actually stated in the text. The third level is applied or evaluative. This is taking what was said (literal) and then what was meant by what was said (interpretive) and then extend (apply) the concepts or ideas beyond the situation.

Methodology

The design of the research was factorial design. There were two groups, the first was experimental group and the second one was control group. In this case, the experimental group was taught with discussion method, and the control group was taught with grammar- translation method. The design of the factorial can be seen below.

Table 1. *Design of the experimental study*

Experimental Group	R	O1	X1	Y1	O 2
Control Group	R	O1	X2	Y1	O 2
Experimental Group	R	O1	X1	Y2	O 2
Control Group	R	O1	X2	Y2	O 2

Patton (2009) defined that population is the number of people whom you wish to learn something. In this study, the population consists of all second year students of English Study Program at one private University in Jambi. There were four parallel classes consisting of 100 students of English Study Program at Faculty of Teacher Training and Education. They consisted of four classes (class A, B, C and D).each class has 25 students. Sample is the part of the population which is investigated. Fraenkel and Wallen (2008) say that the sample in a study is the group of people or things on which information is obtained. This research used cluster sampling technique. We cannot select a sample of individuals due to administrative or other restriction. cluster sampling technique is more effective with large number of classters (Fraenkel & Wallen, 2008). Of the four groups of students, we selected two classes (class A and class C) by using lotery. Therefore, the

total number of sample is 50.To determine which one of class A and class C to be an experimental group and a control group, we flipped the coin.

The data of this study were taken from the result of the tests on reading comprehension administered to research samples. The data of this research were classified as quantitative data. The pre-test was administered to identify the students' ability in reading comprehension before the treatment was given to them. Then, the post-test was administered to find out the result of students' test in reading comprehension after the treatment was applied to the students. Both experimental and control groups were required to do the pre- test at the same time before the treatment began. Furthermore, these two groups were required to do the post-test at the same occasion after the treatment had been conducted for about 16 meetings.

In this research the data were taken from the students attended the reading comprehension test that used multiple choice form. After they finished the pre-test, we started to give the students treatment in the experimental group by using discussion method and cognitive style. After the pre-test administered and treatment given. The post-test administered for both experimental and control groups. The questionnaire was written in English. The items of questionare were adopted from Oxford (1990). There are 20 items and each item has five choices. They are always, ussually, sometimes, seldom and never. Before doing the research, the questionare distributed to try out first.

This study was conducted from 16 February to 16 April 2014 at the Department of English Education, Faculty of Teacher Training and Education Batanghari University. The samples of this research were 50 students. The samples of experimental class were 25 students and control class had 25 respondents. The treatments were done for 14 times. Two meetings were used to administer pre test before doing treatments and post test after conducting the treatments. After treatments have been conducted, we administered post test to both groups of respondents on reading comprehension. Then, we gave questionaires to the experimental and control classes inorder to get the data from them in the aspect of cognitive styles. All the data that were found from the respondents were recorded to be analyzed by using SPSS 19.

There are several types of data that are categorized into six classifications. (1) The scores of reading comprehension of experimental class. (2) The scores of reading comprehension of control group. (3) The scores of independent cognitive style of experimental group. (4) The scores of dependent cognitive style of experimental group. (5) The scores of independent cognitive style of control class. (6) The scores of dependent cognitive style of control class. All these categories of data are presented in the following tables or chart. To understand students' reading comprehension achievement, the writer used multiple choice test. The test was done to the experimental class and control class, where experimental used discussion method treatment after the pre-test given. otherwise control class would be treated with grammar-translation method before giving the post – test. In otherword, both of the class would get pre-test and post-test, but they were treated in different menthod.Discussion method for experimental class and grammar-translation methos for control class. According to Gronlund (1998) as cited in Brown (2004), validity is the extend to which inferences made from assesment results are appropriate, meaningful, and useful in terms of the purpose of the assesment. to sustain the validity of the test as it described above. The writer would test the students by using reading book which relates to reading comprehension. Therefore, the test taht administered was in the form of multiple choice and it would focus on content (Reading Comprehension). Therefore, in this research the writer made the test material that was standardized as content validity. Moreover, validity of instruments are useful, appropriate, correct, and meaningful for testing the respondents' understanding or comprehension on a certain aspect. Content validity refers to content and format of an instrument. For example, how appropriate is the content ? how adequately does the sample of items or questions represent the content to be measured? (Fraenkel & Wallen, 2008).

In this study, the content validity refers to the aspects which the writer included in the instruments. For example, the research wants to measure the students' literal comprehension about the reading text. Then. the students are requaired to understand the interpretative comprehension on reading text. Finally, the writer needs students to know the applied meaning of the reading text. (as written in question number = 9,17,18.22,24,25). Acording to Ary (2003:225),the test-retest reliability is a way to estimate the reliability of a test which administer it to the same group od individuals on two occasions and correlate the paired scores. The similar concept about reliability is stated by Creswell (2008) that the scores from an instrument are stable and consistent. To find out the reliability of the tests administered to the research participants, using SPPS.

The scoring system that the writer used for both pre-test and post-test in this study was based on the principle cited by Brown (2004) thatsays that 10 (ten) items 2 points each. In this study the writer would administered 25 (twenty five) items of questions that has 4 points each.So, the total scores would be 100 points. Based on the table above, it can be seen that the significant level by using person correlation between __X1 test and __X2 test as big r calculated 0.853 whereas r table is 0.396, with the significant value is 0.05 (5%). If r calculated is bigger than r table , it means that the instuments was reliable. Based on the table it is clear that r calculated (0.853) > than r table (0.396). In order to find out if the items of quetionare were said valid, the writer analyzed the correlation between the score of each variable correlated significantly with total score by using correlation product moment (Pearson's correlation) with an assist of SPSS 19 toward the students' cognitive style. Basrowi and Soeyono (2007:24), the questionare was said valid if $r_{count} > r_{table}$. On the other word, validity coeficient of the test was higher than 0.396 (α=0.05 and n=23(df=25-2=23) viewed from the column "Correlated Item-Total Correlation". From the complete validity result of the questionare of the students' cognitive style, it was found that was valid since validity coeficient of the questionare were higher than r_{count} = 0.396 (α=0.05 and n=25). Fraenkel and Wallen (1991) states that reliability refers to the consistency of the scored obtained. There were twenty items of the questionare of the students cognitive style that measured the way of the student's think.The reliability ofthe questionare of the students' cognitive style was said reliable since the p-output was higher than significant level 0.05. The try out of testing reliability was done by administered one (internal consistency), than analyzed by using alpha cronbach. According to Sudjana (1982:370), the tested criteria of analysis is " if the coeficient correlation (r alpha) is bigger and as same as r table on the significant level is (α=0.05), so, the items of the instrument was reliable. Meanwhile, if the score of coeficient correlation (r alpha) is smaller than the sicnificant level (α=0.05),so, the items of the instrument was not valid. On the othe hand, if cronbach alpha or r calculated > r table the items were reliable.

From the table of reliability of the questionare of the students' cognitive style, it was found that p-output of reliability of questionare of the students' cognitive style was 0.663. It means that the whole items of the questionare of the students' cognitive style was reliable. Questionnaire was used to measure the students' cognitive style. The questionnaire was written in English. There were 20 items and each item had four choices. They were Never, Seldom, Sometimes, Ussually, Always. The choice of never was scored as 1, seldom was scored as 2, sometimes was scored as 3, ussually 4, and always scored as 5, The students would be categorized into two kinds of cognitive style: dependent style and independent style based on their score from questioner.

In this research, there were 25 questions that would be answered by the students. The test were in the forms of pre – test which was given before the treatment aand post- test which was given after the treatment. The distribution of the data can be classified into normal if the p-output was higher than mean significant differences at 0.05 levels. To establish the students' scores were homogeneous or not, the students' pretest and posttest scores in the control and experimental groups and the students' multiple choice test were analyzed by using Levene Statistic. The students' scores were considered homogeneous whenever the p-value is higher than the mean significant

difference at the 0.05 level. To analyze a significant difference of using discussion method and cognitive style and explanation and translation method. The independent t-test wouldl be found SPSS 19. There were significant differences if the p-output was higher than mean significant difference at the 0.05 level. To analyze an interaction, the effect of discussion method and cognitive style on students' reading comprehension achievement. We used two–way Annova. An interaction effect would be found whenever the p-output was lower than mean significant difference at the 0.05 level. The data analysis used Annova (Analysis of Variance).

Findings

Hyphothesis one

Before making decision whether a hyphothesis is accepted or not, it is important to consider the result of hyphothesis testing. If the value of probabilty is > 0.05, the null hyphothesis (Ho) is accepted.

Ho : There is no any significant effect of discussion method on students' reading comprehension achievement.
Ha : There is any significant effect of discussion method on students' reading comprehension achievement.

On the other hand, if the value of probability is < 0.05, the null hyphothesis (Ho) is rejected. To know the significant effect of discussion method on students' reading comprehension achievement, we used T-test formula to analyze test result or data. Futhermore, there were several independent T-test which are presented in some tables.

Table 2. *Group statistic*

	Group	N	Mean	Std. Deviation	Std. Error Mean
Reading Comprehension	Experiment	25	74,32	5,872	1,174
	Control	25	69,00	4,444	,889

Based on the table above, it is known that group statistics describes total of data, mean scores, standard deviation, and standard of error in average. This table shows that mean score of standards' reading comprehension by using discussion method in experimental class was = 74.32 and standard deviation was 5.872. On the other hand , in control class the mean score was 69.00 and standard deviation was 4.444. This result showed that students' reading comprehension at experimental class was better than at control class. Furthemore, the independent sample t-test was used for analyzing equality of means. The result of this analysis are presented in the Table 3 below.

Table 3. *Independent sample t- test*

T-test for Equality of Means

T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
3,612	48	,001	5,320	1,473	2,359	8,281
3,612	44,703	,001	5,320	1,473	2,353	8,287

The results of analysis by using the independent sample T-test above, indicate that the value of significant statistics was = 0.001 < the value of alpha (0.05) at the level of 95 %. The value of it calculated was = 3.612 and t table was =2.021. this means that t calculated was > t table (3.612>2.021). Therefore, HO is rejected because both groups had different means. In other words, this value indicated that reading comprehension which was taught by using discussion method and reading comprehension taught by using grammar-translation method had different result or different effect. Based on the result of data analysis mentioned above, it is known that there is any significant effect of discussion method on students' reading comprehension achievement. Another principle that should be considered is that if the value of f calculated is > that the value of f table, Ha is accepted. Then, if the value of f calculated is < than the value is rejected. In table XXI it is found that the value of calculated on factor a (discussion of the method) is = 0.000. Because of the value of probability is < 0.0005, the null hyphothesis (Ho) is rejected. In other words, the value of calculated is = 14.140 > than the value of F table = 1.64, so the Ha is accepted. Based on the result of data analysis mentioned above, it is known that there is any significant effect of discussion method on students' reading comprehension achievement.

Hyphothesis two

To answer the formulation of the problem on the second and the third hyphothesis by using two way annova.It can be described in the table below:

Table 4. *Two-way annova tests of between –subjects effects different variable interaction tests of between-subjects effects*

TABLE 4Source	Type III Sum of Squares	Df	Mean Square	F	Sig.
Corrected Model	456,944[a]	3	152,315	5,847	,002
Intercept	256429,068	1	256429,068	9843,926	,000
faktor_a	368,337	1	368,337	14,140	,000
Factor	4,108	1	4,108	,158	,693
factor * factor	99,057	1	99,057	3,803	,05
Error	1198,276	46	26,049		
Total	258413,000	50			
Corrected Total	1655,220	49			

R Squared = ,276 (Adjusted R Squared = ,229)

The second hyphothesis is to know about the significant effect of cognitive style on students; reading comprehension achievement. The null (Ho) and stastical hyphothesis (Ha) are stated as follows.

> Ho : There is no any significant effect of cognitive style on students' reading comprehension achievement.
>
> Ha : There is any significant effect of cognitive style on students' reading comprehesnion achievement.

To make a decision whether a hyphothesis is accepted or rejected, the result of data analysis should be considered. For example, if the value of probability is > 0.05, so Ho is accepted. Then, if the value of probability is < 0.05, so Ho is rejected. Another way is that if the value f calculated is > that the value of f table, so, Ha is accepted. Then, if the value of f calculated is < than the value of f

table, so Ha is rejected. In table 3, it can be seen tha value of f calculated on factor b (independent and dependent cognitive style) is = 0.158 and the value of probability is = 0.693. Based on the data analysis mentioned above, f calculated is =0.158 < than the value of f table is = 1.64, so Ha is rejected. This means that there is no significant effect of cognitive style on students' reading comprehension achievement.

Hyphothesis three

The three hyphothesis is to know the significant interaction effect between discussion method and cognitive style on students' reading comprehension achievement. The hyphothesis are stated as follows.

Ho : There is no signifficant interaction effect between discussion method and cognitive style on students' reading comprehension achievement.

Ha : There is any signifficant interaction effect between discussion method and cognitive style on students' reading comprehension achievement.

To make decision whether a hyphothesis is accepted or not, the results of data analysis should be used as principle or criteria. For example, if the value of probability is > 0.05, the null hyphotesis (Ho) is accepted, then if the value of probability is <0.05, the null hyphothesis (Ho) is rejected. The similar criteria also explains that if the value of F calculated is < than the value of F table, Ha is rejected.

Based on table above, the value of F calculated on interaction factor a and b is = 3.803 with the value of probability 0.05. Because the value of probability is < 0.05. Ho is rejected. In other words, the value of F calculated is = 3.803 > than F table is = 1.64, so Ha is accepted. This means that there is significant interaction effect between discussion method and cognitive style on students' reading comprehension achievement. Besides data analysis for three types of hyphothesis mentioned above. We also presented line graph, which describe the interaction among the variables of the research. The graph can be seen below.
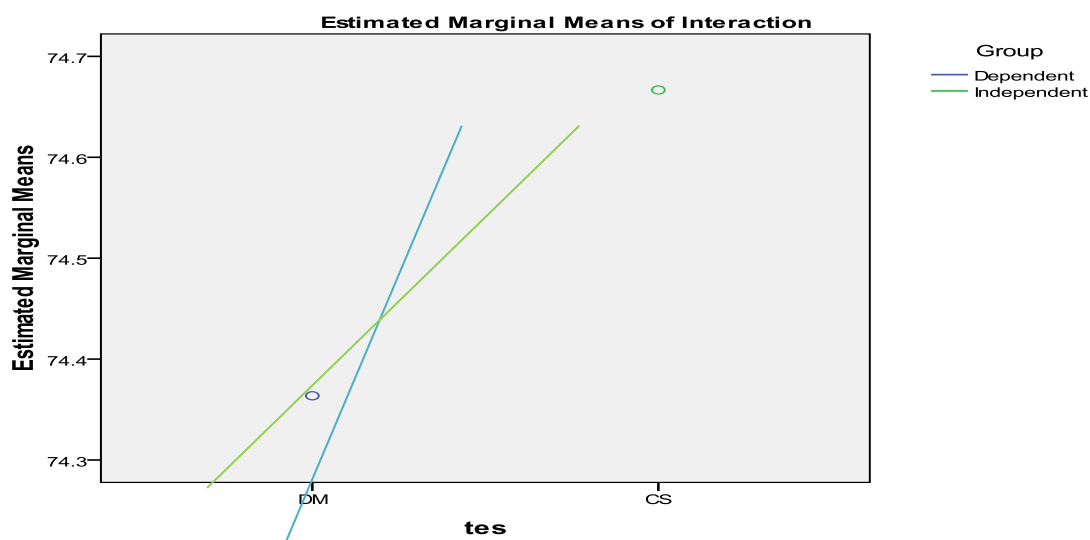

Figure 1. *Estimated marginal means of interaction*

Based on graph line, it can be found that the distribution of data of discussion method and cognitive style lies on score around average lines.There lines interact each other. Furthemore discussion method and cognitive style also interact on students' reading comprehension achievement.

Discussion

Based on data analysis of this study. We discuss findings which relate to effects of independent variables on independent variables. Moreover, we also relate the findings to the theories whch support the variables of this study. Teaching and learning process which was done using discussion method and cognitive style has increased students' creativity and productivity in learning reading comprehension achievement. In experimental class, students were group to be several small groups in a class. They were guided to collaborate each other in a groups in a class. They were guided to collaborate each other in a group in order to discuss the materials of lesson for each meeting. The students were required to be able to comprehend the text, they should be able to explain the text. They also should be able to answer the questions.

In teaching and learning process, the students seemed to be active, creative and serious to find out the concepts of materials of lesson. They tried to find the concept by themselves in order to be the best group among them. Here, everybody of the group should be responsible for the members who did not understand the lesson well. So, by using discussion method in experiemental class, the students had more opportunities to work together to make sure for everyone in the group understand the concepts of materials of lesson. To get the marks from the students, they were given quiz. Each to the member of groups should did the quiz. There score were compared to each other. Then their average scores were compared to the score of previuos meeting.

The process of teaching and learning in the experiemental class by using discussion method had more advantages compared to the control class by using grammar-translation method. The advantages could be seen at the beginning of teaching and leraning process. for example, the students presented their work to share information with other groups. This activity aims to motivate the students to learn seriously either in group or individual. This teaching and learning situation can be reffered to the idea stated by Hamalik (2001) in group work the feeling to increase group prestage constitues strong motivation to reach learning outcome better.

A lot of appreciation should be given to the group who could achieve high achievement. This appreciation aimed to makes students conscious that it is important to help each other. They should be responsible for the group work and for individual. This means that group is sucess is determined by individual potential of all group members. From hyphothesis testing, it is known that the students achievements in experiemntal class which used discussion method is better than students' achievement on reading comprehension in control class which used gramar-translation method. This different occured because in experimental class students tried to find the concept by themselves. Then the students work in group 4 or 5, and lecturer only facilitate them in learning process. On the other hand, in control class the students focused on lecterur's explanation in front of the class.

Individual learning is done by each student. In accordance with his or her ability. Individual competence contributed to competence of group work. So, group members are motivated by individual competence to reach a best result of group work. Again, from hyphothesis testing, it is found that discussion method had significant influence on students' reading comprehension achievement. The scores of post-test indicated that there is significant difference between experimental class and control class. when analyzing the data pre- test and post-test. It was found that there was significant difference on students' reading comprehension achievement between experimental class and control classes. After hyphothesis testing, it was found that: at the first hyphothesis testing, it was found that the value of probability is < 0.05. So, Ho or null hyphothesis

is rejected, or the value of f calculated is = 14.140 > than the value of f table is = 1.64, So, Ha is accepted. This means that there is significant effect of discussion method on students' reading comprehension achievement. At the second hyphothesis testing, the value of probability is > 0.05, Ho is accepted, or f calculated is = 0.158 < f table = 1.64, So, Ha is rejected this result showed that there is no significant effect of cognitive style on students' reading comprehension achievement. At the third hyphothesis testing, it was found that the value of probability is < 0.05, So, the null hyphothesis is =3.803 > f table is =1.64, so, Ha is accepted this means that there is significant interaction effect between discussion method and cognitive style on students' reading comprehension achievement.

After stastistical hyphothesis of this study accepted, it known that students' reading comprehension achievement which was taught by using discussion method is better than the students' reading comprehension achievement that was taught by using grammar-translation method at English study program of faculty of teacher training and education Batanghari University. The results of this study can be refered to the definition of learning as stated by Harmer (2001) that the change of behaviour happens after learning activity is called learning outcome constitutes the increase of score from pre test to post test.

The increase of students' reading comprehension achievement was caused by discussion method which was used in experimental class. This method brought the change in teaching and learning activities. For example, the students could help each other in their group work. Madjid (2013) says that there are many types of discussion methods that can be used in teaching and learning process. For example, (1) class discussion. This is the process to solve problems. All students as member of group work involve in solving learning problem. (2) Small discussion class. It means that the students are divided into small group of 3-5 students or persons. (3) Symposium. This is a discussion form which discusses the problem, but it is based on other point of view. (4) Panel. It means that a forum of discussion about problems. (5) Seminar. This is the discussion that areattended by many people and it is guided by committee members. (6) Workshop. It is a discussion which follows up of the seminar.

Discussion method could bring positive influence on students' reading comprehension achievement, eventhough it was in a simple situation. This was because of the students inquired the concept of lesson through team work in discussion forum. Furthemore, discussion method guided the students to the active in discussion forum. They could express their opinions while they were working together in a team work. In collaboratiing each other, the students remember the concepts of lesson for any longer. Moreover, working in a group work trains the students mutual understanding and mutual respect. It is undoubtful that discussion method brought significant effect on students reading comprehension achievement. One of the causes was that the students respected group work which was supported by individual competency. This idea is supported by Steven and Slavin (1995) who say that individual learning outcome can inrease because the student learns to respect or appropriate towards group based on the learning progress of each individual in a group.

Eventhough there is no permanent regulation which should be obeyed by a lecturer to choose method, technique, and model ofteaching, yet the lecturer should consider a suitable method for certain subject or topic of lesson. Sukamto and Putera (1995) says that there is no single method, technique, or model which is effective for teaching all subjects. In this case, teacher's professional in creating effective and inovative teaching and learninf process is needed, therefore, profesional lecturer is expected to contribute to increase students' learning outcome. This study only focused on three variables such as discussion method, cognitive style and reading comprehension. However, there are still other variables that can be included in this study. This study used test and questionare as the instruments for collecting data. It is known that the

respondents sometimes do not give factual answer to questionare. The third limitation lies on time, we did not have longer time to conduct the research, especially experimental study.

Conclusion and Recommendations/Implications

The conclusion of this study are described based on the finding each data analysis. Discussion method had significant effect on students' reading comprehension achievement at English study program of Batanghari University. The significant effect is proved by the findings based on data analysis by using independent t-test. In this case, the value of probability is=<0.05. In other words, the value of t table is= 1.64. Therefore, in this hyphothesis testing, Ho is rejected whereas Ha is accepted. The second conclusion is that there is no significant effect of cognitive style on students' reading comprehension achievements. It is proven by the findings based on data analysis of calculated is= 0.158 < F table is = 1.64. Therefore, in this hyphothesis testing, Ho is accepted and Ha is rejected. The third hypothesis testing by using two way annova indicated that there is significant interaction effect between discussion method and cognitive style on students' reading comprehension achievements. This is orived by the findings of data analysis as written below.The value of probability is = <0.05. The value of f calculated is = 3.803 > the value of f table is = 1.64. Therefore Ho is rejected and Ha is accepted.

The implication of this study can be described as follows. This study involves three variables, such as discussion method, cognitive style, and reading comprehension achievement. Based on data analysis, it was proved that discussion method and cognitive style have significance effect on students' reading comprehension achievement in experimental class. It is known that discussion method is a good method that can be used by lecturer in teaching English especially teaching reading comprehension. Based on the conclusion above, the writer would like to give several suggestions to the readers (teachers, lecturers) as follows. Discussion method is recommended to be applied in teaching and learning process so that the students become active, creative in earning at a group discussion. In using discussion method, teachers or lecturers should consider students' conditions and characteristic of materials of lesson, so that the use of discussion method can be effective. The teachers should be more creative to select the method for students, and vary the kind of method to improve the students' English skill. The teacher shoul be able to select the material for the students based on their English proficiency and ability. It is suggested to further researchers who will conduct experimental research on discussion method and cognitive style, so that he or she reviews or considerers the results of this study.

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