



Controversial Religious Issues for Improving Students Critical Thinking Skill in Higher Education

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This study investigates whether the application of controversial religious issues in learning impacts increasing students' critical thinking skills. The research conducted quasi-experimental research with a nonequivalent group design. The study applied to students in Malang Islamic University's third-seventh semester. Instruments for collecting the data are in the form of tests, and questionnaires are arranged in multiple-choice and essays conducted before and after treatment. Hypotheses were tested using two-way ANOVA in SPSS 20 version. This study found that implementing controversial religious issues in learning positively improved student critical thinking skills. However, differences in gender and semester groups do not affect differences in student achievement. The study implies that lecturers may apply the controversial religious issues method to students in higher education in any group of gender and semester. Mentally, higher education students are ready to discuss controversial religious issues that will affect students' critical thinking skills and student achievement.

Keywords: controversial issues, critical thinking, higher education, students, learning

INTRODUCTION

Indonesia is a country with a pluralistic population in terms of ethnicity, nation, and religion. These differences are prone to cause conflict among Indonesian citizens, so it is not surprising that disputes have often occurred between them in recent decades, whether conflicts between tribes, races, or religions. An inter-tribal conflict, for example, happened between the Madurese and the Dayak tribes in 2001 in the city of Sampit, Central Kalimantan, which resulted in more than 500 people being killed and more than 1000 people losing their homes (Cahyono, 2008; Karliani et al., 2018). In 2005, a conflict between the Sunni militants and the Ahmadiyya group took many victims, as happened in Tasik Malaya (Nurdin et al., 2019) and Lombok in 2006 (Crouch, 2009). Until now, conflicts related to religious issues are still rife, especially in

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cyberspace, whether they are circulating on Twitter, Facebook, or other social media. This phenomenon makes parents, teachers, and Indonesian society generally worry about their children's future when they have to deal with controversial issues in society (Noddings & Brooks, 2017). Education can be the hope to help their children grow and develop into wise people in dealing with controversial issues in society (Outlon et al., 2004).

Since Indonesia's independence in 1945, education has been one aspect to which the Indonesian government pays great attention. Therefore, the government made a special law regarding the implementation of education in Indonesia, which was revised from time to time to improve the quality of education, one of which was Law No. 20 of 2003 concerning the Law on the National Education System. Indonesian State Law No. 20 of 2003, article 1 paragraph 1 explains education is a conscious and planned effort to create a learning atmosphere and learning process to bring students actively develop their potential to have religious-spiritual strength, self-control, personality, intelligence, noble character, and the necessary skills for his self, society, nation, and state (Diknas, 2003). The sound of the law implies that education is prepared to lead students to become good human beings and ready to live in a society (Jarvis, 2012).

Meanwhile, in social democratic life, many complicated and controversial issues occur in human life that cause misunderstandings between them (D. Hess, 2008; D. E. Hess, 2004) and makes some people awkward and confused in their behavior. To face the problem, some people get into the dispute, others are involved in the discussion by taking lessons from the controversial issue, and some get away from it (Deutsch, 1969). Sometimes contentious issues in society lead to tragic social conflicts because members of the community are not wise in responding to differences and do not respect the opinions of others (Kunovich & Hodson, 1999).

In Indonesia, religious issues often raise controversy and conflict in the community (Panggabean et al., 2010), both internally and externally. Internally, for example, a Muslim must deal with fellow Muslims in determining the law of an act, which is sometimes lawful according to some groups and unlawful or permissible for other groups (Herdiansah, 2016). Externally, a Muslim must also deal with adherents of other religions, who have different theological and moral values (Wilson, 2005). Deal with these differences requires them to have a wise attitude and respect each other to avoid conflict in society (R. Fisher, 2000).

Since Since emotionally charged religious issues often cause controversy and unrest in society, schools have a responsibility to help students develop good attitudes and rational points of view based on reliable data that is relatively free from distortion, prejudice, or bias (Noddings & Brooks, 2017). Schools are required to introduce these controversial issues to students to help them be ready to face the contentious problems that occur in society (Barton & McCully, 2007).

Research on controversial issues learning has been widely carried out (Barton & McCully, 2007; Harwood & Hahn, 1990; Lockwood, 1996), but until now, the problem is still controversial because some reject it and others accept it (D. E. Hess, 2004). Some people refuse it because studying controversial issues causes conflict and disunity in

schools. However, for those who receive it, controversial learning issues increase the maturity of students in addressing controversial issues in society (Franken, 2020). Because of its considerable benefits, some people propose to include the controversial problems in the curriculum (Harwood & Hahn, 1990). Several studies show that controversial issues learning has a positive impact on improving students' abilities in various fields because students can express their opinions freely and with confidence (Barton & McCully, 2007). Controversial issues learning enhance students' democratic attitudes (D. Hess, 2008). Some researchers also show the significant influence of controversial issues learning on students' critical thinking attitudes (Hirayama & Kusumi, 2004; Noddings & Brooks, 2017).

However, research that explicitly raises the theme of controversial religious issues in learning in Indonesia has not been widely carried out. Most of the research on controversial topics learning presents the pieces of history (Hartono & Huda, 2020), social (Hanurawan & Waterworth, 2011), and political issues (Purnomo & Wasino, 2020). At the same time, controversial religious issues are presented to us every day, either through mass media, social media, or in our real life. Many Indonesian people are trapped in conflict due to the emergence of these controversial religious issues. Education will be the best way to enhance this problem by introducing controversial religious issues in the class.

Controversial issues learning is learning that tries to present controversial issues in a community to be analyzed rationally to get alternative ways to address these issues. The application of this learning model will help students understand the problems in their lives and positively influence understanding, critical thinking, and interpersonal skills. The controversial issues learning model aims to develop students' critical thinking skills, solve the problems that arise in their lives as adults, and have emotional maturity. The controversial issue learning model encourages students to express different opinions and develop new ideas. Controversial issues drive students to have higher thought skills such as analyzing, synthesizing, and evaluating (Komalasari, 2011).

Generally, critical thinking defined as an effort to analyze facts to find a decision (Glaser, 1941). Critical thinking is the intellectually disciplined process of actively and skillfully conceptualizing, applying, analyzing, synthesizing, and evaluating information gathered from, or generated by, observation, experience, reflection, reasoning, or communication, as a guide to belief and action (Ennis, 2015).

Siegel (2013), Kuhn (2015), and Facione (1993) shared similar definitions, which essentially explain that critical thinking is an intellectual activity that is skillfully active in analyzing, synthesizing, and applying information obtained through observation, experience, and other resources used as a guide to doing something. According to Glaser (1941), critical thinking includes three main elements, namely, (1) the behavior to deal with problems with full awareness, (2) knowledge of how to solve these problems, and (3) the skills to apply the method. Critical thinking is skilled and active interpretation and evaluation of observation, communication, information, and argumentation (A. Fisher & Scriven, 1997). Furthermore, Johnson (Johnson et al., 2010)

revealed that critical thinking is an organized process that allows students to evaluate evidence, assumptions, logic, and language that underlie other people's statements. Overall, critical thinking skills are carried out by students with skill and active in an organized manner that allows students to evaluate the evidence against observation, communication, information, and argumentation (Mendenhall & Johnson, 2010).

Everyone needs critical thinking skills to encourage them to understand, process, and analyze various kinds of information. Students' critical thinking skills need to be developed as a provision for them to live in society independently and not be carried away by negative currents that lead to conflict. Educational programs and specific methods are needed to improve critical thinking. Particular curricula and approaches are also required to internalize critical thinking skills in students as a provision for living in a society (Dewey, 1910). Teachers and educators implement specific strategies to improve students' critical thinking, following the situation and conditions of students to promote their ability to dialogue with the surrounding environment (Abrami et al., 2015). Critical thinking skills believed can lure students into thinking critically, logically, and maturely to solve controversial problems in society (Hirayama & Kusumi, 2004).

We believe that if a person's critical thinking ability increases, his ability to analyze problems in society also increases (Belecina & Ocampo Jr, 2018) to face controversial religious issues smartly and avoid conflicts with other community members. Therefore, we assumed that critical thinking skills could improve one's ability to handle controversial religious matters in Indonesia, especially for college students. However, some researchers found that stakeholders considered college alumni to have shortcomings in critical thinking and problem-solving skills, even though they saw these skills as essential skills that students must have as provisions in living in society (Abidin, 2021). Many higher education institutions still focus on learning by rote methods rather than critical and innovative thinking (Alandejani, 2021).

This study wants to compare men and women in critical thinking problems and their relation to resolving controversial religious issues. Because we see there is a stereotypical assumption that women in Indonesia are generally considered less vital than men and rely more on their feelings in solving various kinds of problems (Cholil, 2017; Islam & Asadullah, 2018). Problems, including controversial religious issues. Through this research, we will prove whether this kind of assumption is acceptable or not.

We will also conduct a different semester group test of students to determine in what semester higher education applies the learning of these controversial issues and whether there are differences in the achievements of the student groups when viewed from their semester group.

In addition, the research methods used in previous studies also varied, primarily using survey methods and were descriptive (Hartono & Huda, 2020). Several studies on controversial issues also use experimental methods (Hanurawan & Waterworth, 2011; Hirayama & Kusumi, 2004). Still, research that specifically examines the application of learning on controversial religious issues with experimental methods is rarely found.

Therefore, the researchers apply the learning on controversial religious issues with the experimental design method to see firsthand how this method improves students' critical thinking.

This study aims to raise three main research problems, namely;

1. Does apply the controversial religious issues learning method improves students' critical thinking skills?
2. Does gender differences affect students' critical thinking skills?
3. Does the difference in the semester level of students affect the achievement of students' critical thinking skills?

METHOD

Research design

This study employed quasi-experimental research with a *Nonequivalent group design*. Researchers chose two different classes, one as an experimental class that applied religious controversial learning issues and the other as a control class with a traditional teaching model. In this case, the researcher did not randomly choose students based on their semester or gender. Still, the researcher selected them based on existing class groups because the random selection of participants was difficult. Researchers compare their achievements to determine if there is a difference between the experimental group's performance and the control group (Gersten et al., 2005).

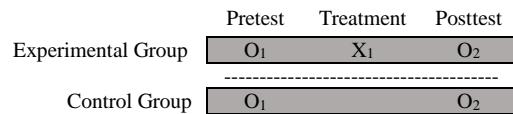


Figure 1

The quasi-experimental research with a *Nonequivalent group design*.

This study applies four steps: the preparatory stage, the pretest stage, the implementation phase, and the posttest stage. In the preparation stage, researchers determine the research subjects, gather preliminary information as supporting material for identifying the research, designing learning activities (preparing Learning Implementation Plans, learning materials, pretest and posttest questions, and observation guides). In the pretest stage, the researchers applied multiple-choice questionnaires and open-ended questions to determine the students' critical thinking skills as a preliminary analysis. Researchers use the Learning Plan that researchers have made at the implementation stage. The control class applied conventional education, while the experimental class applied controversial religious issues learning. The posttest stage was carried out after the treatment of each group in the previous step done.

Research instrument

To measure the development of students' critical thinking skills, this study uses a research instrument developed from the theory of Glaser (1941), and Fisher (1997), which consists of three main components, namely (1) the behavior to deal with problems with full awareness, (2) knowledge of how to solve these problems, and (3) have the

skills to apply the method. From the three main components, each indicator was further developed into three questions, as shown in Table 1 as follows;

Table 1
Research instrument of critical thinking skill development

Instrument item of student critical thinking	
The behavior to deal with problems	1. Identify the central issues
	2. Compare the similarities and differences
	3. Make and formulate critical questions
The knowledge of how to solve these problems	4. Find the causes of the occurrence of the problem
	5. Assess the impact or consequences.
	6. Predict further consequences of the impact of the event
The skills to apply the method	7. Explain the problem and make a simple conclusion
	8. Design a simple solution
	9. Reflect the value or attitude of the event

The application of controversial issues learning in this study was carried out with the following steps: (1) Teachers and students brainstorm about controversial religious issues to be discussed, (2) Students in groups choose one case to study, (3) Students make an inquiry, invite speakers, read books, gather other information, (4) Students present and discuss inquiry results, submit arguments, listen to counter-arguments or other opinions, (5) Students apply concepts, generalizations, social science theories to academically analyze the problem. As for the control class, they are taught using the lecture method that focuses on the lecturer, as is done in *fiqh* learning in general.

Profile of respondent

This research was conducted when the researchers were teaching *the Fiqh* subject at the Malang Islamic University. The study was conducted on third, fifth, and seventh-semester students of the biology major, which was applied to 162 students divided into four different classes. Two experimental classes consisted of 82 students and 80 students in the control class. The themes taught are deliberately taken from lecture themes. There are many controversial issues, namely the issue of *mut'ah* marriage, the difference between schools in Islamic law, sex change, and the Islamic caliphate.

The participants in this study were students who took courses in *fiqh* studies at the Malang Islamic University. Initially, the number of students listed in the absence was 164 students divided into four class groups, with 41 students in each class. However, when the lecture took place, two students from the experimental class withdrew due to colliding with other activities. Until the end of the study, when the researcher applied the posttest, the total number of students who attended the lecture was 162 participants.

Table 2
Distribution of demographic identity of participants

Cluster	Identity	F	N	Percentage
Class distribution	Experimental class	2	80	49.3%
	Control class	2	82	50.7%
Gender	Male		116	71.6%
	Female		46	28.4%
Semester	III		124	76.5%
	IV		28	17.2%
	VII		10	6.3%

Researchers included Eighty-two students in the control class/group and 80 students in the experimental class/group. In terms of gender, they consist of 46 women with a percentage of 28.4% and 116 men with 71.6%. Meanwhile, in terms of the semester level, 124 students came from the third semester, 28 students came from the fifth semester, and ten students came from the seventh semester. The number of fifth and seventh-semester students involved in this study was less because they were students who were supposed to take this course in the third semester. Still, they could not take it in the third semester due to specific problems, so they had to take it in the fifth or seventh semester. Overall, the demographics of the respondents can be seen in Table 2.

Descriptive Statistic

This section explains the results of students' critical thinking skills before and after treatment in experiment and control class. Table 3 shows the descriptive statistic of all variables by showing the mean, standard deviation, and total of its numbers classification.

Table 3
Descriptive statistics analysis result of critical thinking score

Gender	Semester	Posttest	Mean	Std. Deviation	N	
Male	Third semester	experimental class	87.03	4.55	30	
		control class	76.67	7.77	48	
		Total	80.65	8.39	78	
	Fifth semester	experimental class	87.93	4.65	15	
		control class	76.46	6.13	13	
		Total	82.61	7.87	28	
	Seventh semester	experimental class	88.20	4.97	5	
		control class	82.80	6.87	5	
		Total	85.50	6.33	10	
	Total	experimental class	87.42	4.55	50	
		control class	77.09	7.50	66	
		Total	81.54	8.18	116	
	Female	Third semester	experimental class	88.17	5.38	30
			control class	75.94	6.84	16
			Total	83.91	8.30	46
Total		experimental class	88.17	5.38	30	
		control class	75.94	6.84	16	
		Total	83.91	8.30	46	
Total	Third semester	experimental class	87.60	4.97	60	
		control class	76.48	7.50	64	
		Total	81.86	8.47	124	
	Fifth semester	experimental class	87.93	4.65	15	
		control class	76.46	6.13	13	
		Total	82.61	7.87	28	
	Seventh semester	experimental class	88.20	4.97	5	
		control class	82.80	6.87	5	
		Total	85.50	6.33	10	
	Total	experimental class	87.70	4.86	80	
		control class	76.87	7.35	82	
		Total	82.22	8.26	162	

Data normality test

Table 4 shows the normality of students' critical thinking score data using Levene's test of equality of error variance. The output of Levene's test is used to determine whether each variant of the dependent variable is homogeneous.

Table 4
Levene's test of equality of error variance

Dependent Variable: Critical Thinking			
F	df1	df2	Sig.
.667	7	154	.700

The basis used to measure homogeneity is if the significance value (sig) > 0.05 , then the variance of learning outcomes is homogeneous, and if the significance value (sig) < 0.05 , then the variance of learning outcomes is not homogeneous. Based on the output in table 3, the significance value is $0.700 > 0.05$, so the variance of the critical thinking skill value is homogeneous and meets the requirements for a two-way ANOVA test.

Data analysis

After seven meetings, a posttest was held. The data are analyzed using One-way and Two-way ANOVA with SPSS program version 20. The hypothesis is accepted if P-value (sig) < 0.05 . If the P-value > 0.05 means there is no difference between the experimental and the control class, whereas if the P-value < 0.05 , the two levels are different.

FINDINGS AND DISCUSSION

Descriptive analysis using one-way ANOVA shown in Table 5 indicates the mean of critical thinking result, standard deviation, and standard error. It also shows the minimum and maximum scores of critical thinking for every group, comparing the post-test score of critical thinking between the experimental and control class. The result indicates that the mean score of critical thinking in the experimental class was 87,70 and 80,82 for the control class. The range score of the experimental class was between 78 and 96, and the range score of the control class was between 68 and 95.

Table 5
Descriptive analysis results of students' critical thinking test score differences between the score of the experimental and control group

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Experimental	80	87.70	4.856	.543	86.62	88.78	78	96
Control	82	80.82	4.759	.526	79.77	81.86	68	95
Total	162	84.22	5.906	.464	83.30	85.13	68	96

Table 6 explains the result of descriptive analysis using one-way ANOVA from the gender perspective. Table 6 indicates the posttest score for critical thinking between the

Male and Female groups. The result shows that the mean score of critical thinking of the Male group was 83.76 and 85.37 for the Female group. The range score of the Male group was between 68 and 96, and the range score of the Female group was between 73 and 96.

Table 6
Descriptive analysis of students' critical thinking test score differences between male and female group

Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum	Maximum
					Lower Bound	Upper Bound		
Male	116	83.76	5.717	.531	82.71	84.81	68	96
Female	46	85.37	6.273	.925	83.51	87.23	73	96
Total	162	84.22	5.906	.464	83.30	85.13	68	96

Descriptive analysis using one-way ANOVA is run to see the students' critical thinking score differences between semesters. Table 7 shows the posttest score of students' critical thinking from a semester perspective. The result shows that the mean score for critical thinking in semester three was 83.82, the mean score for critical thinking in the fifth semester was 85.21, and 86.30 for seventh-semester students. The score for critical thinking between semesters ranged from 68 to 96.

Table 7
Descriptive analysis of students' critical thinking test score differences between semester groups

Group	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Min	Max
					Lower Bound	Upper Bound		
Third semester	124	83.82	6.13	.55	82.73	84.91	68	96
Fifth semester	28	85.21	4.96	.93	83.29	87.14	77	96
Seventh semester	10	86.30	5.10	1.61	82.65	89.95	79	93
Total	162	84.22	5.90	.46	83.30	85.13	68	96

Figure 1 shows the comparison graph of pretest and posttest score increases in the experimental and control class. The data shows that the mean score of the pretest of the experimental class is 75.60, and the mean score of the posttest is 87.70. The score gap between pretest and posttest scores is 12.1. Meanwhile, the mean score for the pretest of the control class is 75.35, and the mean score for the posttest is 80.82. The score gap between the control class's pretest and posttest scores is 5.47.

The Figure also explains the N-Gain of experimental class and control class in critical thinking skills. The results show that the N-Gain of the experimental class is 12.1 and

the N-Gain of the control class is 4.47. The N-Gain gap between experimental class and control class score is 6.63. It means that the N-Gain of the experimental class is upper than the control class of 6.63 points.

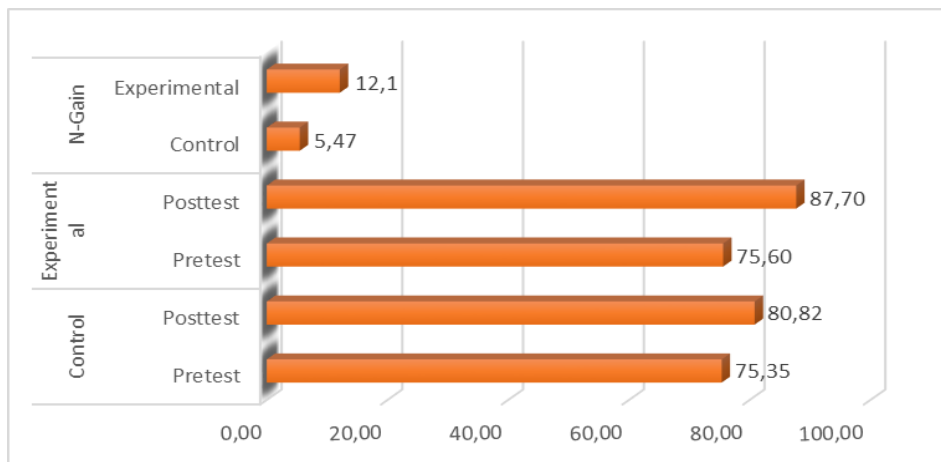


Figure 1
Comparison graph of pretest and posttest score increase

Table 8 shows the result of the two-way ANOVA test. The results of this test are used to determine the results of the research hypothesis testing. The basis for this test's decision-making is if the significance value (sig) < 0.05 means there is a difference in student learning outcomes based on the factor variable. Vice versa, if the significance value (sig) > 0.05 means, there is no difference in student learning outcomes based on the factor variable.

The first question of this research is whether the implementation of controversial religious issues in learning affects students' critical thinking? The researcher compared student learning outcomes in the experimental class and the control class to answer this question. The test results of the two-way ANOVA show that the significance value obtained is $0.000 < 0.05$, which means there is a difference in student learning outcomes between the control class and the experimental class. Overall, applying controversial religious issues to learning improves students' critical thinking.

The second question of this research is, does the implementation of learning with controversial religious issues affect students' critical thinking based on gender? The results of the two-way ANOVA analysis shown in Table 8 indicate that a significance value obtained is $0.868 > 0.05$. It means that gender differences do not affect students' critical thinking abilities.

Table 8
Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	4968.937 ^a	7	709.848	18.163	.000
Intercept	514733.852	1	514733.852	13170.888	.000
Gender	1.089	1	1.089	.028	.868
Semester	117.497	2	58.749	1.503	.226
Experiment and control class	1863.902	1	1863.902	47.693	.000
Error	6018.502	154	39.081		
Total	1106023.000	162			
Corrected Total	10987.438	161			

a. R Squared = .452 (Adjusted R Squared = .427)

Answering the third question, does the implementation of controversial religious issues in learning affect students' critical thinking skills based on differences in students' semester levels. The test results using two-way ANOVA in Table 8 show a significance value (sig) obtained is $0.226 > 0.05$. This value indicates that implementing learning with controversial religious issues has no significant effect on students' critical thinking skills based on differences in students' semester levels.

Table 8 also shows an R Square value of 0.452, which means that the application of controversial religious issues learning increased students' critical thinking skills by 45.2%, while other factors outside the research context influenced an additional 54.8%.

The data shows that applying learning on controversial religious issues improves students' critical thinking skills when viewed from the difference in N-Gain of students in the experimental group, which is 6.63 points higher than the control group. By studying and discussing controversial issues in religion, students try to express their opinions rationally and criticize the views of their friends who they see are not following their ideas, thus triggering an increase in their critical thinking. Although they were shy to express their opinions on the religious issues discussed first, their ability to analyze the problems increased after seven meetings. For example, when talking about the case of the Islamic caliphate. At first, in the pretest, most of the participants agreed with the Islamic caliphate. However, after learning about an approach to controversial religious issues, their critical attitude increased, so their answers became more diverse. Some stick to the original opinion but must change their minds by saying that the Islamic caliphate is not the true mission of Islam. They say that the task of Islam is to bring peace and lead people to good character.

This study confirms several previous studies, which showed that controversial learning issues influence student achievement and learning outcomes (Harwood & Hahn, 1990). The application of controversial religious issues in learning also helps students improve their critical thinking because, in practice, students discuss among themselves by

expressing their respective opinions. There are some groups of students who are pro to certain arguments and some others are against those arguments. With these differences of opinion, students try to understand the problem carefully, based on strong and rational arguments. In controversial religious issues learning, students learn how to deal with differences between them, without claiming that they are the most right and others wrong. They are taught to respect and understand each other's opinions because each of them has their arguments and points of view (King, 2009).

This study also strengthens previous studies, which link learning on controversial issues with increasing students' critical thinking and critical knowledge (Purnomo & Wasino, 2020), and refutes some assumptions that teaching controversial issues in educational institutions has a negative impact (Kubota, 2014) because it can cause conflict between fellow students or students and teachers (Barton & McCully, 2007; Lockwood, 1996). From this point of view, by implementing this learning, students will gain many benefits that maybe they will never gain outside of campus. This study reveals that applying controversial religious issues in education improves students' critical thinking skills.

Besides, students are trained to live with people who have different views so that they know how to deal with differences of opinion with others without conflict. Especially for college students, getting to know controversial issues in society, both related to social problems in general and religious topics in particular, is a must. Because students are agents of change in society, they need sufficient provisions to deal with various kinds of problems in society (Flores, 2018). Critical thinking skills are needed in dealing with these problems, so that students understand the problems they face carefully, argumentatively, and rationally. Critical thinking skills will also guide students to be independent and not be carried away by unclear information flows (Birgili, 2015). Moreover, many studies show that the critical thinking ability of Indonesian students is low, so they find it challenging to deal with controversial issues in society (Amin et al., 2017; Fitriani et al., 2020)

The results also show no difference in learning outcomes between groups of men and women in applying these controversial religious issues learning in universities. It means that stereotypes about women are considered weak and less critical in dealing with controversial religious problems in society is indisputable. In this case, at Malang Islamic Higher Education, if there are still people who echo that stereotype, they should throw it away because it is no longer relevant to distinguish between male and female abilities in critical thinking. In fact, in many cases, female graduates at Malang Islamic Higher Education have won more women than men in some study programs and faculties.

CONCLUSION

This study reveals that the application of controversial religious issues in learning improves students' critical thinking skills in Malang Islamic University. Compared to the control group who studied with the conventional method, the average student achievement of the experimental group was 6.63 points higher than the control group. The results of the two-way ANOVA test also show that the significance value obtained

is $0.000 < 0.05$, so the application of controversial religious issues has a significant effect on improving students' critical thinking.

However, in terms of gender differences and student semester levels, there are no significant differences. It means that controversial religious issues learning can be applied to all student levels in higher education, both male and female groups, and various semesters, especially from the third to seventh semester in Malang Islamic Higher Education.

RECOMMENDATIONS

The result of this study confirm that the controversial religious issues learning model has a positive impact on improving students' critical thinking skill. This result imply that controversial religious issues learning can be implemented in higher education especially in Malang Islamic University, to wider student understanding and interpretation on controversial issues in the community. Managers of higher education may encourage lecturers to implement this kind of learning in teaching their subject, especially in religious and social issues. It is recommended that universities do not discriminate between men and women in implementing programs like this because they have the same ability in critical thinking, especially regarding social and religious issues.

Further researches can be conducted by employing a qualitative approach to explore how they think about learning using controversial religious issues. Their experiences can be investigated more deeply to get an idea of what benefits they get and how lecturers must treat them if they want to apply this method in their learning.

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