



Original Article

The Effectiveness Of Online Tutorial Discussions: Perceptions From Medical Students

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ABSTRACT

Background: Tutorial discussions are a form of implementing Problem-Based Learning (PBL) in medical education. Students' cognitive, motivational, and demotivating aspects determine the effectiveness of tutorial discussions. The COVID-19 pandemic has changed learning methods to online learning, and the implementation of online tutorial discussions can affect the effectiveness of discussions. This study aims to determine the effectiveness of online PBL tutorials at Fakultas Kedokteran dan Ilmu Kesehatan Universitas Jambi (FKIK UNJA).

Methods: This is an observational study with a cross-sectional design, 260 students became respondents. Data was collected using a modified Tutorial Group Effectiveness Instrument (TGEI).

Results: As many as 51.5% of students rated the implementation of online tutorial discussions as quite effective. Based on cognitive and motivational aspects, > 60% of students rated tutorial discussions as effective, while from demotivation aspects, 85% of students rated discussions as quite effective.

Conclusion: The implementation of online tutorial discussions at FKIK UNJA was quite effective. In online tutorial discussions, positive elaborations are still formed among students. Students agree that the success of tutorial discussions is students' responsibility, and irresponsible group members when doing group assignments can reduce the effectiveness of discussions.

INTRODUCTION

Tutorial discussion is a form of implementation of Problem-based learning (PBL).¹ In tutorial group discussions, interaction occurs between students so that

active learning can occur. Tutorial discussions aim to trigger critical thinking skills and raise students' enthusiasm to learn more deeply about the problems that trigger discussions.^{1,2}

Tutorial discussions at Fakultas Kedokteran dan Ilmu Kesehatan Universitas Jambi (FKIK UNJA) are carried out by dividing students into groups of 10-13 and facilitated by a tutor.³ The implementation of this tutorial is guided by the seven jumps method, which consists of clarifying terms, identifying problems, brainstorming, analyzing problems, formulating the Learning Objective, which was carried out at the first meeting, and continued independent study by each group member and reporting at the second meeting. After the whole group carried out the tutorial discussion, they continued the plenary implementation.^{3,4}

At the end of 2019, the world experienced the COVID-19 pandemic. The outbreak of this disease affects all sectors of life, including education.^{5,6} There have been significant changes in the teaching and learning process in education. Learning methods previously carried out offline are now online using communication tools and Online Platforms.⁷

FKIK UNJA, from November 1, 2021, to 2023, is still implementing limited offline learning, known as Hybrid Learning. In Hybrid learning, students are grouped into two classes, namely classes that are carried out offline and classes that are carried out online using Online platforms like e-learning and Zoom Meeting. Clinical Skills learning and practicum are done offline, and lectures, tutorial discussions, and plenaries are still implemented online.⁸

Three fundamental aspects affect the success of the tutorial, namely the scenario,

students, and tutors. Students have an important role and participate in determining the effectiveness of discussions from cognitive, motivational, and demotivating aspects contained in students. Based on the research of Shafira et al., tutorial discussion activities at FKIK UNJA have been quite effective.⁹ The change in implementing tutorial discussions at FKIK UNJA, which was originally offline to online, will undoubtedly affect its effectiveness.

METHOD

This study is an observational study with a cross-sectional design. The effectiveness of tutorial discussions was assessed based on student perceptions using questionnaires. The Tutorial Group Effectiveness Instrument (TGEI) has been modified to be adapted to implementing online tutorial discussions.^{10,11} The TGEI questionnaire was distributed online to students of the Class of 2020, 2021, and 2022 medical study programs in Google form..

RESULT AND DISCUSSION

Based on the study's results, 260 respondents filled out a questionnaire, including 97 students from the class of 2020, 78 students from the class of 2021, and 85 students from the class of 2022. The research data were analyzed univariately to provide an overview of the effectiveness of online PBL tutorial discussions based on cognitive, motivational, demotivated, and overall aspects.

Table 1. Effectiveness of Online Tutorial Discussions

Assessed aspects	Effective	Quite Effective	Less Effective
Cognitive	69,2%	29,6%	1,2%
Motivation	79,6%	20,4%	0%
Demotivation	6,5%	85%	8,5%
Overall	48,5%	51,5%	0%

Table 2. Distribution of answers statements 1 to 19

Statement	SDA		DA		N		A		SA	
	F	%	f	%	F	%	F	%	F	%
Cognitive Aspects										
1. During online tutorials, material explanations are delivered by individuals in their respective homes according to the regulations for conducting lectures during the pandemic	1	0,4	7	2,7	35	13,5	150	57,7	67	25,8
2. During the online tutorial, explanations of the material are given in the individual's own words without looking to the internet, books or other references.	4	1,5	44	16,9	127	48,8	73	28,1	12	4,6
3. Although the tutorial is held online, participants ask adequate questions to other participants to gain an in-depth understanding of the material discussed.	4	1,5	8	3,1	37	14,2	157	60,4	54	20,8
4. During the online tutorial, participants ask critical questions to ensure the explanation of the material provided by other participants	2	0,8	12	4,6	54	20,8	151	58,1	41	15,8
5. During online tutorials, I learned a lot from the contributions of group members	1	0,4	7	2,7	33	12,7	157	60,4	62	23,8
6. During the online tutorial, misunderstandings of the material are corrected by other group members	0	0	13	5	56	21,5	149	57,3	42	16,2
7. Group members encourage each other to be more active in online tutorials based on group members' arguments	1	0,4	10	3,8	42	16,2	149	57,3	58	22,3
Motivational Aspects										
8. I feel as a member of the group, have a responsibility towards the progress of the group	0	0	3	1,2	27	10,4	150	57,7	80	30,8
9. If I don't prepare well for online tutorial discussions, I feel uncomfortable in groups	10	3,8	12	4,6	24	9,2	111	42,7	103	39,6
10. During online tutorials I became more responsive and sensitive to	0	0	6	2,3	91	35	132	50,8	31	11,9

the needs of other members in the group during group work

11. Online tutorials stimulate my self-study activities	0	0	7	2,7	32	12,3	146	56,2	75	28,8
12. Online tutorial group discussions have positively influenced my academic commitment and efforts	0	0	5	1,9	52	20	155	59,6	48	18,5
13. My interest in the material learned increased due to discussions in online tutorial groups	0	0	6	2,3	58	22,3	145	55,8	51	19,6
14. Online tutorial group discussions stimulate my group mates to work to the best of their abilities	0	0	10	3,8	60	23,1	139	53,5	51	19,6
Demotivating Aspects										
15. During online tutorials, some group members only gives little contribution to group discussions	6	2,3	45	17,3	104	40	85	32,7	20	7,7
16. Some group members intentionally retain information they gain during self-study	18	6,9	66	25,4	90	34,6	76	29,2	10	3,8
17. I don't contribute as much as I could during online tutorial group discussion	39	15	130	50	65	25	24	9,2	2	0,8
18. During online tutorials, some group members negatively influence the contributions of other group members	41	15,8	122	46,9	61	23,5	30	11,5	6	2,3
19. During online tutorials, some group members let (hand over) other members to do group assignments	1	0,4	3	1,2	60	23,1	157	60,4	39	15

Information:

SDA = strongly disagree, DA= disagree, N= neutral
A = Agree, SA = Strongly Agree

Based on Table 1, the results of this study show that online tutorial discussions at FKIK UNJA, when viewed from all aspects, have been quite effective (51.5%). Based on the cognitive aspect, 69.2% of students rated tutorial discussions as effective; on the motivation aspect, 79.6% rated tutorial discussions as effective, while from the demotivation aspect, 85% of students rated discussions as quite effective. This study analyzed 19 modified TGEI questionnaire

statements, as seen in Table 2. Based on cognitive, motivational, and demotivating aspects, the highest number of students who agree and strongly agree are in statements number 5 (84.2%), number 8 (88.5%), and number 9 (75.4%).

DISCUSSION

The study found that implementing online tutorial discussions at FKIK UNJA was quite effective in all aspects, including

cognitive, motivational, and demotivating. Research conducted by Shafira et al. in 2019 showed that offline tutorial discussions at FKIK UNJA had run quite effectively.⁹ This indicates that changing the implementation of tutorial discussions from offline to online does not reduce their effectiveness. Students can still carry out tutorial discussions online quite effectively.

Of the seven statements to assess the effectiveness of discussions based on cognitive aspects, most students agreed and strongly agreed with the statement, " During online tutorials, I learned a lot from the contributions of group members." This shows that although tutorial learning is carried out online, positive elaboration is still formed in student tutorial discussion groups; positive interaction and elaboration between group members are required for a successful tutorial discussion.¹² This cognitive elaboration occurs when group members answer each other's questions. What is meant by the implementation of effective elaboration is that group members explain each other's learning material, provide feedback, and relate new information obtained through independent learning. In this way, students can form a new, deep understanding and insight into a problem discussed in the tutorial.^{4,13}

From the aspect of motivation, most students agree and strongly agree with the statement, "I feel as a member of the group, I have a responsibility towards the progress of the group." This shows that students realize that the success of tutorial discussions is the responsibility of students as group members. Each member of the discussion group has a role in achieving the success of the tutorial discussion, and each member should play an active role in conveying their opinions and ideas related to the issues discussed in the tutorial discussion.¹⁴ The motivational aspect is needed in the implementation of tutorial discussions because tutorials will be effective if students have the willingness or motivation

to participate in explaining what they already know during independent learning to encourage the motivation of other group members to participate in expressing their own opinions and understandings which will make the implementation of tutorial discussions more effective.¹⁵

From the demotivation aspect, students agreed and strongly agreed with the statement, "During online tutorials, some group members let (hand over) other members to do group assignments. " These results show that there are still many group members who are not responsible, by allowing other members to do group tasks. This means that many students still have not collaborated well in implementing tutorials. Collaborative learning is one of the principles of the problem-based learning method. Collaborative learning is when two or more people interact to produce a positive learning process. Collaborative learning occurs when participants have common goals, share responsibilities, are interdependent, and need to reach agreement through open interaction. Student interaction in discussions can be in the form of questions, expressing opinions, or doing group assignments together and not imposing on one or several people.¹⁶

CONCLUSION

Based on research, online tutorial discussion activities at FKIK UNJA have run quite effectively. Based on cognitive aspects and motivational aspects, online tutorial discussions still positively influence student learning, which can be seen by the positive elaborations that are still formed in discussions. Most students agree that the success of tutorial discussions is the students' responsibility as group members. The demotivation aspect that still often occurs in discussions is the presence of group members who are not responsible for doing group assignments, which can reduce the effectiveness of the discussion.

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