MADRASAH TEACHERS' PERCEPTIONS OF THE USE OF COMPUTER BASED TEST THROUGH EDMODO DURING THE COVID-19 PANDEMIC

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ABSTRAK

Tujuan penelitian ini adalah untuk mengetahui persepsi guru MI terhadap penggunaan assesmen berbasis CBT melalui edmodo sebagai alternatif teknik evaluasi hasil belajar peserta didik pada masa pandemi covid-19 dan pendampingan terhadap guru MI dalam membuat assesmen berbasis CBT melalui Edmodo. Subjek dalam penelitian ini adalah guru MI di MI Tahassus Ma'arif NU Prapagkidul, Pituruh, Purworejo yang berjumlah 35 guru. Teknik pengambilan data melalui observasi, wawancara, dan dokumentasi. Teknik analisis data menggunakan model Miles and Huberman. Hasil analisis menunjukkan bahwa persepsi guru MI terhadap CBT berbasis edmodo menunjukkan respon yang sangat baik bahwa edmodo dapat digunakan sebagai salah satu alternatif teknik evaluasi hasil belajar peserta didik khususnya pada masa pandemi covid-19. Tampilan yang menarik dan fitur yang lengkap menjadikan edmodo menjadi software yang dapat dijadikan rekomendasi dalam teknik evaluasi hasil belajar peserta didik yang inovatif khususnya pada masa pandemi covid-19.

Kata kunci: persepsi, assesmen, CBT, edmodo, covid-19.

ABSTRACT

The purpose of this study was to determine the madrasa ibtidaiyah teacher's perception of the use of CBT-based assessments through Edmodo as an alternative technique for evaluating student learning outcomes during the COVID-19 pandemic and assisting madrasa ibtidaiyah teachers in making CBT-based assessments through Edmodo. The subjects in this study were madrasa ibtidaiyah teachers at MI Tahassus Ma'arif NU Prapagkidul, Pituruh, and Purworejo, totaling 35 teachers. Data collection techniques through observation, interviews, and documentation. The data analysis technique used the Miles and Huberman model. The results of the analysis show that MI teachers' perceptions of Edmodo-based CBT show a very good response that Edmodo can be used as an alternative technique for evaluating student learning outcomes, especially during the covid-19

pandemic. An attractive appearance and complete features make Edmodo a software that can be used as a recommendation in evaluation techniques for innovative student learning outcomes, especially during the COVID-19 pandemic.

Key words*: perception, assesment, CBT, edmodo, covid-19.*

INTRODUCTION

The development of globalization has affected several ways of life in all countries. This is a common thing to find in today's era. These developments also began to emerge with the existence of the ASEAN Economic Community (AEC) in 2015. This community integrates various fields or sectors in Southeast Asia. The impact changes in several fields such as investment, capital, services, employment, and other things (Pramudyo, 2014). The first step as protection and a way to compete with these developments is to prepare human resources. HR preparation can be started in the education system.

The education system should provide a learning process that is oriented towards the development of cognitive, affective, and psychomotor skills. The learning process must also be directed at issues that are developing in the present such as economic issues, global awareness, environmental sustainability, and demography (Trilling and Fadel, 2009). The learning process will not run well if it is not balanced with an appropriate assessment. Assessments made by teachers must be able to develop students'

potential. As stated by Rustaman (2003) that a good assessment is directed at developing the potential of students. Therefore, there needs to be a big challenge to develop an assessment that is in line with the conditions of technological development. This is in line with the opinion of Griffin et al. (2014); Milligan et al. (2015) that there is a need for an assessment model that can facilitate student skills, accommodate the diversity of students' characters and backgrounds, apply authentic principles, and still produce measurable and valid results.

Unfortunately, there are still many teachers who are not familiar with digital-based assessment. As evidenced by Anggianita et al. (2020) that there are still many teachers who are ignorant or fail in technology. They more often use traditional assessment because they think that method is easier to use. The result is that learning is not interesting. Especially now that the effects of the COVID-19 pandemic are still being felt, where teachers should be familiar with distance learning using e-learning media.

Seeing this problem, this digital-based assessment should be of particular concern. The use of technology itself is necessary

because it can facilitate students to have various activities in distance learning, including in the evaluation process (Rokhuma, Febriani, Rizkiyani, 2021). The teacher becomes the central implementer who needs to see, study and master it carefully so that there are no misunderstandings about its use. Mastery of the assessment is a part that must be implemented in every level of education so that it is relevant to efforts to develop 21st-century skills (Milligan et al., 2015). This computer-based assessment is an assessment that is prepared by utilizing computer and network technology (Ma'muroh, 2014). Computer-based assessment models can be found in a variety of applications. The results of the study, found several free platforms that can be accessed by teachers or other users, such as Moodle, Edmodo, Google Classroom, Google Drive, Blog, Quiziz, Seesaw, and Classkick (Evenddy & Hamer, 2016; Kingsley & Brinkerhoff, 2011; Winderlich, 2016). From these various platforms, Edmodo is an application that is quite familiar among students and teacher.

Edmodo is one of the platforms used in online learning. Edmodo is an active, creative, and engaging platform developed by Jeff'O Hara in 2008 (Sama et al: 2021; Janfeshan, 2022). One of the features of Edmodo is the assessment feature. The existence of a computer-based assessment through Edmodo must of course be in line with the knowledge and understanding of the teacher responding to this. Therefore, it is necessary to explore further the teacher's perception in dealing with this phenomenon. According to Retnoningtyas and Suharso (2005), "perception is a response or direct discovery of an absorption process of a person knowing some things through his five senses". Meanwhile, Slameto (2015) explains that perception is the process of entering messages into the brain. Through perception, a person will continuously make contact with the surrounding environment.

Several studies have identified that the use of electronic-based assessment helps the learning process primarily on students' perceptions (Yang et al., 2015). In line with that, according to several teachers from the results of the training and debriefing, e-assessment training activities are important things that must be trained (Adiguna et al., 2015). On the same hand, this computer assessment model is proven to be able to improve students' problem-solving skills (Wulan, Isnaeni, & Solihat, 2018). From these findings, it is deemed necessary to dig deeper into the perceptions of madrasa teachers in the use of these assessments. This study focuses on the teacher's perception of using Edmodo in the assessment. Many other studies have studied the importance of Edmodo as an assessment tool, but

not many have studied perception. Perception is the process of entering the experience of objects and events in the form of messages or information into the human brain which then forms the thought process (Kurniawan, et al: 2019). In addition, the nature of likes or dislikes, happiness or unhappy about an object will form a perception (Mustakim, et al: 2021). Mustakim, et al (2021) stated that perception is closely related to motivation. So that if someone has a good perception, it will form good motivation so that it produces good actions.

This research is descriptive. The subjects in this study were MI teachers at MI Tahassus Ma'arif Nahdlatul Ulama Purworejo, totaling 35 teachers. The data collection technique used a questionnaire distributed via a google form. The perception questionnaire instrument was adapted from the perception instrument developed by Onu, et al (2021). The questionnaire was prepared using a Likert scale with 4 alternative answers, namely 4 = Strongly Agree, 3 = Agree, 2 = Disagree, and 1 = Strongly Disagree. The answer score from the respondent is calculated according to the answer score given, then the percentage is calculated. Indicators of teacher perceptions include aspects of convenience, usefulness, and acceptance. The data analysis technique uses a quantitative approach. The criteria for teacher

perceptions of the use of Edmodo as a platform for making computer-based test assessments can be seen in table 1.

Table 1. Teacher Perception Criteria

Average Score	Criteria
> 3,25 – 4,00	Strongly Agree (SA)
> 2,50 – 3,25	Agree (A)
> 1,75 – 2,50	Disagree (D)
1,00 – 1,75	Strongly Disagree (SD)

RESULT AND DISCUSSION

The teacher's perception of the use of Edmodo as a CBT platform is carried out after the teacher understands and uses Edmodo. This perception analysis was conducted on 34 MI teachers. Figure 1 is a description of the number of respondents by gender.
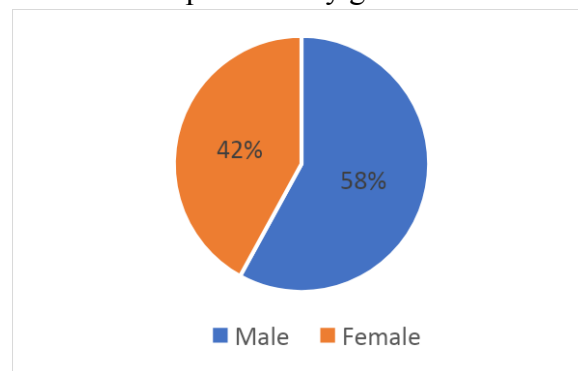

Figure 1. Description of Respondents

The results of the questionnaire analysis of MI teachers' perceptions of Edmodo-based CBT showed the tendency of respondents to fill out a questionnaire for each question item. The number of question items

filled out by respondents was 18 items consisting of positive statement items and negative statement items with aspects of convenience, usefulness, and acceptance as indicators of measuring teacher perceptions. Table 2 shows the summary results of the analysis of MI teachers' perceptions of Edmodo-based CBT.

Table 2. MI Teachers' Perception of Edmodo-based CBT

No	Statement	Respons							Average Score	Percetage	Criteria
			SA	A	D	SD	Total				
1	Edmodo-based CBT is very effective in assessing student learning outcomes during the covid-19 pandemic	F	20	14	0	0	34		3,51	87,75	Strongly Agree
		%	58,82	41,18	0	0	100				
2	Edmodo-based CBT provides high objectivity in assessing student learning outcomes	F	34	0	0	0	34		4,00	100	Strongly Agree
		%	100	0	0	0	100				
3	Edmodo-based CBT is more efficient than Paper Based Test	F	30	4	0	0	34		3,81	95,25	Strongly Agree
		%	88,23	11,77	0	0	100				
4	Edmodo-based CBT is easy to operate	F	5	27	2	0	34		3,06	76,5	Agree
		%	14,71	79,41	5,88	0	100				
5	Edmodo-based CBT assessment makes it difficult for students	F	0	3	28	3	34		2,96		Agree
		%	0	8,82	82,36	8,82	100			74	

No	Statement		Respons					Average Score	Percetage	Criteria
			SA	A	D	SD	Total			
6	Edmodo based CBT is difficult to operate	F	0	2	27	5	34	3,06	76,5	Agree
		%	0	5,88	79,41	14,71	100			
7	Edmodo-based CBT can measure three assessment domains effectively	F	24	10	0	0	34	3,67	91,75	Strongly Agree
		%	70,58	29,42	0	0	100			
8	Edmodo's complete features provide satisfying output	F	28	6	0	0	34	3,81	95,25	Strongly Agree
		%	82,35	17,65	0	0	100			
9	Edmodo-based CBT can display grades automatically after students finish taking exams	F	34	0	0	0	34	4,00	100	Strongly Agree
		%	100	0	0	0	100			
10	The results of student work on Edmodo can be downloaded	F	34	0	0	0	34	4,00	100	Strongly Agree
		%	100	0	0	0	100			
11	Edmodo-based CBT reduces human error in making judgments	F	34	0	0	0	34	4,00	100	Strongly Agree
		%	100	0	0	0	100			
12	Through Edmodo-based CBT, teachers can make tests anytime and anywhere	F	34	0	0	0	34	4,00	100	Strongly Agree
		%	100	0	0	0	100			

No	Statement	Respons						Average Score	Percetage	Criteria
			SA	A	D	SD	Total			
13	Through Edmodo-based CBT, it makes it easy for teachers to check answers, especially for large numbers of students	F	34	0	0	0	34	4,00	100	Strongly Agree
		%	100	0	0	0	100			
14	I am very happy to use Edmodo-based CBT to conduct student assessments, especially during the covid-19 pandemic.	F	29	5	0	0	34	3,84	96	Strongly Agree
		%	85,29	14,71	0	0	100			
15	Edmodo-based CBT can be adopted as a post-covid-19 assessment tool	F	15	19	0	0	34	3,42	85,5	Strongly Agree
		%	44,12	55,88	0	0	100			
16	Students are easier to work on exam questions through Edmodo-based CBT	F	10	22	2	0	34	3,21	80,25	Agree
		%	29,41	64,71	5,88	0	100			
17	Edmodo-based CBT is one of the best and most comprehensive platforms for	F	17	15	2	0	34	3,42	85,50	Strongly Agree
		%	50,00	44,12	5,88	0	100			

No	Statement			Respons						
			SA	A	D	SD	Total	Average Score	Percetage	Criteria
	measuring student assessment									
18	After the covid-19 pandemic ends, CBT is not necessary	F	0	0	19	15	34	3,54	88,50	Strongly Agree
		%	0	0	55,88	44,12	100			
	Total Average							3,62	90,70	Strongly Agree

Table 2 shows that MI teachers' perceptions of Edmodo-based CBT as an assessment evaluation tool indicate the category strongly agrees with an average score of 3.62 and a percentage of 90.70%. These results prove that MI teachers can very well accept the Edmodo platform as a student assessment evaluation tool, especially during the covid-19 pandemic. Teachers consider that Edmodo-based CBT provides enormous benefits and is also easy to operate (EKMEKÇİ, 2016; Fauzi, 2017; Laili & Nasir, 2018; Halil, 2020; Sama, et al: 2021; Janfeshan, 2022).
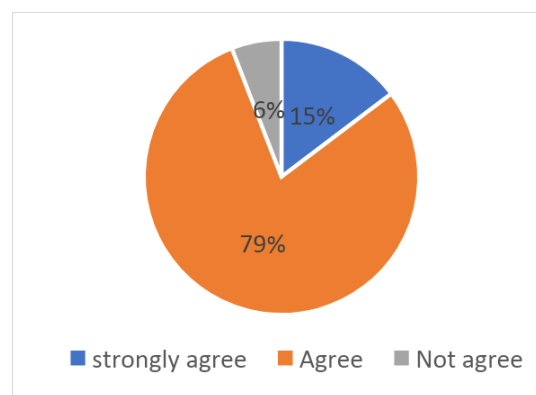

Figure 2. Respondents' responses to the ease of operating Edmodo

Figure 2 shows that 79% of respondents agree that Edmodo-based CBT is easy to operate. Meanwhile, 6% disagree (2 respondents). Respondents who stated that it was not easy to operate Edmodo due to speed constraints in understanding the steps for using Edmodo.

In terms of the usability aspect, respondents stated that some of the benefits of the Edmodo platform as an evaluation tool are that Edmodo has complete features

such as a menu that can adjust the type and form of questions to be made (multiple choice, essay, quizzes and so on), attractive appearance, not monotonous, there is a recording of student work results, can display grades after students finish working on exams, students can download their work, the form of questions can be randomized, there are notifications as notifications for teachers and students if there is latest information, can increase teacher objectivity in assessing students, and others. Sumardi & Muamaroh (2020) mention that Edmodo is a good medium for teachers to conduct computer-based evaluations. Continued, through Edmodo the assessment results become more accurate because fraud is very common.
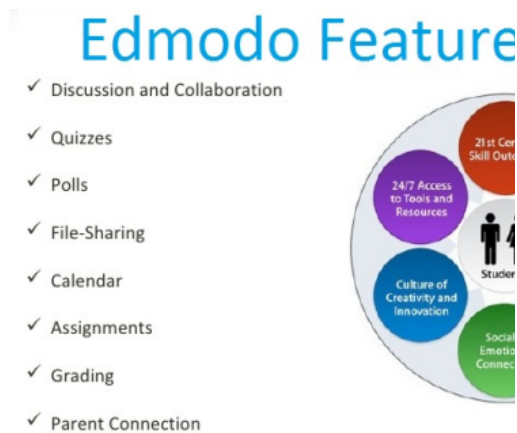

Figure 3. Features in edmodo
(Source: Janfeshan, 2022)

Halil (2020) stated that Edmodo has an attractive menu interface and has complete but simple features. In addition, the use of Edmodo does not use a lot of internet data so it becomes an efficient platform (Sujatmiko, 2017; Halil, 2020). Another advantage of Edmodo is the making of assessments that can be made anytime and anywhere so that it is flexible without being limited by time and space (Sama et al: 2021). Figure 4 is the teacher's perception of using Edmodo as an online evaluation tool during the COVID-19 pandemic.
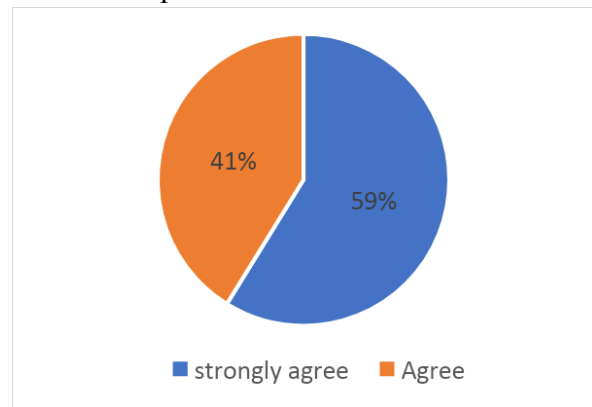

Figure 4. Respondents' responses to the effectiveness of Edmodo as an evaluation tool during the covid-19 pandemic

Based on Figure 4, respondents stated that Edmodo-based CBT during the pandemic was very effectively used as a tool for evaluating student learning outcomes, namely 59% strongly agreed, while 41% agreed. This proves that the Edmodo platform can be used as a platform to evaluate student learning outcomes during the COVID-19 pandemic. These results are relevant to the results of Sobremisana & Aragon's (2016)

study that the use of Edmodo-based CBT has proven to be more effective than PBT evaluation tools. The results show that the use of Edmodo-based CBT is also able to improve student performance. EKMEKÇİ (2016) also stated that Edmodo is an effective tool to use as an evaluation tool and can reduce students' anxiety levels when working on questions because Edmodo's appearance is funny, practical, and can motivate students. Another finding states that students prefer to work on exam questions using Edmodo rather than using paper.

CONCLUSION

The results of the analysis show that MI teachers' perceptions of Edmodo-based CBT show a very good response that Edmodo can be used as an alternative technique for evaluating student learning outcomes, especially during the covid-19 pandemic. An attractive appearance and complete features make Edmodo a software that can be used as a recommendation in evaluation techniques for innovative student learning outcomes, especially during the COVID-19 pandemic. The findings also show that Edmodo can be used as an evaluation platform that can be used post-covid-19.

Future research is expected to be able to measure students' perceptions of the use of Edmodo-based CBT in order to determine the effectiveness of this platform as a good platform and

suitable for use as an online-based evaluation tool.

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