

Analysis of the Success of Online Learning During A Pandemic : A Survey Study in Madrasah Tsanawiyah (MTs) Pekanbaru City

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INFO ARTIKEL

Riwayat Artikel:

Diterima: 14-10-2023
Disetujui: 27-04-2024
Diterbitkan: 30-04-2024

Kata kunci:

Pembelajaran Metode Daring
Validitas
Reliabilitas
Studi Survey
Kesehatan Mental
Karakter
Sikap

ABSTRAK

Abstract: "This article is motivated by the obstacles faced during online learning, starting from technical problems to the learning process, such as networking, quite expensive quota fees, operationalizing the Google Meet, Google Calassroom and E-learning applications with the correct procedures," until sometimes inappropriate use of camera and microphone. Understanding the obstacles that occur in the field regarding online learning activities, it is necessary to review the success of online learning. Therefore, this article aims to find out the extent of the success rate of online learning that occurs at Madrasah Tsanawiyah Pekanbaru City. The research method used in this article is review research (Survey) with a quantitative approach that examines the success of online learning during the Covid-19 pandemic in the city of Pekanbaru. This research was carried out at MTs in Pekanbaru City, which consists of 4 madrasahs, namely 2 MTs State and 2 Private MTs. The data collection technique used was a questionnaire distributed to 297 respondents who were then analyzed descriptively quantitatively using IBM SPSS Statistics 23. The results of the research showed that despite facing obstacles such as difficulty understanding teacher explanations and internet network problems, online learning at MTs Pekanbaru City was considered successful. and made a significant contribution to the learning process during the COVID-19 pandemic, with a positive impact on students' mental health, character and attitudes.

Abstrak: Artikel ini dilatarbelakangi oleh kendala yang dihadapi pada saat pembelajaran daring tersebut, mulai dari masalah teknis hingga pada saat proses pembelajaran, seperti jaringan, biaya kuota yang cukup mahal, mengoperasikan aplikasi google meet, google calassroom dan E-learning dengan prosedur yang benar," sampai penggunaan kamera dan mikrofon yang kadang tidak tepat. Memahami kendala-kendala yang terjadi dilapangan mengenai kegiatan pembelajaran daring, maka perlu ditinjau keberhasilan dari pembelajaran daring. Oleh karena itu, artikel ini bertujuan untuk mengetahui sejauh mana tingkat keberhasilan pembelajaran daring yang terjadi di Madrasah Tsanawiyah Kota Pekanbaru. Metode penelitian yang digunakan dalam artikel ini adalah penelitian tinjauan (Survey) dengan pendekatan kuantitatif yang mengkaji tentang keberhasilan pembelajaran daring saat pandemi covid 19 di kota Pekanbaru. Penelitian ini dilaksanakan di MTs yang ada di Kota Pekanbaru, yang terdiri dari 4 madrasah yaitu 2 MTs Negeri dan 2 MTs Swasta. Teknik pengumpulan data yang digunakan adalah angket yang disebarakan kepada 297 repsonden yang kemudian dianalisis secara deskriptif kuantitatif menggunakan bantuan IBM SPSS Statistics 23. Hasil penelitian menunjukkan bahwa meskipun menghadapi kendala seperti kesulitan memahami penjelasan guru dan masalah jaringan internet, pembelajaran daring di MTs Kota Pekanbaru dinilai berhasil dan memberikan kontribusi signifikan terhadap proses pembelajaran selama pandemi COVID-19, dengan dampak positif terhadap kesehatan mental, karakter, dan sikap siswa.

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INTRODUCTION

It has been two years since the COVID-19 pandemic persisted and is now increasing with the new variant. This affects various segments of life around the world, including educational institutions by following the applicable rules, that is avoiding crowds and crowded places or gathering places. Therefore, through the Ministry of Education and Culture, according to the regulations of the Minister of Education, face-to-face learning is eliminated and replaced with online learning (Circular Letter of the Ministry of Education and Culture of Higher Education No. 1 of 2020) (Firman & Rahman, 2020). The impact of covid can be seen from two aspects, namely the short-term aspect and the long-term aspect. The short-term aspect is that it will affect behavior which eventually goes to the psychology of not only students but also parents both in the form of work and increased responsibility by having to accompany their children in the online learning process.

Online learning is a learning activity that is not limited by space and time and is carried out using the help of technology (Bilfaqih & Qomarudin, 2015). Unfortunately, this process occurs without an institution that evaluates how the online learning process is running. Furthermore, there is also a lack of understanding of teachers, the limited facilities, and costs that are quite expensive for parents to spend even when on one hand, parents' income is eroded and depleted due to the crisis caused by the pandemic. In addition, the implementation of assessments for students on online learning with a lot of trial and error, and with a system that has no certainty, many assessments are not carried out due to the low understanding and difficulties of teachers in making the right assessment instruments.

The long-term impact, of course, if not addressed wisely, there will be caste which further widens the gap of education activities in villages and cities related to the ability of facilities and the empowerment of parents and schools in presenting quality education and equipped with adequate technology. (Shah, 2020) (Firman & Rahman, 2020) revealed that the regulations that have been set will continue, especially in the current situation, not only that the crisis is not receding but there is even a new variant of COVID-19 that is quite troubling for parents, teachers, and the government to reapply a face-to-face learning system.

The process of implementing online learning requires a lot of funds and various supporting facilities, namely android phones along with their data packages. Furthermore, a good internet connection and electricity are also needed as determining factors whether or not the technology can be implemented properly and appropriately (Gikas & Grant, 2013). The obstacles faced during online learning are ranging from technical problems to the learning process, such as networks, expensive quotas, operating the google meet application, google classroom, and E-learning with the right procedures, to the use of cameras and microphones that are sometimes not working properly. It can be annoying when the teacher is explaining and the students have their microphones on as there will be outside noises. It can also make the teacher unaware that the students are not paying attention to the lesson if the camera and microphone are turned off. Interest is also an obstacle in the online learning process due to improper media, methods, and uses or weaknesses in the mastery of teachers, and students in operating existing devices and software to support the online learning process (Octafia Ika Handarini, 2020);

In understanding the obstacles that occur in the field regarding online learning activities, a review of the success of online learning is necessary. (Pujiasih, 2020) revealed that online learning needs to be controlled for its implementation because students are the future generation of Indonesia. In line with this, (Asmuni, 2020) also stated that learning activities require more concern from the government, principals, teachers, and parents to create a generation that is competent in all respects even though Covid-19 is spreading in Indonesia.

Based on the description above, online learning methods need to be analyzed for its success and controlled for its implementation. The success of online learning will have an impact on students as the next generation of the Indonesian nation who will fight for the country in the future. Therefore,

it urges the researchers to find out the extent of the success rate of online learning that occurred in MTs in Pekanbaru.

METHOD

This is survey research with a quantitative approach that examines the success of online learning during the Covid-19 pandemic in Pekanbaru City (Creswell, J., 2012). This research was carried out in MTs in Pekanbaru City, which consisted of 6 madrasahs; 3 Public MTs and 3 Private MTs. The sample was obtained from the Purposive Sampling technique (Suharsimi, 2010). Data collection was done using the SLavin and Krijie and Morgan formulas in determining the data samples. Questionnaires were used as the instruments. A questionnaire is some written statements that have been prepared and must be filled in by the respondent (Muhidin, 2017). Questionnaires were given to students in the form of a google form. Before the questionnaire was distributed to students, the questionnaire was tested for the level of validity and reliability, so that the data obtained will be accurate and consistent in measuring the desired variables (van Laar et al., 2018). According to (Hair et al., 2006) the instrument is declared reliable if the Cronbach alpha value ≥ 0.70 . Furthermore, according to (Daud et al., 2018) if the Cronbach alpha value < 0.60 . The data analysis techniques used were: 1) the level of validity of the instrument was analyzed using the validity of Lawshe content, namely CVR (Content Validity Ratio). The CVR was proposed by Lawshe in 1975 using 3 rating scales (Divayana et al., 2020) and the reliability level of the instrument was analyzed using SPSS Version 23 for windows. The reliability index of the instrument is obtained from the use of Cronbach Alpha. The criteria for determining the level of reliability are presented in table 2 (Berlian et al., 2021); and 2) analysis of online learning success was done with SPSS 23 both descriptively and inferentially to see the extent of the success rate of online learning that has been implemented so far. Table 3 presents an interpretation of the success of online learning carried out in MTs in Pekanbaru city (Riduwan, 2016).

RESULTS AND DISCUSSION

Development of Online Learning Success Instruments

In this study, researchers used CVR results from 31 assessors who were considered experts to test the validity of the contents of the scale used. Items with a minimum score of 0.33 will be declared as qualified. From the CVR testing, it was found that all items passed. The reliability testing analysis in this study was carried out on 31 respondents using the Statistical Package for Social Science (SPSS) version 23 program, said to be reliable if the reliability value was 0.600. From the results of the analysis, it can be seen that the reliability value obtained is $0.969 > 0.600$, it is declared reliable with high criteria. For more details, the results of the validity test calculation work can be seen in Table 1 below.

Table 1. Calculation Results of the Validity Test

Item	Ne	CVR	Criteria
Validation Sheet 1	29	0,87	Valid
Validation Sheet 2	29	0,87	Valid
Validation Sheet 3	27	0,74	Valid
Validation Sheet 4	25	0,61	Valid
Validation Sheet 5	26	0,68	Valid
Validation Sheet 6	24	0,55	Valid

Based on the results of the Table 1 analysis, researchers used CVR results from 31 assessors who were considered experts to test the validity of the contents of the scale used. Items with a minimum score of 0.33 will be declared as qualified. From the results of CVR testing, all items passed and can be used to measure the success rate of online learning. The question item in an instrument is said to be valid if the value of the count Pearson coefficient (r-count) is greater than the value of the table Pearson coefficient (r-table) (Ermayenti & Heryanto, 2019); (R. Kurniawan et al., 2018). In addition, the

correlation between items with some scores exceeding 0.25 is considered one high value (Nunnally, 1978). Furthermore, 34 valid questions are calculated for reliability. The results of the calculation of the reliability of the question items obtained a value of 0.969 with very high criteria. This suggests that the reliability value of $>$ of 0.60 for each of the constructs studied. This result is reinforced by the opinion of Basuki and Haryanto that instruments that have a high or reliable correlation are in the range of $0.6 < X < 1$ (Meng et al., 2020); (Selby et al., 1984). Thus, all eight research constructs have met the requirements of reliability so that they can be used for further research needs.

Table 1 provides information that non-test instruments have met the empirical trials, i.e., valid and reliable. This result is reinforced by the opinion that an assessment instrument that can be used is an instrument that has met valid criteria; (Almanasreh et al., 2019); (Ulfa Nurfillaili, M. Yusuf T., 2016); (Childa Kumala Azzahri, Dwi Widjanarko, 2017), the instrument must also meet high valid criteria; (Yusuf Efendi, 2019); (Gabriela V. Wales, Silvy L. Mandey, 2017). The results of this study are also strengthened by the findings of Inteni, et al who said that one of the conditions for the instrument that has been suitable for use in research is valid (Aji & Winarno, 2016); (Wendy K. Adamsa, 2010). In addition to being valid, the instrument must also meet reliable criteria, when it has an alpha Cronbach value greater than 0.6 (Khumaedi, 2012); when the Cronbach Alpha reliability coefficient is in the range of 0.70- 0.90 (Yusup, 2018). The results of this study are also reinforced by the opinion of Tang Keow, et al that the scales and criteria used to measure test instruments must meet very reliable criteria (Ngang et al., 2014).

Thus, this research instrument that measures the evaluation of the success rate of online learning that has been tested is considered worthy of use and is trusted for use in research that measures the evaluation of the success rate of online learning for users. This is reinforced by research that states that the instruments used are derived from the selection of valid and reliable tools (Souza et al., 2017); (Suratno et al., 2016); (Pinilih, Fitria Wahyu, Rini Budiharti, 2013). With the assessment instrument, the evaluation of the success rate of online learning for users can prevent speculation from users in conducting assessments, especially in determining the final score after researching the achievement of online learning success rate evaluation for users.

Success Rate of Online Learning Implementation

The results showed that the learning methods that were often used during the pandemic were online learning by as many as 186 people (63.5%), a combination of online and offline learning by as many as 76 people (25.9%), carried out at home (96.2%) with good internet conditions (72.7%), with relatively good community's economy (48.5%), Online learning is carried out by giving assignments in the form of questions (73.7%), providing material interactively online (46.8%), providing material interactively through online media and assignments in the form of worksheet assignments (84.6%) and assignments from teachers (43%), social media that are often used are WhatsApp groups / Google Hangout / Facebook / Messenger (76.1%), and the main barrier for teachers during online learning was the difficulty for students in understanding teacher explanations (60.1%) and the internet network (48.8%).

The results of this study are strengthened by (Pratama & Mulyati, 2020a) the fact that online and offline learning systems are expecting teachers to be creative in educating students so that learning success can be achieved properly or effectively. The term online and offline is introduced in the era of information technology at this time, online stands for online learning, or a substitute for the term online learning that we often use in internet technology (Ivanova et al., 2020; Kristiawan & Muhaimin, 2019). Learning Offline is learning that is carried out outside of face-to-face by teachers and students, but is carried out offline which means that the teacher provides material in the form of hardcopy assignments to students and is carried out outside the school (Pratama & Mulyati, 2020b).

A network or internet connection is one of the supporting factors for online learning. This is reinforced by Wulandari (2016) who stated that there are several factors supporting teachers in the online learning process, namely the availability of smartphones, quotas, and a stable internet network. These supporting factors are used by teachers as much as possible in monitoring the development of

students carrying out online learning. The results of the study also showed that the social media that is often used is WhatsApp group / Google Hangout / Facebook / Messenger. This is reinforced by Trisnani (2018) that the results of the study showed that most of the social media accounts that are often accessed are Facebook, Instagram, Google+, LinkedIn, Twitter, Path, WhatsApp, BBM, and YouTube.

Facilities that support teachers to carry out online learning for teachers were 84.6% of supporting facilities were well met, including electricity, the internet, textbooks, student worksheets, and interactive learning media facilities (48.7%). These facilities include WhatsApp groups, Google Classroom, and Google Meet, and the majority of students have aided in online learning (58.4%). These facilities include smartphones, headsets, and laptops. The results of the study are strengthened by Andriani & Madio (2013) that the system approach consists of a specific goal to advance the teaching and learning process, where the specific goal is to provide facilities to students. Among the facilities needed in online learning include electricity, internet, textbooks, student worksheets, WhatsApp groups, Google Classroom and Google Meet, smartphones, headsets, and laptops. Some online learning media that can be used as a liaison between teachers and learners are the LMS Portal, Google Classroom Services, Live streaming media such as Zoom or Google Hangout, and chat group applications such as WhatsApp or Telegram (Naserly, 2020). Every learning medium has its advantages and disadvantages. For this reason, it is necessary to carry out a continuous evaluation so that online learning patterns can take place effectively.

In times like this during the Covid-19 pandemic, online learning is more effective by using google meet for online learning because this application does not consume too much data packages, especially now that all students get internet packages from the Ministry of Education and Culture during distance learning (Utari et al., 2020). The Google Classroom application is also the best application that can be used for learning because the learning is presented as it is carried out in offline classes, it's just that in Google Classroom online classroom learning is not conducted face to face in person (Salamah et al., 2020). The use of WhatsApp groups as a learning medium is considered sufficient to help tutors and students in the learning process as a development of learning media (Iskandar, 2020). By using the Google Meet application, Google Classroom, and WhatsApp group, students can join online classes wherever they are by using a google account and Android smartphones.

Aspects of Success Achievement of Online Learning

The achievement of online learning success is seen from 6 (six) indicators, namely self-organization abilities in general, self-organization during the covid-19 semester, environment, attitudes towards online learning, communication, and overall learning achievement. More details are presented in table 2.

Table 2. Recapitulation of The Results of Constructive Analysis of Online Learning Success Rate

No	Constructs	Percentage	Category
1	Self-organization abilities in general	75,36	Good
2	Self-organization during the COVID-19 semester	64,66	Good
3	Environment	68,63	Good
4	Attitudes toward online learning	68,59	Good
5	Communication	67,45	Good
6	Overall learning achievement	64,94	Good
Average		68,27	Good

Based on Table 2, the average level of implementation of online learning in MTs in Pekanbaru City was 68.27%. Table 4.8 provides information that the construct of Self-organization abilities in general contributes highly from other constructs in supporting the success of online learning. Referring to Table 3 on the interpretation of online learning success, it was concluded that the level of

implementation of online learning is classified as "Good" because the results of the analysis were 68.27% which was in the range of 61% - 80%.

In the indicator of self-organization abilities in general, students have discipline in managing learning time, initiative and independence. With the independence of learning, students will easily follow the learning process, especially in the online learning process (Hidayat et al., 2020). With the creation of an independent learning process, students tend to learn better (Sadikin & Hakim, 2019), be able to evaluate and organize learning effectively (Dini, 2021), manage learning time efficiently (Nainggolan, 2020), and easy to follow the lesson so that learning objectives are achieved.

Learning independence has a strong influence on student learning outcomes where student learning outcomes are what determine the quality of learning. A student who has strong independence will not give up easily (Ginting, 2019). An attitude of independence can be shown by the ability to solve problems faced with behavior. The personality of a student who has traits of independence positively influences their learning achievements (Siregar, 2019). This can happen because the student begins with a belief in their abilities consciously, regularly and in discipline trying earnestly to pursue learning achievements, they do not feel inferior and are ready to overcome the problems that arise. If students already have learning independence, they will no longer commit cheating in the evaluation process, so this also affects the quality of online learning.

In the indicator of self-organization during the COVID-19 semester, students are more systematic and organized during COVID-19 pandemic than usual. According to Dohmen, distance education is a form of systematically organized independent learning that is tried by a group of teaching staff who have different responsibilities (Y. D. Kurniawan & Hartono, 2022). The responsibilities of the teacher include counseling activities, module presentations, education, supervision, and monitoring of student success (Tobing, 2019). On the contrary, Peters said that distance learning is a way of conveying knowledge, expertise, and behavior through the use of media that practices an industrialization system in education (Saykili, 2018). Thus, distance learning is a learning that is carried out not limited by space and time, but keeps in mind that distance learning must pay attention to all aspects, from aspects regarding the readiness of students as well as the readiness of a teacher in designing distance learning. Support systems for learning must support the achievement of learning objectives.

In the indicator of environment, students can participate in learning activities through video communication (such as Zoom rooms, Google Meet, and others). This is reinforced by the results of Subagiyo - Haryanto (2022) that there is an influence of online learning using the Zoom application assisted by Google Classroom on student learning outcomes. The application of online learning using *zoom* assisted by Google Classroom can improve student learning outcomes (Shaharuddin et al., 2021). The increase in student learning outcomes is caused by several things, including 1) The training of students' ability to construct their knowledge in understanding physics deeply during learning (Linda Rahman, Depi Fitriani, 2019) and 2) the enthusiasm and interest of students during the learning process (Aholongan et al., 2021). This is in line with research conducted by Sabran - Sabara (2019) stating that through the zoom application assisted by Google Classroom, learning objectives will be easier to realize and full of meaning, because, with the zoom application assisted by Google Classroom, it will make it easier for teachers to manage and convey information accurately and accurately to students.

In the indicator of attitudes toward online learning, the classroom learning experience is better than the online learning experience and students hope to have more opportunities to learn online. This is strengthened by the results of Ismiati & Andayani (2021) research showing that students' preference for face-to-face learning is more than online learning, which is as much as 75% while the comparison of experiences felt by students is as much as > 50% who choose face-to-face learning. Face-to-face learning is common and tends to be easier than online learning (Peled et al, 2019) because all materials can be taught manually, namely through projectors, markers, and whiteboards. Teachers can directly explain the material in detail and if there are questions, students can immediately ask questions which can then be directly explained through a whiteboard.

Some students say that it is more fun to learn face-to-face because students can meet with the lecturer if there is a material that is not understood and the lecturer can explain the material through a whiteboard so that it can be directly understood by students (Gultom & Tambunan, 2021; Situmorang et al., 2022). While some other students choose online learning because students become more flexible about learning time and feel that the teaching is not too serious so that students can be more relaxed in learning (Rondonuwu et al., 2021; Yaniaja et al., 2020). In carrying out these two types of learning, there are often differences of opinion between students about which learning is better and more flexible.

In the indicator of communication, students can communicate with peers well during the COVID-19 pandemic and can have online discussions. Distance learning was chosen as something of a supportive concept to be used during a pandemic, especially during Covid-19. In this case, of course, technology has a very important role to facilitate interaction, communication, and presentation so that the learning process runs well (Vlachopoulos & Makri, 2019). Therefore, it is very important to make the most of technology. The role of learning media is needed to facilitate communication between educators and learners (Masdul, 2018). However, if it is not used properly, it will only cause problems, failures occur, and learning does not go well and will only be an evaluation material of distance learning (Hodges et al., 2020). The use of virtual learning in the distance learning process is believed to provide more ease of learning, being able to communicate directly so that the material is easy to accept.

In the indicator of overall learning achievement, students can learn without the presence of a teacher face-to-face, and learning during the COVID-19 pandemic has had a positive impact on the success of their studies. This is reinforced by the results of Wiragunawan (2022) research that one of the obstacles in online learning is the atmosphere of learning from home without the presence of teachers and peers directly makes students reluctant to ask questions and discuss subject matter that is not understood. However, learning during the COVID-19 pandemic has had a positive impact on the success of student's studies.

The implementation of Online Learning will certainly have an impact on student learning outcomes, and this is inseparable from student learning independence. Online Learning requires high learning independence from students to be able to understand the material being taught because learning independence has a positive effect on learning outcomes (Handayani & Merdekawati, 2019). Darr & Fisher (in Supianti, 2016) in their research found that learning independence is positively correlated with the achievement of learner learning outcomes. What is meant by learning independence is a learning activity that is independent and does not depend on others (Abidah et al., 2020). This opinion is also supported by Kusuma (2020), which states that learning independence is a learning activity that is driven by self-will and self-choice and accompanied by a sense of responsibility from the learner. Thus, it can be understood that learning independence is a learning process that occurs due to the influence of one's thoughts, feelings, strategies, and behaviors oriented toward the achievement of goals.

CONCLUSION

The results of the development research provide the following conclusions: 1) all question items can be used to measure the success rate of online learning and the calculation of the reliability of the question items obtained a value of 0.969 with very high criteria; 2) that the learning methods that are often used during the pandemic are online learning as many as 186 people (63.5%) and the combination of online and offline learning as many as 76 people (25.9%) carried out at home (96.2%) with good internet conditions (72.7%), with a relatively good community economy (48.5%), online learning is carried out by giving assignments in the form of questions (73.7%) and providing material interactively online (46.8%), providing interactive material through online media and assignments in the form of worksheet assignments (84.6%) and assignments from teachers (43%), social media that are often used are WhatsApp groups / Google Hangout / Facebook / Messenger (76.1%), and the main obstacle for teachers during online learning is difficulty understanding teacher explanations

(60.1%) and internet networks (48.8%); 3) the average level of online learning implementation in MTs in Pekanbaru City is 68.27% with the "Good" category, due to the results of the analysis of 68.27% with a range of 61% - 80%. These achievements are seen from 6 (six) indicators, namely self-organization abilities in general, self-organization during the covid-19 semester, environment, attitudes towards online learning, communication, and overall learning achievement; and 4) online learning affects students' mental health, character, and attitudes by 75.99% with the category "Good".

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