The Impact of Online Learning Implementation on Student’s Learning Outcomes in Al Quran Memorization

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ABSTRACT

The spread of the coronavirus changes all human activities, including in the education system. The learning process was conducted at home through online system based on the distance learning policy, in accordance with a circular issued by the Minister of Education and Culture on 24 March 2020. Unfortunately, the online system has challenges in the learning process because its impacts the allocation time of Al Quran memorization at SD Muhammadiyah East Jakarta. This study focused to find the impact of online learning on students’ learning outcomes in Al Quran memorization and the significant variable that impact learning outcomes in Al Quran memorization. This study used a quantitative. The data collection technique is by survey. The subject of the studies includes students in sixth grade at SD Muhammadiyah East Jakarta. The analysis technique used a multiple regression analysis with an error rate of 5%. The result of this study stated there is a significant impact of online learning implementation on the student’s learning outcomes of Al Quran memorization which is inferred from significance was 0.00 < 0.05 then H1 was accepted. It means there is a significant impact communication, resources, disposition and bureaucratic structure on learning outcomes of Al Quran memorization. Moreover, the communication was an essential variable that would impact online learning.

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Introduction

The Covid-19 pandemic requires the transition of all human activity, including education, to digital media. To reduce the number of people affected by Covid-19, the Minister of Education and Culture issued a Circular on March 24, 2020 to regulate study from home through distance learning (Sutrisno, 2020). Distance learning is delivering education via the internet through online learning. With the distance learning model still unfamiliar to elementary school students, students must adapt to the new learning process changes. Of course, this is not easy for elementary school students who are used to interacting and playing with their friends and teachers at school. Students need support from parents to accompany them during online learning so that children follow the learning process well (Khurriyati et al., 2021).

Online learning is the form of study that is an alternative in helping the student and teacher activities in the midst of the Covid-19 pandemic. Online learning uses technology to send, support, and improve teaching, learning and assessment (Bristol, 2020). Furthermore, Rosenberg (2001) defines online learning as the use of technology internet to distribute learning materials so that students can access from anywhere. According to Kurtarto (2017) online learning is carried out with the help of the internet in order to be able to meet lecturers and students virtually. In addition, from a student’s perspective, there are seven success factors for online learning, namely basic online model, instructional support, instructional presence, cognitive presence, online social comfort, online interaction mode, and social presence - considered to be is significant and reliable (Van Wart et al., 2020).

Online learning needs media to be implemented. In its implementation, online learning requires the support of mobile devices such as smartphones, tablets and laptops, which allow information to be accessed anywhere and anytime (Gikas & Grant, 2013). In addition, the mobile technology used makes a significant contribution to education, including the achievement of long-distance learning goals (Korucu & Alkan, 2011). Google classroom as an online learning media could make study more efficient and effective because it was inexpensive and straightforward to use (Kumar et al., 2019; Murtikusuma et al., 2019). Moreover, WhatsApp Group was the famous platform for online learning at an elementary school in rural area on East Java (Setiawan & Iasha, 2020). In line with that matter, Wardhani (2020) found that online learning for elementary schools in Green Village Regency, Ngijo, Gunung Pati, Semarang is ineffective.

The success of online learning depends heavily on several factors. Pangondian et al. (2019) said that technology, teacher and student characteristic support factors in online learning. In addition, Putria et al., (2020) found that there were several supporting factors in the online learning process, smartphone availability, quotas and a stable internet network as not all students have smartphones. Moreover, mobile learning allows the teacher to deal with better student performance. Also, the students are highly motivated to memorize and self-assess what they read because they always feel under the teacher’s supervision (D Purbohadi et al., 2019).

In online learning, teachers should use technology such as computers. This situation makes teachers unable to take advantage of the technology needed to learn because of the online learning policy. Almost all teacher primary schools in Indonesia must understand how to utilize technology. For example, in SD Muhammadiyah 24 and SD Muhammadiyah 08 Plus East Jakarta, teachers must utilize and use technology for online learning during this COVID-19 pandemic. SD Muhammadiyah conducts the learning process through zoom and WhatsApp media. As a result of online learning, SD Muhammadiyah has implemented changes in the allocation of study time, especially in the Al Quran memorization. SD Muhammadiyah 24 and SD Muhammadiyah 08 Plus have their own rules for the allocation of Al Quran memorization learning time. SD Muhammadiyah 24 conducts two meetings per week with duration of 80 minutes each session but has changed 30 minutes per meetings (Idris, 2021). Furthermore, SD Muhammadiyah 08 Plus has normally 8 hours a week but have changed to 4 hours per week since the Covid-19 pandemic (Diana, 2021).

The education of the Al Quran memorization integrated into the formal education creates a brand new hope to graduate students who have good characters with the inspiration of spiritual education and a mixture of scientific...
competency at the formal grade school level. Formal education within the contemporary context is required to produce scientific provisions to students and other skills needed to make the most global competition for future generations. Furthermore, there is the Strategic Education Plan 2015-2019 strategic issue number 7 regarding the Improvement of Religious Education offered by the Directorate of Early Education and Islamic Boarding Schools through the launching program of 10,000 students in 2015-2020 period with the target of student’s age on 7-18 years (Kementerian Agama, 2019).

Students who memorize the Al Quran have the opportunity to enter college through a special path. This is applied by IPB, UNDIP, Malang University, and Hasanuddin University Makassar (Tirto, 2018). The reason that universities are recruiting Al Quran memorizers is to prepare the best generation of 2025. In line with that matter, the Ministry of Religion has a strategic target to increase the participation of students to receive Al Quran memorization scholarships during 2020-2024 (Kementerian Agama RI, 2020).

There are some success factors in implementing online learning in Al Quran memorization. According to Wasyik & Hamid (2020), the implementation of online learning on Al Quran memorization through WhatsApp video calls runs smoothly because of the rules, teachers’ and parents’ supervision and the applications used are easily accessible. Nevertheless, there has been inhibiting factor such as internet network disruption. Meanwhile, the implementation on Al Quran memorization at SDIT Madani Madiun, through WhatsApp has obstacles such as internet network and quota internet has limited (Ikhwan et al., 2021). Moreover, online learning of Al Quran memorization was less effective because of the lack of student motivation and the learning allocation was reduced to 2 meetings via WhatsApp video calls from 4-5 meetings when face-to-face learning (Hidayati et al., 2020).

Not many studies focused on COVID-19 and its relation to Al Quran memorization. The Al Quran memorization program in education formal rarely includes the effects of disease on providing effective education for students. This condition forces educational institutions, including SD Muhammadiyah at East Jakarta, to make breakthroughs related to online learning methods, so that learning continues even though it is done virtually with all of the consequences of limitations. The Al Quran memorization at SD Muhammadiyah 24 and SD Muhammadiyah 08 Plus is a good program because their students always win in competition that held by other institution, and the number of Quran memorization graduates is increasing every year (Idris, 2021) (Diana, 2021). They have an A accreditation of study programs (Kemdikbud, 2021). SD Muhammadiyah requires their graduates in 6th grade to memorize at least 1 juz (chapters of the Al Quran). In accordance with the problems described above, the objectives to be achieved by the researchers in this study is to find the impact of online learning on students’ learning outcomes in Al Quran memorization and the significant variables on student’s learning outcomes. This paper has a hypothesis to answer purpose on study. Herewith the hypothesis formulation:

H0: There is no significant impact communication, resources, disposition and bureaucratic structure on learning outcomes of Al Quran memorization.

H1: There is a significant impact communication, resources, disposition and bureaucratic structure on learning outcomes of Al Quran memorization.

Research Methods

This type of research is a quantitative study using multiple regression analysis. There are some stages on multiple regression analysis (look more detail on Multiple Regression: A Pratical Introduction book by Aki Roberts, John M. Roberts, Jr). Researcher distributed survey via google form to six grade students at SD Muhammadiyah. In this study, total population of 135 students at SD Muhammadiyah, only 127 students filled out the survey with details, 70 girls and 57 boys or 94 percent students joint those survey. The data were analyzed using SPSS to determine validity, and reliability with the Cronbach alpha test, also with a regression model. This research uses the theory of policy implementation from George Edward III, the implementation of online learning by four aspects such as
communication, resources, attitudes, and bureaucratic structure. Moreover, in finding the success factors of online learning uses the final score of student in last term. The research design showed in figure 1.

![Research Design](image)

**Figure 1 Research Design**

**Result and Discussion**

**Descriptive Statistics**

Descriptive statistics in this study provide information about the characteristics of the variables studied, including minimum, maximum, mean, and standard of deviation. A measure of the mean is the most common method of measuring the central value of a data distribution, while the standard of deviation is the difference between the values of the data under study and the mean. The descriptive statistics in this study are shown in Table 1.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Standard of Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1</td>
<td>2.14</td>
<td>5.00</td>
<td>4.0190</td>
<td>.60690</td>
</tr>
<tr>
<td>X2</td>
<td>2.17</td>
<td>5.00</td>
<td>4.0798</td>
<td>.60758</td>
</tr>
<tr>
<td>X3</td>
<td>2.20</td>
<td>5.00</td>
<td>4.0535</td>
<td>.65970</td>
</tr>
<tr>
<td>X4</td>
<td>1.50</td>
<td>5.00</td>
<td>3.9961</td>
<td>.90522</td>
</tr>
<tr>
<td>Y</td>
<td>65.00</td>
<td>98.00</td>
<td>82.8945</td>
<td>6.84751</td>
</tr>
</tbody>
</table>

Source: data source processed by the author
Table 4.1 of the descriptive statistics shows the minimum, maximum, mean and standard deviation values with most cases processed were 127 cases. The minimum implementation of communication, resources, propensity, bureaucratic structure, and successful online learning was 2.14, respectively. 2.17; 2.20; 1.50; 65.00 and the maximum was 5.00 respectively. 5.00; 5.00; 5.00; and 98.00. The average variable of communication is 4.0190, and the average communication in online learning means 4.01090. A standard deviation of .60690 means that the average value of .60690 has a communication deviation value. The average online learning performance variables for resources, properties, bureaucratic structures, and implementations are 4.0798, respectively. 4.0535; 3.9961; Each standard deviation is .60758, but 82.8945. .65970; .90522; 6.84751.

Classical Assumption Test

Normality Test
The regression model has met the normality assumption (see table 2).

Table 2
Normality Test

<table>
<thead>
<tr>
<th>One-Sample Kolmogorov-Smirnov Test</th>
<th>Unstandardized Residual</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>127</td>
</tr>
<tr>
<td>Normal Parameters&lt;sup&gt;a,b&lt;/sup&gt;</td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td>Std. Deviation</td>
</tr>
<tr>
<td>Most Extreme Differences</td>
<td>Absolute</td>
</tr>
<tr>
<td></td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Test Statistic</td>
<td>.071</td>
</tr>
<tr>
<td>Asymp. Sig. (2-tailed)</td>
<td>.191&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

<sup>a</sup> Test distribution is Normal.
<sup>b</sup> Calculated from data.
<sup>c</sup> Lilliefors Significance Correction.
Source: data source processed by the author

Multi-collinearity Test

This test is carried out to see if the regression model correlates with independent variables. If there is a strong correlation, then it can be said that there has been a multi-collinearity problem in the model regression. The model can be concluded that there is no multi-collinearity (see table 3)

Table 3
Multi-collinearity Test

**Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Coefficient</th>
<th>Tolerance</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Communication</td>
<td>-.067</td>
<td>.442</td>
<td>-.017</td>
</tr>
<tr>
<td>Resource</td>
<td>-.787</td>
<td>.473</td>
<td>-.199</td>
</tr>
<tr>
<td>Disposition</td>
<td>.659</td>
<td>.404</td>
<td>.181</td>
</tr>
<tr>
<td>Bureaucracy Structure</td>
<td>-.178</td>
<td>.244</td>
<td>-.067</td>
</tr>
</tbody>
</table>

**Heteroscedasticity**

It is used to test for heteroscedasticity in a linear regression model. This refers to the state in which the variance of the residual or error term in the regression model is constant. The error term does not change much as the value of the predictor variable changes. Based on the result (see Table 4), we can conclude that the regression model does not contain heteroscedasticity.

**Heteroscedasticity Coefficients**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Constant)</td>
<td>4.236</td>
<td>1.781</td>
<td>2.378</td>
<td>.019</td>
</tr>
<tr>
<td>Communication</td>
<td>-.067</td>
<td>.442</td>
<td>-.017</td>
<td>-.151</td>
</tr>
<tr>
<td>Resource</td>
<td>-.787</td>
<td>.473</td>
<td>-.199</td>
<td>-1.663</td>
</tr>
<tr>
<td>Disposition</td>
<td>.659</td>
<td>.404</td>
<td>.181</td>
<td>1.632</td>
</tr>
<tr>
<td>Bureaucracy Structure</td>
<td>-.178</td>
<td>.244</td>
<td>-.067</td>
<td>-.729</td>
</tr>
</tbody>
</table>

a. **Dependent Variable: abs**

Source: data source processed by the author
Multiple Linear Regression Analysis

Multiple linear analysis was used to answer the hypothesis whether communication, resources, disposition and bureaucratic structure simultaneously or partially influence the online learning outcomes in Al Quran memorization. Several factors have a greater impact on the online learning outcomes (look more on table 5).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>35.694</td>
<td>2.748</td>
<td>12.991</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Communication</td>
<td>5.456</td>
<td>.682</td>
<td>.482</td>
<td>8.002</td>
</tr>
<tr>
<td>Resources</td>
<td>3.338</td>
<td>.729</td>
<td>.295</td>
<td>4.576</td>
</tr>
<tr>
<td>Disposition</td>
<td>1.706</td>
<td>.623</td>
<td>.164</td>
<td>2.737</td>
</tr>
<tr>
<td>Bureaucratic Structure</td>
<td>1.186</td>
<td>.376</td>
<td>.156</td>
<td>3.150</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Final Score
Source: data source processed by the author

Based on the results of data processing using SPSS, herewith is the regression model:

\[ Y = 35.694 + 5.456X1 + 3.338X2 + 1.706X3 + 1.186X4 \]

Based on test result of the regression equation above, the conclusion that can be taken as follows:
(1) If all independent variable values had value (0), the value of dependent or final score performance variable was 35.694.
(2) The coefficient variable of independence for X1 variable - communication was 5.456, it means final score performance variable would increase by 5.456, if the other independent variables were fixed.
(3) The coefficient of experience for resources variable was 3.338, it means the final score performance would increase 3.338, if the other independent variables were fixed.
(4) The coefficient of disposition was 1.706, it means the technology performance would increase by 1.706, if the other independent variables were fixed.
(5) The coefficient of bureaucratic structure was 1.186, it means the final score performance would increase by 1.186, if the other independent variables were fixed.
T Test
Based on table t-test (see table 5), this indicates a significant impact of online learning implementation on the success factors of Al Quran memorization, which is inferred from significance was 0.00 < 0.05 then H1 was accepted. It means that there is a significant impact communication, resources, disposition and bureaucratic structure on learning outcomes of Al Quran memorization.

Analysis

The Effect of Communication on Learning Outcomes
Based on the results of the t-test from Appendix 8 in the regression model, the t value between communication and the final score was 5.456, and the significance value was 0.000, lower than the level of significance α = 5%, which means that communication is an important factor affecting online learning outcomes. Online learning will be greatly aided by teachers who communicate effectively with students. In addition to this, teachers must have interpretive skills so that students can clearly understand what the teacher is saying. Therefore, this will make online learning more effective.

The Effect of Resources on Learning Outcomes
Based on the results of the t-test from Appendix 8 in the regression model, the t value between resources and the final score was 3.338, and the significance value was 0.000, lower than the level of significance α = 5%, which means that resources variable influences online learning outcomes significantly. Resources for implementing online learning include information, teacher qualifications, and learning facilities.

The Effect of Disposition on Implementation Online Learning
Based on the results of the t-test from Appendix 8 in the regression model, the t value between disposition and the final score was 1.706, and the significance value was 0.000, lower than the level of significance α = 5%, which means that disposition variable influences online learning outcomes performance variable significantly. Disposition in implementation of online learning means willingness the teacher and student to accept and carry out a task.

The Effect of Bureaucratic Structure on Implementation Online Learning
Based on the results of the t-test from Appendix 8 in the regression model, the t value between bureaucratic structure and final score was 1.186 and the significance value was 0.000, lower than the level of significance α = 5%, which means that bureaucratic structure variable influences implementation online learning performance variable significantly. Bureaucratic structure in online learning includes, the guidelines for online learning in Al Quran memorization and distribution of responsibility.

Gender Analysis
In gender analysis on implementation online learning based on statistical calculations using SPSS (look more on Appendix 12) with independent samples T-test. It can be concluded that there is no significant difference in the results of implementing online learning in gender-based Quran recitation, where is the sig. 0.610 > 0.05. Overall, it can be concluded that the communication variables have positive impact on
learning outcomes in Al Quran memorization. The more communication between teachers and students, the more helpful in implementing online learning in Quran memorization. Hence H1 was accepted, implying that online learning implementation had a significant impact on the learning outcomes in Al Quran memorization. This finding is consistent with previous research that online learning can provide new and more challenging experiences than traditional learning models (Kurtarto, 2017). Online learning outcomes has proven to work well with easily accessible rules, teachers, and an application (Wasyik & Hamid, 2020) and online learning could improve students’ reading skills (Khusniyah & Hakim, 2019).

When online learning started, teachers had the task of creating effective communication and not long to speak in the same direction. Teachers should therefore prepare a beautiful presentation of the teaching material with excellent design. It is also necessary to take into account the appearance of fashion style — not dull, formal, but every day — so that teachers and students look fresh. In addition, efforts by Governments and other stakeholders are needed to work together to improve online learning infrastructure, equip teachers and students with standardized home-based teaching/learning tools, provide online teacher education, develop extensive online learning at the national level as part of the national strategic plan, and also supported academic research in online education, especially religious education, to help students who had difficulties in learning online with the Al Quran to overcome the shortcomings of online learning during the Covid-19 pandemic. Previous study Steele (2019) showed that virtual applications integrated into the curriculum can improve cognitive and artistic skills of students through a student-centered environment. Similarly, Sandhu (2020) reported that new online learning methods should be taken into account in the design of a replacement medical curriculum similar to that of online hands-on training for medical students.

The Government, as a policy-makers and educators, should strengthen the implementation of Al Quran memorization in online learning. In understanding the teaching of Al Quran memorization, the students were to cultivate religious spirit. In addition, through religious education, students will be directed towards strengthening intellectual attitudes towards religious diversity and intra-religious and interreligious tolerance, as well as relations between religious communities and the State. If it's supported by communication, resources, disposition and bureaucratic structure.

CONCLUSION

There is a significant impact of online learning implementation on the success factors of Al Quran memorization which is inferred from significance was 0.00 < 0.05 then H1 was accepted. Furthermore, the communication was an essential factor that would impact online learning performance. The teachers who communicate effectively with students will significantly help in online learning. In addition, teachers should be able to explain to students how they understand what the teacher is talking about. Consequently, this will make online learning more effective. According to the results of the study, the researcher makes some suggestions. We hope that this study will encourage teachers to reflect on how best to teach the Al Quran memorization in order to improve students’ abilities. The teacher can also use interesting methods to develop the student's abilities, use interesting materials such as storytelling, games that will not make students bored. For the Government, the researcher suggests the development of a more detailed Al Quran memorization policy that can provide the teacher with advanced knowledge and best practices that can assist the student abilities, and laws should be proposed to monitor and control the implementation of Al
Quran memorization program which may mitigate the impact of the strengthening of the Al Quran memorization team (MTQ), which sometimes wins the national level competitions and preparing the golden generation in 2025.

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**Online Document:**
