JOURNAL OF INTERNATIONAL CONFERENCE PROCEEDINGS JICP

Online Learning Readiness in Facing the Covid-19 Pandemic at MTS Manunggal Sagara Ilmi, Deli Serdang, Indonesia

Nur Afrianti[1], Reza Aditia[2]
Universitas Negeri Medan[1,2]
Jl. Willem Iskandar / Pasar V Medan, 20221, Indonesia
Correspondence Email: lakha702@gmail.com

ABSTRACT

The Covid-19 pandemic has affected all aspects, especially in the field of education. Schools have been required to do online learning, while not all schools are ready to implement it. This study aims to determine the readiness of online learning for students at MTs Manunggal Sagara Ilmi in terms of parents' occupation, ownership of cellphones, laptops, tablets, internet costs incurred, and sources of the internet access used for online learning. The sampling technique used purposive sampling with the division of classes VII, VIII, and IX. From the various characteristics used to identify samples, it can be concluded that the Learning Management System (LMS) cannot be fully implemented in MTS Manunggal.

Keywords: Covid-19, Internet, Online Learning

INTRODUCTION

Coronavirus is a group of viruses that can cause disease in animals or humans (Seah & Agrawal, 2020). Several coronavirus types are known to cause respiratory tract infections in humans ranging from colds to more severe coughs such as Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS) (Gostic et al., 2020). The newly discovered coronavirus causes the disease COVID-19. The Covid-19 pandemic has had an impact without exception, especially in the field of education (Viner et al., 2020). All school activities are stopped; this decision was taken because of government instructions and reasons to prevent the spread of the Covid-19 virus. In Indonesia, this is regulated in the Minister of Education and Culture Circular No. 4 of 2020 concerning the Implementation of Education Policies in an Emergency Period of the Spread of Covid-19, 2020. All schools are required to conduct distance learning or what is known as online learning.

Online learning, which ideally utilizes the Learning Management System (LMS) cannot be done effectively; this is due to the minimal availability of technology, especially in schools among the underprivileged, especially at Madarsah Tsanawiah (MTs) Manunggal Sagara ilmi Bandar Khalifah, North Sumatra. MTs Manunggal has students from underprivileged families. Some of the students have parents who work as casual daily laborers, making it difficult for them to cover the internet's cost for the online learning process. That is why before online learning is implemented, it is crucial to map the condition of students' readiness to do online learning, so that online learning, which initially functions as a panacea, does not end up becoming a burden to students and parents

Based on the phenomena that occur, this study aims to determine
1. What are the types of jobs for parents of students at MTs Manunggal Sagara Ilmi
2. What is the condition of the student's cellphone ownership at MTs Manunggal Sagara Ilmi
3. What is the condition of student laptop ownership at MTs Manunggal Sagara Ilmi
4. What is the condition of student tablet ownership at MTs Manunggal Sagara Ilmi
5. How much internet costs do students spend in a month at MTs Manunggal Sagara Ilmi
6. Where do students access internet resources at MTs Manunggal Sagara Ilmi.

RESEARCH METHOD

The sample in this study were students at the MTS Manunggal Sagara Ilmi, Deli Serdang. The sampling technique used purposive sampling with the division of grade VII, VIII, and IX. Respondents who participated in this study were 103 people, with the division of 49 people in class VII, 30 people in class VIII, and 24 people in class IX. Because the data are nominal, the data analysis uses non-parametric statistical analysis tools. The analysis tools are crosstab and contingency coefficient to see the relationship between one nominal variable and another nominal variable (Siegel, 1956).

Table 1. Number of Samples Based on Sample Categories

		Frequency	Percent
Grade	IX	24	23.3
	VII	49	47.6
	VIII	30	29.1
	Total	103	100.0
Parents' occupation	entrepreneur	59	57.3
	polce	12	11.7
	construction worker	6	5.8
	day laborer	13	12.6
	private employee	6	5.8
	carpenter	1	1.0
	civil servant	2	1.9
	pedicab driver	1	1.0
	driver	3	2.9
	Total	103	100.0
Cellphone ownership	Yes	85	82.5
	No	18	17.5
	Total	103	100.0
Laptop ownership	Yes	9	8.7
	No	94	91.3

	Total	103	100.0
Tablet ownership	Yes	10	9.7
	No	93	90.3
	Total	103	100.0
Source of internet access	Wifi	7	6.8
	quota bandwidth	89	86.4
	other	7	6.8
	Total	103	100.0
Internet cost	Rp 0 - Rp 50.000	36	35.0
	Rp 51.000 - Rp 100.000	54	52.4
	> Rp 100.000	13	12.6
	Total	103	100.0
Internet access intensity	Frequent	84	81.6
	Infrequent	19	18.4
	Total	103	100.0

RESULTS AND DISCUSSION

Through the Contingency Coefficient, the authors analyzed to see the relationship between ownership of mobile phones, laptops, tablets, internet access sources, internet costs, and the intensity of internet access to parents' jobs. The more the contingency coefficient value approaches 1, the closer the relationship between the two variables is, and vice versa (Siegel, 1956). The first analysis is to look at the relationship between cellphone ownership and parents' occupation.

It can be seen in table 2, that the majority of students claim to have cellphones, whether from any parent workgroup. As many as 82.5% of students claimed to have cellphones, and 17.5% did not have cellphones. Ownership of mobile phones for each occupational group of parents can be seen in more detail in table 2. To see if there is a relationship between ownership of cellphones and the type of occupation of parents, a Contingency Coefficient analysis was conducted. After the analysis was carried out, the Contingency Coefficient value was obtained of 0.231. This implies that there is only a weak relationship between ownership of a cellphone and the parents' occupation because it is known that almost all students have cellphones.

Table 2. Cellphone ownership based on the parents' occupation

	Parents' occupation									**Total**
	Entrepreneur	Police	Construction Worker	Day Laborer	Private Employee	Carpenter	Civil Servant	Pedicab driver	Driver	

Do you have a cellphone?	Yes	51	8	5	9	5	1	2	1	3	85
		86.4%	66.7%	83.3%	69.2%	83.3%	100.0%	100.0%	100.0%	100.0%	82.5%
	No	8	4	1	4	1	0	0	0	0	18
		13.6%	33.3%	16.7%	30.8%	16.7%	0.0%	0.0%	0.0%	0.0%	17.5%
Total		59	12	6	13	6	1	2	1	3	103
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Unlike the case with cellphones, it is known that the majority of students do not own laptops, regardless of the parents' occupation. As many as 91.3% of students claimed not to have laptops; this means that only 8.7% of students at MTS Manunggal Sagara Ilmi have laptops. Laptop ownership for all types of parents' occupation can be seen in more detail in table 3.Through the contingency coefficient, a coefficient value of 0.237 is obtained, which means that there is a weak relationship between ownership of a cellphone and the parents' occupation, because it is known that the majority of students who do not have laptops come from across the parents' occupation

Table 3. Laptop ownership based on parent's occupation

		Parents' occupation									**Total**
		Entrepreneur	Police	Construction Worker	Day Laborer	Private Employee	Carpenter	Civil Servant	Pedicab driver	Driver	
Do you have a laptop?	Yes	6	0	1	0	1	0	0	0	1	9
		10.2%	0.0%	16.7%	0.0%	16.7%	0.0%	0.0%	0.0%	33.3%	8.7%
	No	53	12	5	13	5	1	2	1	2	94
		89.8%	100.0%	83.3%	100.0%	83.3%	100.0%	100.0%	100.0%	66.7%	91.3%
Total		59	12	6	13	6	1	2	1	3	103
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Like laptops, it turns out that after conducting a survey and analysis, it is known that the majority of students do not own tablets. Of all types of parents' occupations, as many as 90.3% of students claimed not to have tablets; this means that only 9.7% of students have tablets. This is reinforced by the contingency coefficient value of 0.240. This means that there is only a weak relationship between tablet ownership and certain types of parents' occupation because it is known that the majority of students who do not own laptops come from all parents' occupation groups.

Table 4. Tablet ownership based on parents' occupation

	Parents' occupation									**Total**
	Entrepreneur	Police	Construction Worker	Day Laborer	Private	Carpenter	Civil Servant	Pedicab	Driver	

						Employee			driver		
Do you have a tablet?	Yes	6	2	0	1	0	0	1	0	0	10
		10.2%	16.7%	0.0%	7.7%	0.0%	0.0%	50.0%	0.0%	0.0%	9.7%
	No	53	10	6	12	6	1	1	1	3	93
		89.8%	83.3%	100.0%	92.3%	100.0%	100.0%	50.0%	100.0%	100.0%	90.3%
Total		59	12	6	13	6	1	2	1	3	103
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The most crucial thing in distance learning is internet access because the device's ownership alone is not enough for students to be reached by the teacher in the teaching and learning process. Based on the crosstab of the data obtained, it is known that quota bandwidth is the primary internet source for students to access the internet. The percentage of students who use quota bandwidth as a source of their internet access is 86.4%. Meanwhile, Wi-Fi as a source of internet access is only 6.8%. The quota bandwidth as the primary source of internet access applies to all parents' occupation group. Through the contingency coefficient analysis, a coefficient value of 0.431 was obtained. It can be concluded that there is only a weak relationship with the source of the internet access used by students with the type of parents' occupation, because it is known that the bandwidth quota as the primary source of internet applies to all parents' occupation.

Table 5. Sources of internet access by type of parent's occupation

		Parents' occupation									**Total**
		Entrepreneur	Police	Construction Worker	Day Laborer	Private Employee	Carpenter	Civil Servant	Pedicab driver	Driver	
Sources of internet access	Wifi	2	1	2	1	1	0	0	0	0	7
		3.4%	8.3%	33.3%	7.7%	16.7%	0.0%	0.0%	0.0%	0.0%	6.8%
	Quota bandwidth	54	11	4	8	5	1	2	1	3	89
		91.5%	91.7%	66.7%	61.5%	83.3%	100.0%	100.0%	100.0%	100.0%	86.4%
	Other	3	0	0	4	0	0	0	0	0	7
		5.1%	0.0%	0.0%	30.8%	0.0%	0.0%	0.0%	0.0%	0.0%	6.8%
Total		59	12	6	13	6	1	2	1	3	103
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Internet spending is divided into three levels, IDR 0 - IDR 50,000; IDR 51,000 - IDR 100,000; and> IDR 100,000. Through Crosstab, it is known that 52.4% spent money on internet access cost of IDR 51,000 - IDR 100,000. Meanwhile, 35% of students have internet access cost of Rp. 0 - Rp. 50,000, and 12.6% of students have internet access

cost of more than Rp. 100,000. Through the contingency coefficient analysis, the coefficient value is 0.395. This implies that there is a weak relationship between internet fees and the type of parents' occupation because the internet access cost of IDR 51,000 - IDR 100,000 applies to almost all students with any type of parents' occupation

Table 6. Internet cost by type of parents' occupation

		Parents' occupation									**Total**
		Entrepreneur	Police	Construction Worker	Day Laborer	Private Employee	Carpenter	Civil Servant	Pedicab driver	Driver	
Your internet costs in a month	Rp 0 - Rp 50.000	19	5	2	5	1	1	0	1	2	36
		32.2%	41.7%	33.3%	38.5%	16.7%	100.0%	0.0%	100.0%	66.7%	35.0%
	Rp 51.000 - Rp 100.000	34	6	1	7	3	0	2	0	1	54
		57.6%	50.0%	16.7%	53.8%	50.0%	0.0%	100.0%	0.0%	33.3%	52.4%
	> Rp 100.000	6	1	3	1	2	0	0	0	0	13
		10.2%	8.3%	50.0%	7.7%	33.3%	0.0%	0.0%	0.0%	0.0%	12.6%
Total		59	12	6	13	6	1	2	1	3	103
		100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Internet access intensity is divided into frequent and infrequent. The number of students who admitted frequently accessing the internet was 81.6%, while students who admitted that they did not frequently access the internet were 18.4%. Through the contingency coefficient, the coefficient value is 0.333. This means that there is a weak relationship between the intensity of internet access and certain types of parents' occupation

Table 7. Internet access intensity based on parent's occupation

		Parents' occupation									**Total**
		Entrepreneur	Police	Construction Worker	Day Laborer	Private Employee	Carpenter	Civil Servant	Pedicab driver	Driver	
Internet access intensity	Frequent	51	8	5	10	5	0	2	0	3	84
		86.4%	66.7%	83.3%	76.9%	83.3%	0.0%	100.0%	0.0%	100.0%	81.6%
	Infrequent	8	4	1	3	1	1	0	1	0	19
		13.6%	33.3%	16.7%	23.1%	16.7%	100.0%	0.0%	100.0%	0.0%	18.4%

Total	59	12	6	13	6	1	2	1	3	103
	100.0 %	100 .0%	100.0 %	100 .0%	100. 0%	100. 0%	100 .0%	100. 0%	100 .0%	100 .0%

Table 8. The contingency coefficient value of each variable with the type of parents' occupation

	Contigency Coefficient	Approximate Significance
Cellphone ownership	0.231	0.670
Laptop ownership	0.237	0.630
Tablet ownership	0.240	0.617
Source of internet access	0.431	0.100
Internet cost	0.395	0.265
Internet access intensity	0.333	0.116

CONCLUSIONS

Based on the results obtained, it can be concluded that the application of online learning that makes full use of LMS cannot be made at MTS Manunggal Sagara Ilmi. This is because device limitations occur in all students, regardless of the demographics of their parents. Ideally, the LMS uses the video call feature in the learning process. However, if we look at the devices owned by most students at MTS Manunggal Sagara Ilmi and the amount of internet access costs that are incurred each month, it is not sufficient to implement video calls in LMS. Therefore, the authors suggest for MTS Manunggal Sagara Ilmi and schools with similar demographics to enrich the material by using the most straightforward possible communication. If the LMS is still used, as much as possible, the LMS should be filled with teaching materials that have a small file size (text-based), this is to save students' bandwidth or internet quota. Besides, to monitor student learning progress, teachers can also use worksheets (paper-based) which are distributed and collected regularly, so that dependence on internet access and devices that are still not owned by all students can be overcome, and the learning process continues to be carried out amid an ongoing pandemic situation.

REFERENCES

Gostic, K., Gomez, A. C. R., Mummah, R. O., Kucharski, A. J., & Lloyd-Smith, J. O. (2020). Estimated effectiveness of symptom and risk screening to prevent the spread of COVID-19. *Elife*, *9*, e55570.

Seah, I., & Agrawal, R. (2020). Can the coronavirus disease 2019 (COVID-19) affect the eyes? A review of coronaviruses and ocular implications in humans and animals. *Ocular Immunology and Inflammation*, *28*(3), 391–395.

Siegel, S. (1956). *Nonparametric statistics for the behavioral sciences*. McGraw-Hill.

Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., Mytton, O., Bonell, C., & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child & Adolescent Health*.