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Analysis of Learning Motivation of Junior High School Students in Terms of the use of Digital Platforms in Online Learning

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ABSTRACT

This study aims to analyze the level of motivation to learn science in terms of the use of platforms in online learning. The research was carried out at Junior High School (SMP) Negeri Singingi, Kuansing Regency, Indonesia for the 2021-2022 Academic Year. This research is quantitative descriptive. The type of data obtained consists of primary data and secondary data. The instrument used to measure the level of student learning motivation is using a questionnaire. This learning motivation questionnaire was prepared with reference to the aspect of learning motivation which consists of 8 aspects. The results of learning motivation on the concentration indicator get an average of 64.56% in the medium category, the curiosity indicator on average 64.83% in the medium category, the average spirit indicator 62.14% in the medium category, the average independence indicator at 70.25% in the high category, the average readiness indicator is 77.50% in the high category, the average enthusiasm and encouragement indicator is 64.68% in the medium category, the indicator of never giving up is on average 66.67% in the medium category, and the average confidence indicator is 79.18% in the high category. The results of the study concluded that the overall student learning motivation was categorized as good.

1. Introduction

The spread of Coronavirus disease 19 (Covid-19) has a very strong impact on people's lives in the world, especially in the education sector. Changes to the education administration system were made to anticipate this situation, face-to-face teaching and learning activities were stopped and replaced with online or online learning. Online learning is an online learning process that involves technology with the help of the internet network. This learning requires various technological devices, such as smartphones, tablets, and laptops (Rigianti, 2020). This change in the learning process also occurred in public schools in Singingi

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District, Kuansing Regency, especially in Singingi District Public Junior High Schools. Since the Covid-19 Pandemic, SMP Negeri Singingi has implemented online science learning using various learning platforms such as whatsapp groups, zoom meetings, google classroom, and googlemet.

This online science learning system certainly creates a different learning atmosphere from face-to-face learning which also affects students' learning motivation. Sari and Rusmin (2018) revealed that in face-to-face science learning the teacher can maintain a conducive classroom atmosphere to maintain student learning motivation, because the classroom climate has a significant influence on learning motivation. Maulah, et al. (2020) in their research shows that students' perceptions are less satisfied with online learning as a learning tool during the Covid-19 pandemic, because it depends on their ability and motivation to learn. Based on the results of interviews with Singingi State Junior High School teachers that in general during online science learning students' learning motivation decreases, only a few students really actively participate in learning, sometimes students take part in learning while watching television or even doing other homework, so students do not focus and did not follow the lesson well. Low learning motivation will have an impact on the learning process and learning outcomes. Juliya and Yusuf (2021) revealed that if students' learning motivation is disrupted, the learning process will not run well and will have an impact on student learning outcomes so that learning objectives are not achieved.

Based on various problems that arise during online science learning at Singingi District Junior High School, it is necessary to analyze students' learning motivation in science learning in terms of the use of digital platforms. The purpose of this study is to provide an objective description of the level of student learning motivation in learning during the Covid-19 pandemic so that it can be used as an evaluation in creating effective and efficient online learning.

2. Methodology

This research is a quantitative descriptive study, which produces data to describe the results of the analysis conducted on phenomena, events, social activities, and attitudes of individuals or groups. This type of research uses a survey method. Fitriyani et al., (2020) revealed that the use of survey research methods is very suitable to be used in expressing motivation in online learning during the Covid-19 pandemic. The research was carried out at Singingi Junior High School, Kuansing Regency, for the 2021-2022 Academic Year. The type of data obtained consists of primary data and secondary data. Primary data in the form of data obtained in research, while secondary data in the form of data obtained through previous studies that are used to support primary data.

The population in this study were students of class IX SMP Negeri in Singingi district. The number of public junior high schools in Singingi District is 7 junior high schools with a total of 299 students in class XI. Based on the population of

class VIII SMP Negeri Singingi, the determination of the number of samples used the Yamane formula (Kriyantono, 2006) with the following calculation method.

$$n = \frac{N}{N \times d^2 + 1}$$

Information:

n = number of samples

N = population

d = 95% precision value or sig = 0.05%

Determination of the number of samples based on the above formula, using an error rate of 0.05%, then:

$$n = \frac{N}{N \times d^2 + 1}$$

$$n = \frac{229}{229 \times 0,05^2 + 1}$$

$$n = \frac{299}{1,7476}$$

n = 171.10 (rounded up to 171 people)

Thus, the sample in this study was 171 students. The selection of students used as samples in this population was carried out by systematic randomness. In detail the number of samples in each school is presented in Table 1.

Table 1. Number of Research Respondents at Each School Origin

No	School Origin	Total Students
1	SMP N 1	48
2	SMP N 2	30
3	SMP N 3	20
4	SMP N 4	33
5	SMP N 5	15
6	SMP N 6	10
7	SMP N 7	15
Total		171 People

The instrument used to measure the level of students' learning motivation in terms of the use of digital platforms in science learning for students at Singingi District Junior High School is a questionnaire. This learning motivation questionnaire was compiled with reference to aspects of learning motivation according to Hamzah B. Uno, 2009 which consisted of: (1) Concentration, (2) Curiosity, (3) Spirit, (4) Independence, (5) Readiness, (6) enthusiasm or encouragement, (7) Never give up, and (8) Confidence. The number of statements given in this questionnaire is 24 positive statements. In detail, the student learning motivation questionnaire grid can be seen in Table 2.

Table 2. Student Learning Motivation Questionnaire

No	Aspect	No Item	Number of Items
1	Concentration	1,2,3	3
2	Curiosity	4,5,6	3
3	Spirit	7,8,9	3
4	Independence	10,11,12	3
5	Readiness	13,14,15	3
6	Enthusiasm and Encouragement	16,17,18	3
7	Never give up	19,20,21	3
8	Self-confident	22,23,24	3
Total			24

(Hamzah B. Uno, 2009)

The assessment of the learning motivation questionnaire was carried out based on the provisions of the predetermined student questionnaire answer scores, which consisted of 5 categories with a score range of 1-5. Guidelines for scoring the learning motivation questionnaire can be seen in Table 3.

Table 3. Guidelines for Scoring the Learning Motivation Questionnaire

Interpretation	Rating Score
Always	5
Often	4
Sometimes	3
Seldom	2
Never	1

(Arikunto, 2012)

The formula used in the analysis of the results of the questionnaire can be written as follows according to Ngalim Purwanto, (2010).

$$NP = \frac{R}{SM} \times 100\%$$

Information :

NP = Percent Value sought

R = Raw score obtained

SM = Maximum score

The total score obtained is then interpreted to determine the level of student motivation in participating in the science learning process in terms of the use of digital platforms based on Table 4.

Table 4. Interpretation Criteria for Student Learning Motivation Questionnaire Score

Percentage	Category
20% - 36%	Very low
37% - 52%	Low
53% - 68%	Currently
69% - 84%	High
85% - 100%	Very high

(Hendrayana, 2014)

3. Results and Discussion

Testing the level of learning motivation was carried out using a motivational questionnaire given to students at the Singingi District Junior High School with a total sample of 171 students. The motivation questionnaire was given using a Google form. The results of the analysis of the level of motivation to learn science in SMP Negeri Singingi District. Overall the results of learning motivation can be seen in Figure 1.

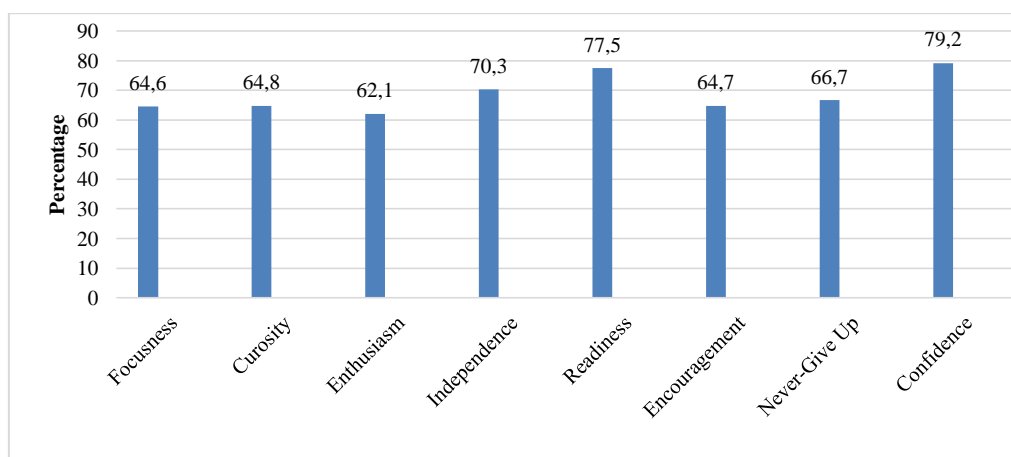


Figure 1. Graph of the Results of Science Learning Motivation Indicators for Middle School Students in Singingi District

Figure 1 shows that the average value of learning motivation on the Concentration Indicator gets an average of 64.6 Medium category, Curiosity indicator on average 64.8 Medium category, Average enthusiasm indicator 62.1 Medium category, average Independence indicator The average is 70.3 for the High category, the Readiness indicator is in the average 77.5 for the High category, the Enthusiasm and Encouragement indicator is on average 64.7 for the Medium category, the Never-Give Up indicator is on average 66.7 for the Medium category and the Confidence Indicator is getting an average score - an average of 79.2 High category. The results of the research through the questionnaire above, show that most of them are in the moderate category, this proves that students still have concentration, curiosity, enthusiasm, enthusiasm and encouragement, never give up, which is sufficient in online learning while in independence, readiness, and trust. good self. Student learning motivation has an effect on learning success. This is in accordance with what was expressed by Emda (2018), that the learning process will achieve success if students have good learning motivation. The following is a description of the findings of the learning motivation of junior high school students in Singingi District for each measured learning motivation indicator.

Concentration

The results of the questionnaire given the average value of students' learning motivation results in Singingi District Junior High School on concentration indicators can be seen in Table 5.

Table 5. Results of Student Learning Motivation in Singingi District on Concentration Indicators

Questionnaire Indicator	Average Score	Category
I pay close attention to every explanation of the teacher's material and not while doing other activities.	59,2	Currently
I can understand the instructions given by the teacher well	66,8	Currently
I take notes on the material presented by the teacher well	67,7	Currently
Average	64,6	Currently

Table 5 shows that the average score of students' motivation for learning at Singingi District Junior High School on the concentration indicator gets an average of 64.6 in the medium category. Overall this shows that in the learning process students still have a good concentration attitude. According to Aviana & Hidayah (2015) a high concentration of student learning will stimulate learning activities to become more qualified, students become more serious in learning, and students' understanding power becomes better. Learning concentration is a behavior and focus of students' attention to be able to pay attention in every implementation of learning and be able to understand every subject matter that has been given (Mayasari, 2017).

Curiosity

The results of the questionnaire given the average value of students' learning motivation results in Singingi District Junior High School on the curiosity indicator can be seen in Table 6.

Table 6. Results of Student Learning Motivation in Singingi District on Curiosity Indicators

Questionnaire Indicator	Average Score	Category
I ask questions in order to understand the material well	54,9	Currently
I look for information on learning materials independently by using the internet and books	79,6	High
I ask the teacher via whatsapp chat or google classroom about material that I don't understand	60,0	Currently
Average	64,8	Currently

Table 6 shows that the average learning motivation score of Singingi District Junior High School students on the Curiosity indicator gets an average of 64.4 medium categories. Overall, the questionnaire indicators get quite good results in the curiosity indicator. Online learning is often required to be more motivated in learning because the learning environment depends on motivation and characteristics related to curiosity and self-regulation to be involved in the learning process (Selvi, 2010). Curiosity can appear suddenly, can change focus easily, or end unexpectedly, but curiosity can still be a very strong motivation (Raharja et al., 2018).

Enthusiasm

The results of the questionnaire given the average value of students' learning motivation results in Singingi District Junior High School on the Spirit indicator can be seen in Table 7.

Table 7. Results of Student Learning Motivation in Singingi District on Spirit Indicators

Questionnaire Indicator	Average Score	Category
Before online learning begins, I prepare myself, stationery and books that will be used properly	74,7	High
When I have free time during online learning, I fill it by doing the science questions in the textbooks	53,6	Currently
During discussions in online learning, I take an active role in providing questions and suggestions	58,1	Currently
Average	62,1	Currently

Table 7 shows that the average learning motivation score of Singingi District Junior High School students on the Spirit indicator gets an average of 62.1 in the medium category. Overall indicators of enthusiasm for student motivation are good, because students have enthusiasm before and when learning begins. Motivation can be realized with a high desire and enthusiasm for learning. Furthermore, Kusuma (2015) explains that motivation is very important in teaching and learning activities.

Independence

The results of the questionnaire given the average value of students' learning motivation results in Singingi District Junior High School on indicators of independence can be seen in Table 8.

Table 8. Results of Singingi Subdistrict Students' Learning Motivation on Independence Indicators

Questionnaire Indicator	Average Score	Category
I am actively learning independently without being asked by my parents	82,5	High
I re-learn when there is a lesson I don't understand	68,2	Currently
When working on assignments given online, I don't contact other friends to get the same answer	60,1	Currently
Average	70,3	High

Table 8 shows that the average learning motivation score of Singingi District Junior High School students on the Independence indicator gets an average of 70.3 in the high category. Overall, the independence of students in online learning is very good, this is because online learning makes students learn independently. Dabbah stated that one of the characteristics of students in online learning activities must have the skills to learn independently (Dwi et al., 2020). In accordance with the opinion of Hidayat et al, (2020) online learning, students can freely set their own learning strategies.

Readiness

The results of the questionnaire given the average value of students' learning motivation results in Singingi District Junior High School on the readiness indicator can be seen in Table 9.

Table 9. Results of Student Learning Motivation in Singingi District on Readiness Indicators

Questionnaire Indicator	Average Score	Category
I try to be on time and follow the science lessons that are done online	90,2	Very high
I study the material that the teacher will teach before the online learning starts	62,6	Currently
I always prepare study materials and stable internet access before starting online learning	79,8	High
Average	77,5	High

Table 9 shows that the average learning motivation score of Singingi District Junior High School students on the Readiness indicator gets an average of 77.5 in the high category. Research conducted by Horzum, et al. (2015) found that academic motivation mediates the relationship between online learning readiness and learning experiences. Research conducted by Yilmaz (2017) states that online learning readiness is one of the predictors of the emergence of academic motivation in students.

Enthusiasm and Encouragement

The results of the questionnaire on the learning motivation of Singingi sub-district junior high school students on this indicator can be seen in Table 10.

Table 10. Results of Singingi District Students' Learning Motivation on Enthusiasm and Encouragement Indicators

Questionnaire Indicator	Average Score	Category
When I have difficulty doing the given science assignment, I feel challenged to complete the task	63,6	Currently
I always submit assignments on time	65,8	Currently
When I am not satisfied with the explanation given by the teacher online, I try to find additional information using the internet	64,6	Currently
Average	64,7	Currently

Table 10 shows that the average learning motivation score of Singingi District Junior High School students on the Enthusiasm and Encouragement indicators gets an average of 64.7 in the medium category. The success of learning objectives depends on how enthusiastic the students are in participating in learning activities (Oktiani, 2017). Yustina (2020), increased motivation to learn due to the need and encouragement to be fulfilled.

Never Give Up

The results of the questionnaire given the average value of the results of learning motivation of SMP students in Singingi sub-district on the indicator of never giving up can be seen in Table 11.

Table 11. Results of Student Learning Motivation in Singingi District on the Never Give Up Indicator

Questionnaire Indicator	Average Score	Category
If I am not able to do the given science assignment, I will continue to do the task until it is successful	60,6	Currently
To complete the answer to the task given by the teacher, I look for other references by utilizing information via the internet	59,6	Currently
If I can't take online lessons, I try to ask friends and teachers about the material presented	79,8	High
Average	66,7	Currently

Table 4.11 shows that the average learning motivation score of Singingi District Junior High School students on the indicator of Abstinence to Give Up gets an average of 66.7 in the medium category. Aryasuta, Suparta, & Suweken (2014) explained that students who have a high level of toughness will have high motivation and learning achievement as well. According to Mohatashami, Tajari, & Rad (2015) learning resilience does have a positive effect on personal resilience, so students never give up in the face of difficulties.

Self-Confident

The results of the questionnaire given the average value of students' learning motivation results in Singingi District Junior High School on the Confidence indicator can be seen in Table 12.

Table 12. Results of Student Learning Motivation in Singingi District on Confidence Indicators

Questionnaire Indicator	Average Score	Category
I work on the science assignments given during online learning seriously	83,9	High
I'm sure I can answer the questions the teacher asks during online science lessons	79,4	High
I am sure that I can understand the science material presented by the teacher well during online learning	74,3	High
Average	79,2	High

Table 12 shows that the average learning motivation score of Singingi District Junior High School students on the Confidence indicator gets an average of 79.2 in the High category. The self-confidence that is formed is a manifestation of the various stages of learning in the form of learning experiences that have been passed. The experience gained makes students more confident in doing assignments and facing the learning process in class (Effendi, Mursilah, & Mujiono, 2018; Ibrahim & Suardiman, 2014).

Firman & Rahayu (2020) online learning during the COVID-19 pandemic has flexibility in its implementation and is able to encourage the emergence of independent learning and motivate students to be more active in learning.

4. Conclusion

The level of motivation to learn science at SMP Negeri Singingi District in terms of the use of platforms in online learning is fairly good based on the results of the questionnaire given to students. It can be seen from the results of each indicator of learning motivation which gets the Medium to High category. The research was conducted using online learning, this resulted in research getting obstacles and problems, obstacles occurred due to the lack of internet access and an adequate network in the students' residences, so that researchers found it difficult to get the desired results quickly.

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References

- Arikunto, S. (2012). *Dasar-dasar evaluasi pendidikan edisi 2*. Jakarta: Bumi Aksara.
- Aryasuta, I. W. E., Suparta, I. N., & Suweken, G. (2014). Pengaruh model pembelajaran berbasis masalah dengan media pembelajaran berbantuan geogebra terhadap prestasi belajar matematika siswa ditinjau dari tingkat ketangguhan siswa. *Jurnal jurusan pendidikan matematika ganessa*, 3(1), 1-9.
- Aviana, R., & Hidayah, F. F. (2015). Pengaruh Tingkat Konsentrasi Belajar Siswa terhadap Daya Pemahaman Materi pada Pembelajaran Kimia di SMA Negeri 2 Batang. *Jurnal Pendidikan Sains (JPS)*, 3(1), 30-33.
- Dwi, B., Amelia, A., Hasanah, U., & Putra, A. M. (2020). Analisis Keefektifan Pembelajaran Online di Masa Pandemi Covid-19. *Jurnal Pendidikan Guru Sekolah Dasar*, 2(1), 28-37.
- Effendi, E., Mursilah, M., & Mujiono, M. (2018). Korelasi Tingkat Perhatian Orang Tua dan Kemandirian Belajar dengan Prestasi Belajar Siswa. *Titian Ilmu: Jurnal Ilmiah Multi Sciences*, 10(1), 17-23.
- Emda, Amna. (2018). Kedudukan motivasi belajar siswa dalam pembelajaran. *Lantanida Journal* 5(2), 172-182.
- Firman, & Rahman, S. R. (2020). Pembelajaran Online di Tengah Pandemi Covid-19 Firman1, Sari Rahayu Rahman1. *Indonesian Journal of Educational Science (IJES)*, 2(2), 81-89.
-

-
- Fitriyani, Y., Fauzi, I., & Sari, M. Z. 2020. Motivasi belajar mahasiswa pada pembelajaran daring selama pandemik covid-19. *Jurnal Kependidikan: Jurnal Hasil Penelitian dan Kajian Kepustakaan di Bidang Pendidikan, Pengajaran dan Pembelajaran*, 6(2), 165-175.
- Hidayat, D. R., Rohaya, A., Nadine, F., & Ramadhan, H. (2020). Kemandirian Belajar Peserta Didik Dalam Pembelajaran Daring Pada Masa Pandemi Covid -19. *Perspektif Ilmu Pendidikan*, 34(2), 147– 154.
- Horzum, M. B., Kaymak, Z. D., & Gungoren, O. C. (2015). Structural equation modeling towards online learning readiness, academic motivations, and perceived learning. *Educational Sciences: Theory & Practice*, 15(3), 759-770.
- Ibrahim, D. S., & Suardiman, S. P. (2014). Pengaruh Penggunaan E-Learning Terhadap Motivasi dan Prestasi Belajar Matematika Siswa SD Negeri Tahunan Yogyakarta. *Jurnal Prima Edukasia*, 2(1), 66.
- Juliya, M., & Yusuf, T, H. 2021. Analisis Problematika Pembelajaran Daring dan Pengaruhnya Terhadap Motivasi Belajar Siswa. *Genta Mulia*, 12(1), 281-294.
- Kriyantono, R. (2006). *Teknik Riset Komunikasi*. PT. Raja Grafindo Persada Jakarta. Jakarta.
- Kusuma, A. B., Astuti, W., & Setyawan, C. E. 2019. Analisis Penerapan Media Pembelajaran Bahasa Arab Berbasis Aplikasi Google Classroom di Sekolah Tinggi Agama Islam Masjid Syuhada (STAIMS) Yogyakarta. *Al-Manar*, 8(2), 151-180.
- Maulah, S., Nurul, A. F. & Ummah, N. R. 2020. Persepsi Mahasiswa Biologi Terhadap Perkuliahan Daring Sebagai Sarana Pembelajaran Selama Pandemi Covid-19. *ALVEOLI: Jurnal Pendidikan Biologi*, 1(2), 49-61.
- Mayasari, F. D. (2017). Pengaruh Konsentrasi Belajar dan Motivasi Belajar Terhadap Hasil Belajar Siswa SI SMK Negeri 1 Ngabang. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa*, 6(6), 1–11.
- Mohatashami, A. R., Tajari, F., & Rad, M. R. A. (2015). Studying the relationship between hardiness and resilience personality traits and academic achievement among students of kashan university in 2014. *Cumhuriyet Üniversitesi Fen-Edebiyat Fakültesi Fen Bilimleri Dergisi*, 36(3), 3294-3301.
- Ngalim Purwanto. 2009. *Ilmu Pendidikan Teoretis dan Praktis*. PT Remaja Rosda Karya, Bandung.
- Oktiani, I. (2017). Kreativitas Guru dalam Meningkatkan Motivasi Belajar Peserta Didik. *Jurnal Kependidikan*, 5(2), 216-232.
- Raharja, S., Wibhawa, M. R., & Lukas, S. (2018). Mengukur Rasa Ingin Tahu Siswa [Measuring Students' Curiosity]. *Polyglot: Jurnal Ilmiah*, 14(2).
- Rigianti, H. A. 2020. Kendala Pembelajaran Daring Guru Sekolah Dasar di Kabupaten Banjarnegara. *Elementary School*. 7(2). 297-302.
- Sari, D. P., & Rusmin, A. R. (2018). pengaruh iklim kelas terhadap motivasi belajar peserta didik di sman3 tanjung raja. *Jurnal PROFIT Kajian Pendidikan Ekonomi dan Ilmu Ekonomi*, 5(1), 80-88.
- Selvi, K. (2010). Motivating factors in online courses. *Procedia -Social and Behavioral Sciences*, 2(2), 819–824.
-

- Uno, H. B. (2009). *Teori Motivasi dan Pengukurannya di bidang pendidikan*. Jakarta: PT. Bumi Aksara.
- Yilmaz, R. (2017). Exploring the role of e-learning readiness on student satisfaction and motivation in flipped classroom. *Computers in Human Behavior*, 70, 251-260.
- Yustina, Y., Syafii, W., & Vebrianto, R. (2020). The effects of blended learning and project-based learning on pre-service biology teachers' creative thinking through online learning in the Covid-19 pandemic. *Jurnal Pendidikan IPA Indonesia*, 9(3), 408-420.

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