

Online Learning Motivation and Online Learning Participation Rate of High School Students

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Abstract

This study was conducted due to the low level of online learning participation observed during the second year of online learning implementation due to the COVID-19 pandemic in Indonesia. It aimed to discover the relationship between online learning motivation level and online learning participation rate. It also sought to study the difference between males and females in terms of online learning motivation levels. It was a descriptive, differential, and correlational quantitative study using the survey method. The population of this study was Grade XI students at a private senior high school. The students took part in filling out a paper-based questionnaire and the data were analyzed using descriptive and inferential statistics. The analysis results showed that there was a significant correlation between students' online learning motivation level and their online learning participation rate. Another important result was that there was a significant difference between males and females in terms of online learning motivation levels. It was concluded that the higher students' level of online motivation, the higher their online learning participation rate would be. Finally, males have a slightly higher online motivation level than females.

Keywords— online learning, learning motivation, learning participation, online learning motivation, online learning participation rate

Abstrak

Penelitian ini dilakukan karena rendahnya tingkat partisipasi pembelajaran daring yang diamati selama tahun kedua pelaksanaan pembelajaran daring akibat pandemi COVID-19 di Indonesia. Hal ini bertujuan untuk menemukan hubungan antara tingkat motivasi belajar online dan tingkat partisipasi pembelajaran online. Ini juga berusaha untuk mempelajari perbedaan antara pria dan wanita dalam hal tingkat motivasi belajar online. Itu adalah studi kuantitatif deskriptif, diferensial, dan korelasional menggunakan metode survei. Populasi penelitian ini adalah siswa Kelas XI di sekolah menengah atas swasta. Para siswa mengambil bagian dalam mengisi kuesioner berbasis kertas dan data dianalisis menggunakan statistik deskriptif dan inferensial. Hasil analisis menunjukkan bahwa terdapat korelasi yang signifikan antara tingkat motivasi belajar online siswa dengan tingkat partisipasi pembelajaran daring mereka. Hasil penting lainnya adalah bahwa ada perbedaan yang signifikan antara laki-laki dan perempuan dalam hal tingkat motivasi belajar online. Disimpulkan bahwa semakin tinggi tingkat motivasi online siswa, semakin tinggi tingkat partisipasi pembelajaran online mereka. Akhirnya, pria memiliki tingkat motivasi online yang sedikit lebih tinggi daripada wanita.

Kata kunci— pembelajaran online, motivasi belajar, partisipasi belajar, motivasi belajar online, partisipasi belajar online

INTRODUCTION

In 2020, the first year of the COVID-19 outbreak in Indonesia, online learning started to become compulsory following the ban on face-to-face class meetings. With exceptions in a few areas untouched by COVID-19, all levels of education were forced to hold online learning to change the traditional class meetings. However, the practice of online learning in Indonesia was not an easy task. Due to the sudden change of teaching and learning practice to online learning, many problems had appeared because of various reasons. Many teachers and students complained about not having access to adequate internet connection or good internet facilities (Surahman et al., 2020). Some parents and students revealed their inability to buy internet quota (Sari, 2017), and some others complained about lacking information technology (IT) skills to cope with the online learning activities (Prawanti & Sumarni, 2020). These issues became national concerns during the first year-implementation of online learning in Indonesia.

During the second year of online learning implementation in Indonesia, online classes seemed to have been so boring in the eyes of students. Through a few online class observations, they showed that the level of participation in online class activities decreased. In a few cases, the number of students who attended the online classes dropped due to unknown reasons. In class discussions, students often kept silent or inactive. Many times, teachers need to call the names of students repeatedly to engage them in discussions. Sometimes, there were no responses at all when they were called by teachers. Prawanti and Sumarni (2020) found that students had experienced boredom with their online classes because they could not directly socialize with their peers. Although students could actually connect with others through IT media, but the isolation from and limitations of direct contact with others (Anastasakis et al., 2021) probably had become the source of this problem.

The motivational problem also became one of the psychological issues investigated. A few studies found that during online learning, students had the low motivation (Ikhwan & Andriyanti, 2021; Suhaili et al., 2021) or experienced a learning motivation decrease (Sutrisno, 2021; Asril et al., 2021). Online learning somehow negatively impacted students' motivation to learn due to various factors (Zaitun et al., 2021). For some students, Gustiani (2020) found that this amotivation happened due to poor online learning supporting facilities like frequent electricity unavailability and bad internet connection quality. For other students, lack of social interaction, dissatisfaction with the learning contents, and poor management of learning environments decrease their online learning motivation (Meşe & Sevilen, 2021). In a study conducted by Cahyani et al. (2020), they found that some other students experienced a decrease in learning motivation during the pandemic that their level of motivation only fell in the average category. Similar results were also found in a few studies that students only had average online learning motivation (Winata, 2021; Firmansyah, 2021). In conclusion, the decision to use an online learning platform seemed to have reduced the motivational factor students had in normal traditional offline classes.

What motivates students to participate in online learning? Like the types of motivation students usually have in offline learning, they also possessed both intrinsic and extrinsic motivations. In terms of intrinsic motivation, students participate in online learning because they are ambitious to learn and gain new knowledge and they enjoy experiencing the new learning model using online digital platforms (Gustiani, 2020). On the other, Gustiani found that they are extrinsically motivated to participate in online learning to avoid the consequences of being absent in online classes or to experience using the internet support available and supporting gadgets like smartphones and laptop computers. As it relates to doing online learning activities, a study found that there was a positive relationship between students' motivation and their virtual learning activities (Ikhwan & Andriyanti, 2021). In other words, the higher their motivation level is, the more participative they would be in online learning activities.

What factors increase the motivation level of students to learn online? Meşe and Sevilen (2021) found that internal and external factors influence students' motivation in online learning. The internal factors consist of a feeling of satisfaction with the learning materials and the need to communicate. On the other hand, external factors like teachers' teaching methods, lesson presentations, feedback, and how they interact with students in online classes impact their motivation levels. Another external factor Meşe and Sevilen stated is the presence of their peers. The more classmates involved in the online class activities, the more motivated the students. With similarities in a few aspects, a study found that the student's online learning environment correlated with their learning motivation (Lasut, 2021). Lasut stated that the learning environment itself consists of aspects like the teacher's presence, cognitive activities, and social interactions. As these aspects increase, the learning motivation also increases. Instead, as these aspects decrease, the learning motivation also decreases.

RESEARCH METHODS

This current study used the quantitative approach with a survey method involving statistical analyses. To gather data for the research it used virtual questionnaires distributed to respondents. To answer the research questions, the data were analyzed using both descriptive and inferential statistics.

Population and Respondents

The population studied in this research was 133 Grade XI students at a private senior high school located in the district of Airmadidi, North Minahasa regency, North Sulawesi province, Indonesia. Because this is not a study on a sample, it decided to take all students in the population as respondents. On the day of data collection, 107 respondents consisting of 41 males and 66 females took part in the study, but the rest of the 26 students were absent on that day for various reasons. Therefore, the response rate based on Johnson and Christensen (2014) was $107/133 \times 100 = 80.45\%$. It was acceptable because it is higher than the commonly accepted minimum response rate expected of respondents in research.

Instrument

The instrument used in the current study was two self-constructed questionnaires. The first was used to measure the motivation of online learning which consisted of 10 items, and the other was used to measure the online learning participation rate consisting of 6 questions. The online learning motivation questionnaire offered the following five-point-scale responses: 5 = strongly agree, 4 = agree, 3 = somewhat disagree, 2 = disagree, and 1 = strongly disagree. Unlike the first, the second questionnaire offered seven-point-scale options: 7 = more than five hours per day, 6 = five hours per day, 5 = four hours per day, 4 = three hours per day, 3 = two hours per day, 2 = one hour per day, and 1 = less than one hour per day.

To prove the validity of the two questionnaire items, they went through a series of expert judgments on their face and content validity. Four lecturers of the Faculty of Education examined them by commenting, criticizing the wording and layout, and giving necessary suggestions. The questionnaires were then improved based on the lecturers' comments, critiques, and suggestions. Next, the two questionnaires were tried out on ten students of Grade XI and their responses were analyzed for reliability. To estimate the reliability of the questionnaires, this study used internal consistency analyses using the coefficient alpha formula. The results showed that the online learning motivation questionnaire was reliable with a coefficient alpha index of .76. The second questionnaire measuring the online learning participation rate was also reliable ($r_{xx} = .92$). Because the coefficient alpha indexes of the two questionnaires were higher than .70, they were considered consistent to measure the constructs.

Data Collection Procedure

Due to the relaxation of COVID-19 restrictions in Indonesia where teachers and students can study offline at school since January 2022, the process of collecting the data was conducted offline using paper-based questionnaires. First, the data collector made an agreement with the homeroom teachers to administer the questionnaires directly in classrooms. The data collector then visited the respondents in their classrooms and explained to them the purpose of the research was being conducted and that it needed their willingness to fill out questionnaires. When agreed, the questionnaires were distributed, and the respondents started to fill them out. It took about 20 to 30 minutes for the respondents to finish filling in their responses. Whenever a respondent returned the questionnaires, the data collector did a quick check to make sure that all items were already answered. When all respondents were done, all the questionnaire sheets were then secured for data analyses.

Data Analysis Techniques

First, students' responses to the questionnaires were tabulated using computer software for processing numbers. After that, the quantitative data were analyzed quantitatively which involved both descriptive and inferential statistics. The descriptive analyses covered several central tendencies and variability analyses like calculating the mean scores and standard deviations of students' motivation to learn online and their participation rates. The inferential analyses used several different types of analyses. To make sure that the data were normally distributed, it used the Kolmogorov-Smirnov test of normality on online learning motivation variabel. The test result showed that the p-value of the variabel was (.07) higher than α (.05). For this reason, the data of the variabel was considered normally distributed (see Table 1). To analyze the online learning motivation

Table 1. Normality Test Result

Variabel	D	df	p
Online Learning Motivation	.08	107	.07

and participation levels, it calculated the mean scores of both variables. To analyze the correlation between the two variables (variable X and Y), it used the Pearson Product Moment Correlation Coefficient analysis. This type of parametric statistics analysis was chosen because the independent variabel's distribution met the assumption of normality distribution (Field, 2009). Finally, to analyze the difference in online learning motivation levels between males and females, it used the independent-samples t-test. In the analysis process, this study used a commonly used computer software designed for conducting statistical analyses.

RESULTS AND DISCUSSIONS

Using descriptive statistics analyses, the results showed the mean scores of the two variables. The mean score of students' online learning motivation level was 3.03 and the mean score of their participation rate was 2.76. To be more specific on the motivation items levels, the mean score of each item was presented in Table 2. In Table 3, the mean scores of all online participation items were presented.

Table 2. Levels of Online Learning Motivation

Item	M	SD	Description
I am interested to attend online learning because I think I'm able to use the technology of information and communication.	3.53	1.06	High
I think that online learning gives me advantages.	3.33	1.02	Moderate
I think that online learning is beneficial for me.	3.33	1.00	Moderate
Online learning makes me skillful to use the technology of information and communication.	3.88	.82	High
I attend online learning because I want to interact with teachers online.	3.14	1.02	Moderate
I attend online learning because I want to interact with my classmates online.	3.01	1.13	Moderate
I attend online learning because I receive a free internet quota provided by the government.	2.39	1.30	Low
I'm satisfied when doing online learning activities because they match my interest.	3.12	1.03	Moderate
I attend online learning because I want to be seen by my teachers using the technology of information and communication.	2.73	1.03	Low
I attend online learning because I want to be praised by teachers.	1.84	.87	Low

Table 3. Levels of Online Learning Participation

Item	M	SD	Description
Attending online classes	5.15	1.41	Above Average
Doing online exercises/assignments given by teachers	2.23	1.11	Low
Doing online homework	2.46	1.18	Low
Discussing lessons with peers online	2.16	1.30	Low
Discussing homework with peers online	2.25	1.25	Low

Inferential statistics analyses revealed the relationship between online learning motivation and online learning participation and the difference between males' and females' levels of online learning motivation. For the correlation, the results of Pearson product-moment correlation coefficient analyses showed that the p -value was .00 and $r = .26$. For the difference, the results of independent the t -test analyses firstly showed that the Levene's test for equality of variances was equal (p -value = .65 > .05). Secondly, the p -value of difference between males and females was .04 and the mean difference was .26. Additionally, the result of the effect size calculation of difference showed $r = .20$.

The results of descriptive and inferential analyses produced a few findings. First, the students show a high level of perception of two online learning motivation items. They highly attend their online learning because they think that they can use the technology of information and communication. In addition, they also highly perceive that online learning makes them skillful to use the technology of information and communication. Conversely, they show a low level of perception on three items of online learning motivation. These consist of the following reasons: they receive free internet quota provided by the government, they want to be seen by their teachers using the technology of information and communication, and they want to be praised by teachers. Overall, their level of online learning motivation is at a moderate level. Second, students' perceptions of their online

learning participation activities show two kinds of responses: from below average to low level of participation. Attending classes online becomes the only activity that is below average level. The other four activities: doing online exercises/assignments given by teachers, doing online homework, discussing lessons with peers online, and discussing homework with peers online are in the low-level category. On average, students' level of online learning participation is at a moderate level. To sum up, both the online learning motivation level and online learning participation rate fall under the category of moderate level.

There are two most important findings found in this study. One of them is that there is a correlation between students' online motivation level and their online participation rate. Due to the p -value $< .05$, it is concluded that students' online learning participation rate is related to their online learning motivation. The correlation between both variables is categorized as a positive weak correlation (Larson & Farber, 2012) because r is close to 0 and is a positive value. Although it is weak, this positive correlation means that an increase in online learning motivation level will be followed by an increase in online learning participation level (Reynolds et al., 2009). On the contrary, a decrease in online learning motivation level will also be followed by a decrease in online learning participation level. This finding is in line with what Ikhwan and Andriyanti (2021) found in their study. The second most important finding was that males were different from females in terms of online learning motivation levels (p -value $< .05$). The mean difference showed that males ($M= 3.19$) had higher online learning motivation levels compared to females ($M= 2.93$). The effect size calculation of difference ($r < .3$) showed that it represented a small-sized effect (Field, 2009). This implies that there is only a small difference between males' and females' levels of online learning motivation.

CONCLUSIONS

To conclude, the low levels of students' online learning participation rate are positively related to the low levels of their online learning motivation. If teachers want to encourage their students to participate in online learning activities more actively, they need to realize that one factor (among some other factors) that the students need is a higher level of online learning motivation. Finally, because of the small effect of the difference between males and females in terms of online learning motivation levels, teachers do not need to be concerned about how they need to differently treat males from females in online learning activities.

RECOMMENDATIONS

This research has a few limitations that hopefully could be improved by other future studies. Due to the weak positive correlation between variables X and Y of this study, it indicates that some other unknown factors could be strongly correlated with the online learning participation rate. These future studies could contribute to analyzing the correlation of those factors with online learning participation rate and probably how they impact it.

Nowadays, all levels of education in Indonesia are switching back to offline learning. The findings of this study are expected could contribute to current knowledge of when educational researchers are trying to learn as many aspects of successful online learning practices as compared to traditional or blended learning practices. For classroom implications, teachers may use its findings to improve the way or strategies they implement online learning when it is urgently needed in the future.

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