



RESEARCH ARTICLE

High School Students' Motivation and Engagement in Online Learning

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Abstract

This study aims to determine the effect of motivation toward student engagement of high school students in Padang city in online learning. The quantitative research method of simple linear regression analysis was used in this study. This study included 331 high school students who participated in online learning using random sampling techniques. The Motivated Strategies and Learning Questionnaire (MSLQ) and the Student Engagement Scale were applied to this study. Reliability on the motivation scale was .922 and the student engagement scale was .926. The results of this study indicate that motivation has a significant effect on student engagement in high school students in Padang City in online learning. This can be seen from the significance value of .000 ($p < .05$) and the R-square coefficient (R^2) value of .545. It can be concluded that motivation influences student engagement by 55%, while the remaining (45%) is influenced by other factors not investigated in this study.

Keywords: motivation, student engagement, online learning

INTRODUCTION

The current COVID-19 pandemic has had an impact on various fields, including education. If learning has always been done face-to-face in schools, the Minister of Education and Culture is now requiring students to learn online from home (Kemendikbud, 2020). This is one of the government's policies aimed at reducing the COVID-19 transmission chain. Furthermore, by implementing online learning, it will be possible to keep the education system running during the COVID-19 pandemic (Mukhtar, Javed, Arooj, & Sethi, 2020).

Online learning allows each student to study whenever and wherever so that learning becomes more flexible (Pangodian, Santosa, & Nugroho, 2019). Students can interact with teachers/teaching staff using various technologies such as the world wide web, email, group chat, audio, and video conferencing (Dhull & Sakshi, 2017). Students can also access learning materials or materials at any time and repeatedly (Rohmah, 2011).

Online learning presents its own challenges for students. According to Napsawati (2020), the challenges faced by students during online learning, including network problems or signal difficulties that interfere with

the learning process, then students find it difficult to manage learning time due to the many other activities that may occur compared to students being in school.

The challenges faced by students during online learning have caused students to be negligent in doing the tasks given by the teacher/teaching staff (Napsawati, 2020). Online learning can also lead to frustration, anxiety and confusion in students (Pangodian et al., 2019). In addition, in online learning students feel bored, because they have to study alone at home (Mastura & Santaria, 2020).

The impact of online learning, which has been described previously, indicates that there is a problem with student engagement in online learning. This is reinforced by the results of Anugrahana's research (2020), which says that student engagement is less than optimal during online learning.

Student engagement is defined as students' willingness to actively participate in learning, which is followed by positive emotions in learning activities, and are willingness to make various efforts to be successful in learning activities (Fredricks et al., 2004). Students who are engaged or involved will devote time and effort to having studied material, demonstrating learning, interacting with others in the classroom, and being emotionally invested in their learning (Dixson, 2015).

According to Fredrick et al., (2004), the embodiment of student engagement can be seen from three aspects, including behavioral engagement in the form of positive behavior (such as following rules), actions involved in learning and academic tasks (such as effort, perseverance, concentration) and participating in learning. Furthermore, emotional engagement is a student's affective reaction to learning (such as interest, happiness, boredom, sadness, or

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anxiety). Then there's cognitive engagement, which is a combination of student attention, student willingness, and student learning strategies.

According to Schlechty (in Saeed & Zyngier, 2012), students who are engaged in learning are more likely to be diligent in achieving goals despite difficulties in learning. Walker, Greene, and Mansell (2006) then stated that cognitively engaged students use a variety of strategies and spend time doing learning tasks. Meanwhile, students with low student engagement will exhibit passivity by being apathetic, easily influenced by things outside of learning, not participating fully in learning activities, feeling helpless and tired during learning activities, and so on (Reeve, Jang, Carrell, Jeon, & Barch, 2004).

Motivation is one of the factors that influence student engagement (Gibbs & Poskitt, 2010). According to Zimmerman (in Schunk, Meece, & Pintrich, 2014), students who are motivated to learn are more likely to participate in learning activities. Then, according to Rimbarizki (2017), students who have learning motivation will be encouraged to be active in class and to express their opinions as well as to express obstacles or problems in learning. And the purpose of this study was to determine how much influence motivation has on student engagement in Padang City High School students in online learning.

METHODS

This study used quantitative methods. Respondents in this study included 331 high school students from the city of Padang who participate in online learning. Students who participated in the study were distributed across nine of Padang's eleven sub-districts. Respondents were retrieved using an accidental sampling technique and an online survey (g-form) as a data collection medium.

The measuring instruments used in this research are indeed a modified Motivated Strategies and Learning Questionnaire (MSLQ) measuring instrument from Pintrich et al. (1991) and a student engagement measuring instrument created by the researcher based on student's engagement aspect by Fredrick et al. (2004). The motivation measuring instrument has 26 items with a reliability of .922 and consists of a value component, an expectancy component, and an affective component. The motivation scale is based on a 5-point likert scale ranging from extremely inappropriate, not appropriate, sometimes appropriate, slightly appropriate, sufficiently appropriate, appropriate, and extremely appropriate. The student engagement measurement tool then has 38 items with a reliability of .926 that include aspects of behavioral engagement, emotional engagement, and cognitive engagement. That scale responds ranging from never, seldom, sometimes, often, and always. And the data analysis technique used is simple linear regression.

RESULT

Table 1
Description of the research subject

Gender	Frequency	Percentage
Male	80	24.2
Female	251	75.8
Total	331	100

According to table 1. The description of the research subject, the subjects of this study were 331 people, with 80 male subjects and 251 female subjects. All research subjects are Padang City senior high school students who are involved in online learning.

Table 2.
Description of subjects based on school

School Status	Frequency	Percentage
Public senior high school	260	78.5
Private High School	71	21.5
Total	331	100

Table 2. shows that there are 260 students from public high schools and 71 students from private-public high schools the total number of subjects (is 331).

Table 3.
the subject's description based on age

Range-Age	Frequency	Percentage
15 years	56	16.9
16 years	139	42
17 years	121	36.6
18 years	15	4.5
Total	331	100

Table 3 shows that the subjects in the study ranged in age from 15 to 18 years. There were 56 subjects aged 15 years, 139 subjects aged 16 years, 121 subjects aged 17 years, and 15 subjects aged 18 years. As can be seen, a large percentage of the subjects in this study were under the age of 16. The results of a simple linear regression test of the two variables are shown following table.

Table 4.
Results of simple linear regression

Variable	Mean	F	Sig
Student Engagement	64250,145	393,620	0,000
Motivation			

The level of significance ($p = 0.000$; $p 0.05$) is shown in table 4. This means that motivation has a significant influence on student engagement in online learning among high school students in Padang City. The magnitude of the influence contributed by the motivation to student engagement is then shown in table 5. below:

Table 5.
Motivational Regression Coefficient on Student Engagement

Variable	R	R ²	B	Sig
Student Engagement	0,738	0,545	57,527	0,000
			0,168	

The value of R² (R-square) is 0.545, as seen in Table 5. It means that motivation affects student engagement 54.5%

of the time, with the remaining 0.455 or 45.5% influenced by other variables.

DISCUSSION

Motivation can describe what drives or motivates students to participate in learning activities (Gibbs & Poskitt, 2010). Motivation, according to Schunk et al. (2014), involves a goal that can provide encouragement and direction to carry out activities, both physical and mental. Where physical and mental activity are described as student involvement or student engagement (Schunk et al., 2014). According to Sadirman (in Galugu & Amriani, 2019), motivation is a series of efforts made to provide certain conditions so that a person has the will to do an activity and tries to eliminate any feelings of dislike that he may have.

Previous research on face-to-face learning by Saeed and Zyngier (2012) found that motivated students were more engaged in their learning. Then, according to Amalia and Hendriani (2017)'s research, motivation has an effect on student engagement. Students who are highly motivated will appear more enthusiastic, active while learning, and curious. According to Nayir (2017), students who are highly motivated will try to be involved (engaged) in the classroom. Students who are highly motivated will participate actively in and enjoy the learning process (Martin, 2010).

Then, according to the findings of research on the effect of motivation on student engagement in online learning, motivation was a significant predictor of student engagement or student involvement in online learning (Xiong, Li, Kornhaber, Suen, Pursel, and Goins, 2015). Where motivation is required to initiate, maintain, or adjust learning behavior. According to Zimmerman (in Schunk et al., 2014), motivated students are more likely to participate in learning activities such as attending classes, practicing the material to be studied, and taking notes to facilitate future learning. Furthermore, according to Palmer (in Amalia & Hendriani, 2017), if students are highly motivated, they will engage in learning activities such as doing assignments right away, asking questions and answering them voluntarily, and so on.

The effect of motivation on student engagement can also be explained through the self-system model of motivational development which provides a theoretical model for studying motivation and engagement or engagement (Connell, 1990; Connell & Wellborn, 1991; Deci & Ryan, 1985 in Fredricks et al., 2004). This model assumes that people have three basic motivational needs: autonomy, competence, and relatedness. Students will be more involved (engaged) in learning if they can meet these three needs. Students' need for connection is more likely to manifest itself during learning activities in which teachers and classmates foster a caring and supportive environment. Then students' need for autonomy can be met when they feel they have a choice in learning.

Finally, students' competence needs can be met when they have an optimal class structure and believe they can achieve the desired goals. Then, according to Ryan and Powelson (1991), the types of needs that can motivate students to engage in learning are mostly interpersonal, namely the need for autonomy and relatedness in learning activities.

Other factors that can affect student engagement, according to Gibbs and Poskitt (2010), include student relationships with teachers and other students, relational

learning, disposition to become learners, personal agency (student self-control over learning conditions), self-efficacy, and goal orientation. Students participating in learning and making their own learning arrangements. Then, according to Xiong et al. (2015), another factor that can influence student engagement in online learning is students' readiness to participate in online learning.

CONCLUSION

Based on the results of a study, there was a significant influence of motivation on student engagement in online learning among high school students in Padang City. This means that the level of student motivation can influence the level of student engagement in online learning among high school students in Padang City. The percentage contribution of motivation to student engagement is 55%, while the remaining 45% is influenced by other factors. The results showed that the motivation and student engagement of high school students in the city of Padang in online learning was in the medium category.

Based on the findings, this study suggests that future researchers who want to investigate the same topic should be able to draw samples from a larger population, such as students in West Sumatra who participate in online learning. As a result, the research findings can provide more data and enrich findings concerning motivation and student engagement. This research can be used to develop policies regarding online learning.

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