

# The Effect of Emotion Regulation on Learning Saturation of Students in The Era of Covid 19

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**Abstract.** This study aimed to investigate the effect of emotional regulation on learning saturation of students in the era of the covid 19 pandemic. This study was quantitative research. The population in this study were 608 students. The sample of this study were 241 students. The instrument given was an emotion regulation and a learning saturation questionnaire. The data were analyzed using a simple linear regression technique. The results showed that the significance value ( $0.00 < 0.05$ ) and the t count value is  $4.261 > t_{table}$  1.046. It could be concluded that there is an effect of Emotion Regulation on the Learning Saturation of students in the Guidance and Counseling Study Program, Faculty of Education, State University of Medan.

**Keywords:** Emotion Regulation, Learning Saturation, Covid 19

## 1 Introduction

Online learning during the COVID-19 pandemic has its own challenges, it requires the capacity to manage emotions so that learning becomes something fun and avoids boredom from spending more time studying at home. According to Cole [4] Emotion regulation puts emphasis on why and how emotions can regulate and facilitate psychological processes, namely focusing attention, problem solving, social support and why emotion regulation has a detrimental effect, such as disrupting the process of focusing attention, interfering with the problem solving process and disrupting social relations between individuals.

According to Gross [6] emotion regulation is an individual's way of influencing the emotions they have, when individuals can feel them and how individuals can experience or express these emotions. Gross [7] said that there are 2 strategies in emotion regulation, namely: (1) Cognitive Reappraisal, which is a form of cognitive change that involves a potential emotional core situation so that it can change the influence of the emotional. (2) Conscious Suppression of Expression of Emotions (Expressive Suppression) is a disclosure of responses that slow down behavior in expressing the emotions that are being experienced.

Strongman [15] argued that aspects of emotion regulation consist of changing situations, choosing situations, spreading attention, changing responses and changing cognitive. According to Goleman [9] emotion regulation is part of emotional intelligence. According to Balter [2] Emotion regulation is a form of effort in managing or regulating emotions and how individuals can experience and express emotions that can influence others to achieve a goal. Krings [10] said that Emotional regulation has a goal in minimizing negative consequences in a problem that is faced with how to evaluate and monitor one's emotional experience. Emotion regulation can help individuals to control themselves.

Then, when facing difficulties, they will not be influenced by negative emotions and are able to guide individual behavior in a positive direction. Faridh [5] argued that This allows individuals to minimize learning saturation. Learning saturation can be defined as a state of very low arousal according to Van Tilburg & Igou [20]. Boredom is conceptualized in an academic context, so it is referred to as academic boredom according to Pekrun [13]. An emotional state that can occur in all academic boredom such as when attending lectures or attending classes, while taking exams, and when preparing for homework.

From this perspective, learning saturation is seen as a form of emotion, Pekrun [13]. Then boredom is conceptualized in terms of factors that explain emotions in activities that are shaped by how the task is faced and felt. Previous studies have shown that academic boredom is associated with positive and negative levels of emotion, Goetz et al [8]. Learning saturation arises especially in situations where students experience low stimulation and lack of intrinsic motivation simultaneously.

In Pekrun (2011) Control Value Model, boredom results from activities that are less exciting and are considered low in personal value. Westgate and Wilson (2018) describe the Meaning Model and Attention Components, in which boredom occurs due to, (a) a mismatch between the cognitive and mental demands of available resources and (b) meaning or value related to the expected outcome. For some students, this aspect of schooling may be insufficiently stimulating and a lack of autonomy and undermining intrinsic motivation. Experiences of feeling trapped or constrained by unchanging school routines may reduce motivation and lead to poor outcomes (Goetz et al., 2014).

Learning saturation is an emotional situation that describes individuals experiencing mental or physical boredom as a result of the demands of work related to increased learning activities. According to Edi Sutarjo [16] Based on the strength of the relationship with previous studies, it points to the fact that boredom does not overlap with other negative emotions nor does it represent only the absence of positive emotions. Suwarjo & Diana [17] said that learning saturation is defined as a condition of physical, mental and emotional exhaustion that has physical depletion characteristics, namely feelings of hopelessness and helplessness, feelings of emptiness, negative self-concept and negative attitudes accompanied by feelings of failure in achieving ideal self goals.

According to Edi Sutarjo, Dewi Arum WMP, Ni.Kt. Suarni [16] learning saturation, namely the existence of an emotional condition that occurs about someone who has experienced mental and physical saturation which becomes the demands of a job related to increased learning. Aspects of learning saturation according to Widari Ni et al [16] are firstly fatigue in the mind that comes from excessive tension, individuals with this symptom cannot concentrate, are not willing to do assignments, lose memory in a lesson. Second, emotional exhaustion where individuals feel they will feel excessively tired both physically and emotionally, individuals feel drained of energy and also feel empty and lose energy to face lessons and face other people. Third, it does not bring results, individuals cannot get maximum learning outcomes, learning outcomes do not get progress and even learning achievement will decrease.

Tam et al [18] provide evidence of this saturation dynamic. In their study, over two weeks, high school teachers self-reported their burnout. Students in each of their own classes reported their saturation at the end of the class session. Studies show that burnout is a commonly reported emotional state among high school students. The hypothesis in this study is that there is a positive relationship between emotional regulation and learning saturation in guidance and counseling students at the State University of Medan.

## 2 Methods

The research was conducted at the Guidance and Counseling Study Program, Faculty of Education, State University of Medan. This study uses a quantitative approach to survey methods that aim to test hypotheses. The data collection technique used an emotion regulation questionnaire and a learning saturation questionnaire. The population in this study were active students of the guidance and counseling study program for the 2021/2022 academic year with a total of 608 students. The sample was taken by calculating the slovin formula from the total number, namely 241 students. The data analysis technique used descriptive, regression and comparative statistics.

## 3 Result and Discussion

### 3.1 Result

Steps to identify students who experience emotional regulation, using the Mean and Standard Deviation. Based on the answers given by the respondents, the data can be distributed in several categories. Based on calculations using the formula of the Emotion Regulation variable, it is known:

$$X_{min} = 43$$

$$X_{max} = 75$$

$$Range = X_{max} - X_{min}$$

$$= 75 - 43 = 32$$

$$Mean = (X_{max} + X_{min}) / 2$$

$$= (75 + 43) / 2 = 59$$

$$SD = Range / 6$$

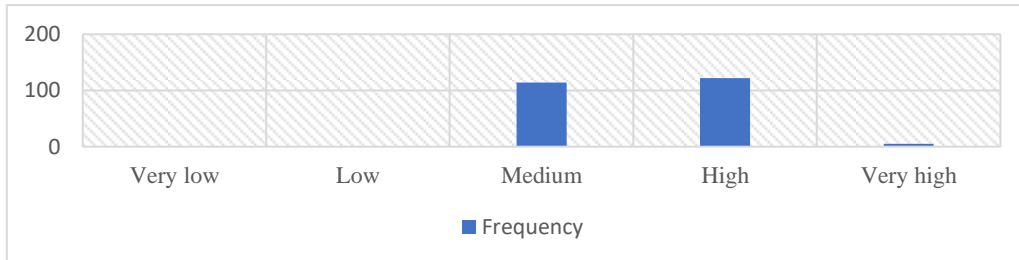
$$= 32 / 6 = 5,3$$

Based on the above calculations, students who experience emotional regulation can be categorized in the form of table 1.

**Table 1.** Emotion Regulation Category

Category	Range	Frequency	%
Very high	$\geq 64$	5	2.1 %
High	52-63	122	50.6 %
Medium	40-51	114	47.3 %
Low	28-39	0	0 %
Very low	$\leq 27$	0	0 %

Based on the results of table 1, it can be seen that as many as 114 students (47.3%) were in the medium group, as many as 122 students (50.6%) were classified as high, 5 students (21.1%) were in the very high group. The histogram table below can clarify the level of emotion regulation.



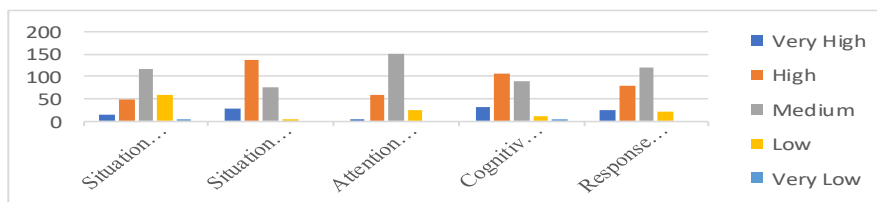
**Fig.1.** Frequency of Emotion Regulation

In the emotion regulation variable, there are five indicators that can conclude that emotional regulation has an influence on student learning saturation during the covid 19 pandemic. The indicators in emotional regulation are: Situation Selection, Situation Change, Attention Dissemination, Cognitive Change, and Response Change.

**Table 2.** Description of all Emotion Regulation Indicators

Category	Situation Selection (I)		Situation Change (II)		Attention Dissemination (III)		Cognitive Change (IV)		Response Change (V)	
	F	%	F	%	F	%	F	%	F	%
Very High	14	5,8	27	11	5	2,1	31	13	24	10
High	50	20.74	136	56.43	60	24.89	107	44.39	78	32.36
Medium	117	48.5	77	31.95	150	62.24	91	37.75	119	49.37
Low	59	24.48	1	0.41	26	10.78	11	4.56	20	8.29
Very Low	1	0.41	0	0	0	0	1	0.41	0	0

Based on the results of the calculations in table 2, it can be seen that there is a Very Low category for one student in indicators (I) and (IV). In the low category, there are 59 students in the indicator (I), 1 student in the indicator (II), 26 students in the indicator (III), 11 students in the indicator (IV), and as many as 20 students in the indicator (V). The high score in table 2 is found in the situation change indicator (II) as many as 136 students (56.43%). This aims to show that most of the regulation of emotions occurs when situations change. For more details, see the histogram below.



**Fig.2.** Changes in Emotion Regulation Based on Indicators

Steps to identify the effect of emotion regulation on learning saturation, then use the Average and Standard Deviation. Based on the calculation, the data is distributed into several categories. Based on data from the learning saturation variable, it is known that the highest value ( $X_{max}$ ) is known to be 63 while the minimum value ( $X_{min}$ ) is 26. Then  $M$  and  $SD$  can be calculated as follows. Therefore, the level of student learning saturation can be categorized in table 3.

$$X_{min} = 26$$

$$X_{max} = 63$$

$$Range = X_{max} - X_{min}$$

$$= 63 - 26 = 37$$

$$Mean = (X_{max} + X_{min}) / 2$$

$$= (63 + 26) / 2 = 44,5$$

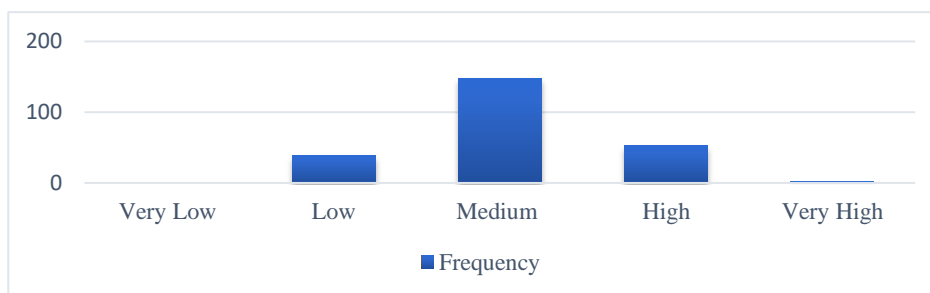
$$SD = Range / 6$$

$$= 37 / 6 = 6,1$$

**Table 3.** Learning Saturation Category

Category	Range	Frequency	%
Very High	$\geq 64$	0	0.0 %
High	52-63	39	16.2 %
Medium	40-51	148	61.4 %
Low	28-39	52	21.57%
Very Low	$\leq 27$	2	0.82 %

From the table above, we can see that there were 2 students who belonged to the very low category (0.82%), 52 students were in the low category (21.57%). There are 148 students in the medium category (61.4%) and 39 students in the high category (16.2%). The histogram image below can clarify the data obtained.



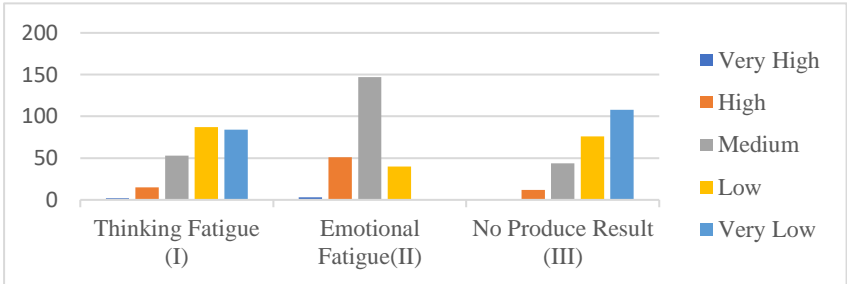
**Fig.3.** Frequency of Learning Saturation

The learning saturation variable has three indicators of achievement, namely thinking fatigue there are 3 statements, emotional fatigue there are 9 statements and there are 3 statements that no produce results. The five categories are described in table 3. The following is a description of each indicator of learning saturation which can be seen in table 4.

**Table 4.** Description of all Learning Saturation Indicators

Category	Thinking Fatigue (I)		Emotional Fatigue (II)		No produce result (III)	
	F	%	F	%	F	%
Very High	2	0.82	3	1.24	1	0.41
High	15	6.22	51	21.16	12	4.97
Medium	53	21.99	147	60.99	44	18.25
Low	87	36.09	40	16.59	76	31.53
Very Low	84	34.85	0	0	108	44.81

Based on the data in table 4, it can be seen that there are students in the Very High category as many as 2 students in the indicator (I), 3 students in the indicator (II), and 1 person in the category not bringing results (III). Meanwhile, in the Medium category, there were 147 students in category (II), and from the indicator table, there were no results in category (III) seen as many as 108 students chose no produce results. Based on the data found, it can be seen in the histogram image below.



**Fig.4.** Histogram of Learning Saturation Indicators

**3.2 Discussion**

The study was conducted to determine the extent of the influence of emotional regulation on student learning saturation at the State University of Medan. The data collection was carried out using a scale in the form of a google form which was distributed online. Data analysis was carried out by describing the results of each variable and each indicator. Through emotion regulation variables, it is known that as many as 122 (50.6%) students are in the high category level. The data above shows that students' assessment of their ability to manage emotions is in the high category.

Because the higher the category of emotional regulation that students have, the higher their ability to express their emotions. The above is supported by various research results which also say that emotion regulation develops throughout the human life span Cole [3] So, if you face a problem someone has assertiveness. Silaen [14] & Muna [12] argued in another study also shows that self-regulation training can reduce learning saturation.

Based on the results of data analysis per emotion regulation indicator, it can be seen that 136 students (50.6%) had the highest score obtained through the Situation Change indicator with a high category. Through the results of the analysis, it can be seen that students have high emotional regulation abilities, especially in changing situations. This is in line with research according to Ayuningtyas [1] which shows that emotion regulation in changing learning from face-to-face to online (online) is an important aspect that must be possessed by all students.

This was reinforced by a brief interview with a student of the Unimed Guidance and Counseling study program with the initials A, he felt the boredom of learning he felt due to his inability to manage emotions by changing the situation from face-to-face learning to online learning during this covid 19 pandemic. So, it cannot be ignored that emotion regulation has an important aspect in managing learning saturation.

In the analysis of the data variables shown in learning saturation, the highest score was 148 students in the medium category (61.4%) which means that student learning saturation is in the medium category. Through the results of data analysis per indicator of learning saturation, it can be seen that the highest score of 147 students (61%) was obtained on the indicator of emotional fatigue in the medium category.

Through the results of the data analysis, it can be seen that the emotional fatigue of students in learning saturation is in the moderate category. This is reinforced by interviews with student B who said that when studying online they experienced emotional exhaustion, so they often became angry and annoyed when the signal disappeared and there were too many lectures. Through the results of linear regression analysis with ANOVA, it can be seen that 18.1% of the learning saturation level is determined by emotional regulation factors.

#### ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	938.097	1	938.097	18.160	.000 <sup>b</sup>
1 Residual	12346.152	239	51.658		
Total	13284.249	240			

Based on the explanation above, it is known that there is an influence of emotional regulation on student learning saturation of the guidance and counseling study program, Faculty of Science, State University of Medan. The validity of the regression equation in the data above can be found through the t-test. With the test rule that if  $t_{count} > t_{table}$  then the hypothesis can be accepted.

Model		Unstandardized		Standardized	T	Sig.
		Coefficients		Coefficients		
		B	Std. Error	Beta		
	(Constant)	23.801	4.879		4.878	.000
1	Emotion Regulation	.396	.093	.266	4.261	.000

Through the results of the significance value of the coefficients table, a significance value of 0.00 < 0.05 can be obtained, so it can be concluded that there is an influence between the Emotional Regulation variable (x) on the learning saturation variable (y). Then, after looking for table at a significant level of 0.05 with  $n-2 = 239$ , a value of 1.046 was obtained. It turns out that  $t_{count} > t_{table}$  or  $4.261 > 1.046$ , therefore the hypothesis is accepted. Then it can be

proven that the equation in the regression is valid or if in a simple way it can be proven that emotional regulation significantly affects the learning saturation of students in the guidance and counseling study program, Faculty of Education, State University of Medan.

In this study, it can be found that emotional regulation has a contribution of 18.1% in reducing the level of student learning saturation, of that amount, there are still 81.9% which is another determining factor that can affect student learning saturation and is not discussed in the study. this. Through the studies conducted, it is proven that emotional regulation is not too much or can be said to be only a little in influencing the decrease in the level of student saturation.

However, emotional regulation takes part in reducing student learning saturation levels and therefore cannot be ignored. If students are able to regulate emotions appropriately, then student skills in learning will increase so that in this era of the covid 19 pandemic, where learning is carried out online (on a network), students are able to manage learning saturation and students can be independent in learning.

#### **4 Conclusion**

The emotional regulation of students in the guidance and counseling study program is in the high category, as many as 122 (50.6%) which means that students' assessment of their ability to manage emotions is high because the higher the category level of emotion regulation that students have, the higher their abilities. in expressing their emotions. The indicator on the emotion regulation variable that gets the highest value is found in the situation change indicator. The level of learning saturation of the UNIMED guidance and counseling study program students is in the moderate category (61.4%), the indicator on the learning saturation variable that has the highest score is emotional fatigue.

The results of the linear regression analysis with ANOVA showed that 18.1% of the learning saturation level was determined by emotion regulation factors. Judging from the significance value of the coefficients table, a significance value of  $0.00 < 0.05$  is obtained, therefore, it can be concluded that there is an influence between the emotional regulation variable (x) on the learning saturation variable (y).

Then, after looking for ttable at a significant level of 0.05 with  $n-2 = 239$ , a value of 1.046 was obtained. It turns out that  $t_{count} > t_{table}$  or  $4.261 > 1.046$ , therefore the hypothesis is accepted. Based on this, it is simply proven that emotional regulation has a significant effect or it is proven that the regression equation above is already valid on the learning saturation of students in the guidance and counseling study program, Faculty of Education, State University of Medan, for the 2021/2022 academic year.

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