

## **ANALYSIS OF FACTORS RELATED TO STUDENT STRESS LEVELS DURING ONLINE LEARNING AT MUHAMMADIYAH UNIVERSITY EAST KALIMANTAN**

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### **ABSTRACT**

Online learning needs to be a concern because it has positive and negative impacts, this can cause student stress due to various influencing factors. Procrastination is the tendency to postpone a task or job. Social support is something that needs attention and is associated with material and non-material support for students. Self-efficacy is the ability possessed by individuals to achieve certain desired results in carrying out an action or task. This study aimed to determine the relationship between procrastination, social support, and self-efficacy and student stress during online learning. The purpose of this study was to analyze the relationship between procrastination factors, social support and self-efficacy with student stress levels during online learning. This study employed descriptive correlational design with cross-sectional approach and examined 707 students of Muhammadiyah University East Kalimantan with a purposive sampling method. Procrastination was measured using the APS (0.901), social support using the MSPSS (0.85), and self-efficacy using GSE (0.83). Stress was measured using DASS (0.755). The instrument used is the Indonesian language version which has been tested for validity and reliability. The results show that respondents had 247 (34.9%) high procrastination, 318 (45%) moderate social support, 364 (51.5%) high self-efficacy. Respondents experienced severe stress 261 (36.9%). The results of the gamma correlation test obtained a p value of  $0.000 < (0.05)$  there is a significant relationship between procrastination, social support and self-efficacy with student stress levels during online learning. It is hoped that educational institutions and parents can play an active role in reducing other factors that cause stress during online learning.

Keywords: procrastination; online learning; stress levels; social support; self efficacy

### **INTRODUCTION**

Online learning is an educational innovation that incorporates elements of technology into learning. Online learning is learning via the internet with features that provide access, connectivity, flexibility, and various learning interactions. Online learning is expected to be one of the solutions to continuing teaching and learning activities that can be done anywhere and anytime. However, with changes in the learning process from face-to-face to online learning, this makes learning unable to run optimally. (Irawati & Jonatan, 2020). Students during online learning experience positive impacts, namely that online learning is fun, gathering with family, easy to find material, and preventing transmission of viruses, while the negative impacts are not understanding the material, being lazy, signal interference, being boring, increasing assignments, and using a lot of data, so that online learning has an effect even on psychological effects such as anxiety, stress, and depression. Online learning has an indirect impact on student psychology. Students experience fear, anxiety, and worry about academic demands. Students began to complain about several obstacles that occurred during the online lecture process, such as non-existent networks, expensive internet packages, homework that also had to be completed, and piles of coursework, and students felt less focused on studying without direct interaction with lecturers as well as other students. The inability of students to adapt to these circumstances makes them experience stress (Betari, 2021). Stress is physical, psychological, emotional and mental tension. Students as academic beings, in their

activities are inseparable from stress. Stress can be caused by several factors both from within and outside the individual (Rismalinda, 2017).

Procrastination can be interpreted as procrastination associated with anxiety and fear of failure. Procrastination is considered an obstacle for students to achieve academic success because it can reduce the quality and quantity of learning, increase stress levels, and have a negative impact on student life (Muyana, 2018). External demands can come from coursework, study load, parents' demands for success in college, and social adjustment in the campus environment. The demands of student expectations can originate from the ability of students to follow lessons. Academic procrastination in students can have an affective impact (such as anxiety, anxiety, fear, regret, stress, uncontrolled emotions, panic, crying and sadness); cognitive (such as always remembering an unfinished task and assessing himself as having failed); behavior (such as being lazy to do other tasks, coming in late, late collecting assignments and rushing); physical (such as fatigue, difficulty sleeping, lazy to eat, headache, palpitations and pain); academic (such as delayed work, decreased grades, piling up of assignments); morals (such as cheating); interpersonal (such as getting bad ratings from other people, not feeling comfortable with the lecturer and being scolded by the lecturer) (Jisaid et al., 2022).

The definition of social support refers to the comfort, attention, appreciation, or assistance provided by others or groups to individuals; social support is defined as the help and support one gets from interacting with others (Sarafino, E.P. & Smith, 2011). Social support given to a person has various functions, namely providing assistance so that the individual can have a better mood, sharing information that can help the individual understand and overcome these problems, assisting the individual in spending time with other people, and helping the individual overcome difficult situations. According to him, it is difficult for individuals to feel positive feelings (Hidayat & Darmawanti, 2022). Self-efficacy is related to individual beliefs about things that can be done with the abilities they have and can motivate them to be able to complete challenging tasks or work toward the achievement of certain goals (Masitoh et al., 2022). Individuals who have no confidence in their abilities will tend to view the demands they face as pressing, not confident, and unsure of their ability to overcome the situation. Self-efficacy can be a possible solution to various problems for students with low self-confidence. Low self-confidence can be a behavior deviation, like imitating friends work and putting off a task or job, and bring up many bad emotional disturbances such as stress and depression (Saleh et al., 2017)

## **METHOD**

This research is a quantitative study using a cross-sectional study design approach. The population in this study was 1,943 students from all study programs at Universitas Muhammadiyah Kalimantan Timur, and the sample was taken using the stratified random sampling technique. The samples obtained had 707 respondents. Data collection uses a questionnaire in the Indonesian version that has been tested for validity. The questionnaire used for procrastination is The Academic Procrastination Scale (APS), developed by McCloskey (2011) and adapted and translated into Indonesian by Shofa Dzakiah (2021), has a Cronbach's alpha value of around 0.901 and consists of 25 question items. The social support used by researchers is the Multidimensional Scale of Perceived Social Support (MSPSS), which was developed and adapted into Indonesian (Winahyu et al., 2017). This questionnaire consists of 12 items, which include support from family, friends, and loved ones. with a reliability value of 0.85. Self-efficacy is measured using the GSE

(General Self-Efficacy) questionnaire developed by Jerusalem and Schwarzer (1995), which has been translated into the Indonesian version, tested for validity, and obtained a reliability value of 0.872 (Rachmad & Kusuma, 2021). To measure the stress variable, the Depression Anxiety Stress Scale (DASS) questionnaire was used, which was adapted into Indonesian and consisted of 42 questions, consisting of 14 questions on stress, 14 questions on anxiety, and 14 questions on depression. In this study, using the stress aspect with 14 questions, validity and reliability tests were carried out with Cronbach's alpha results of 0.755 (Fahrianti & Nurmina, 2021). Questionnaires were distributed directly to respondents and through online forms to all research samples, then analyzed univariately using the frequency distribution and bivariately using the gamma correlation test.

## RESULTS AND DISCUSSION

Table 1.  
Characteristics of Respondents (n=707)

Characteristics	f	%
Age		
<19 year	31	4,4
19-21 year	647	91,5
>21 year	29	4,1
Gender		
Male	318	45,0
Female	389	55,0
Study Program		
Bachelor of Nursing	64	9,1
Bachelor of Pharmacy	50	7,1
Bachelor of Public Health	74	10,5
Bachelor of Environmental Health	22	3,1
Bachelor of Psychology	61	8,6
Bachelor of Management	175	24,8
Bachelor of Law	50	7,1
Bachelor of International Relations	23	3,3
Bachelor of Information and Technology	79	11,2
Bachelor of Mechanical Engineering	34	4,8
Bachelor of Civil Engineering	39	5,5
Bachelor of Sports Education	17	2,4
Bachelor of Education in English	19	2,7
Residence		
Boarding House	205	29,0
With a parent or Guardian	502	71,0

Table 1 shows that the characteristics of the respondents show that the majority are aged 19–21 years, namely 647 people (91.5%). Most of them were female (389 respondents, or 55%), and male (318 respondents, or 45%). Most of the respondents were in the Bachelor of Management Study Program with 175 (24.8%). Most of the respondents live together with their parents or guardians 502 respondents (71%).

Table 2.  
Analysis of Procrastination Factors During Online Learning (n=707)

Procrastination	f	%
Very Low	57	8.1
Low	146	20.7
Moderate	241	34.1
High	247	34.9
Very High	16	2.3

Table 2 shows that most of them had a high procrastination rate 247 respondents (34.9%), and a small number experienced very high procrastination (2.3%).

Table 3.  
Analysis of Social Support Factors During Online Learning (n=707)

Support System	f	%
Low	166	23,5
Moderate	318	45,0
High	223	31,5

Table 3 shows that most of the respondents experienced moderate social support; there were 318 respondents (45%), and at least 166 respondents (23.5%) experienced low social support.

Table 4.  
Analysis of Self Efficacy Factors During Online Learning (n=707)

Self Efficacy	f	%
Low	343	48,5
High	364	51,5

Table 4 shows that most of them have high self-efficacy; there are 364 (51.5%) who have high self-efficacy, and 343 (48.5%) have low self-efficacy.

Table 5.  
Analysis of Stress Level During Online Learning (n=707)

Stress Level	n	%
Normal	251	35.5
Mild	69	9.8
Moderate	92	13.0
Severe	261	36.9
Extremely Severe	34	4.8

Table 5 shows that most of them experienced severe stress with 261 respondents (36.9%) and very severe stress with 34 respondents (4.8%).

Table 6.  
 Analysis of the Relationship between Procrastination and Stress Levels During Online Learning  
 (n = 707)

Procastination	Stress Level					Total	r	p value
	Normal	Mild	Moderate	Severe	Extremely Severe			
Very Low	41	6	5	3	2	57	0,557	0,000
Low	81	24	21	12	8	146		
Moderate	99	28	45	55	14	241		
High	24	9	18	189	7	247		
Very High	6	2	3	2	3	16		

Table 6 shows that there is a significant relationship between procrastination and stress levels during online learning in students ( $r = 0.557$ ,  $p = 0.000$ ). The strength of the relationship between the two variables is moderately correlated, and the relationship is positive, which means that the higher the procrastination, the heavier the respondent's stress level.

Table 7.  
 Analysis of the Relationship between Social Support and Stress Levels During Online Learning  
 (n = 707)

Support System	Stress Level					Total	r	p value
	Normal	Mild	Moderate	Severe	Extremely Severe			
Low	12	3	12	133	6	166	-0.592	0,000
Average	109	32	51	108	18	318		
High	130	34	29	20	10	223		

Table 7 shows a significant relationship between social support and stress levels during online learning for students ( $r = -0.592$ ,  $p = 0.000$ ). The strength of the relationship between the two variables is moderately correlated and has a negative relationship, which means that the higher the social support received, the lower the stress level of the respondents.

Table 8.  
 Analysis of the Relationship between Self Efficacy and Stress Levels During Online Learning  
 (n = 707)

Self Efficacy	Stress Level					Total	r	p value
	Normal	Mild	Moderate	Severe	Extremely Severe			
Low	56	14	32	221	20	343	-0.703	0,000
High	195	55	60	40	14	364		

Table 8 shows that there is a significant relationship between self-efficacy and stress levels during online learning for students ( $r = -0.703$ ,  $p = 0.000$ ). The strength of the relationship between the two variables is strongly correlated and has a negative relationship, which means that the higher the respondent's self-efficacy, the lower the respondent's stress level. The results of this study show there is a relationship between procrastination, social support, and self-efficacy factors and the stress level of Muhammadiyah University East Kalimantan students, each of which has a moderate to strong relationship.

The procrastination factor has a positive relationship with student stress levels during online learning; the higher the student procrastination, the heavier the stress level during online learning. Procrastination, or academic procrastination, is a tendency to delay academic-related activities and behaviors, a complex psychological behavior, and a source of considerable stress and anxiety (Rajesh & Poonam, 2019). Procrastination among students in college is very common. Students who experience learning difficulties and are unable to do assignments will procrastinate as a form of circumvention. Procrastination due to a series of delays due to the involvement of other tasks that are considered more important or satisfying is seen in deviant behavior that results in emotional disturbances such as stress (Kandemir, 2014). Online learning activities certainly have several impacts on students, including the difficulty of arranging class schedules with assignments at home or helping parents. Student assignments collected online will coincide with assignments from other lecturers; in this case, of course, students need good time management. Another factor is attention disturbances such as invitations to play with friends, which may be more tempting and make students complacent about them so that they set aside existing assignments and make them neglected, and it is not clear when they will be completed. The results of other studies show that procrastination can occur because of the time gap between plans and other work and because of activities that are more enjoyable (Khoirunnisa et al., 2021).

Social support is a form of verbal and nonverbal information, assistance, and behavior that is given or carried out by the people closest to the individual in their social environment, and this influences the feelings and behavior of the individual. Social support is also interpreted as providing a sense of security, caring, and providing assistance that individuals receive from other individuals or from a group. A study shows that the first-year students at Syiah Kuala University have a moderate level of social support. A moderate level of social support means that most of the students perceived the care that had been given by a person or group, such as parents and friends as adequate. The students with a moderate level of social support were able to perceive that their family really try to help them. They have received emotional help and talked about their problems with their family. The family also helped them make decisions (Marhamah & Hamzah, 2017). Other research also shows that most respondents get social support in the moderate category during online learning, such as from student families who are always looking for information about the online learning process; families also teach students about things to avoid while attending online lectures; families sometimes give advice when there are problems in lectures; and sometimes the family reminds them to attend lectures diligently (Ibrahim et al., 2020).

Academic performance Self-efficacy is the belief in one's own ability to carry out all activities that support individual learning processes. Efficacy plays a very important role in everyday life. A person will be able to use his potential optimally if self-efficacy supports it. The results of other studies show that the self-efficacy factor has a significant relationship with stress levels ( $p = 0.000$ ). This condition is consistent with a study on medical faculty students ( $p = 0.000$ ). Students who have low self-efficacy have a risk of experiencing stress 18.857 times. These results show that self-efficacy has a greater influence on stress (Paramita et al., 2022). For this reason, it is very important for each individual to be able to assess whether he has the power to produce something he wants, because this shows high self-efficacy, which will be perceived as motivation for individuals cognitively to act appropriately and purposefully, especially if the goal to be achieved is a clear goal. Self-efficacy is important and must be owned by students because self-efficacy can influence thinking processes, levels of motivation to learn, and conditions of feeling, which all contribute to the type of performance performed when stress occurs. Self-efficacy is an important aspect of

motivation and behavior that can affect one's life. The result of analyzing the four variables of college life adjustment, self-efficacy, perceived stress, and depression for their correlation using Pearson correlations was as follows: There was a strong positive correlation ( $r = .586$ ,  $p = .000$ ) between college life adjustment (3.180.44) and self-efficacy (3.11 0.45). Meanwhile, there was a strong negative correlation ( $r = -.324$ ,  $p = .000$ ) with stress (Sim & Moon, 2015).

## CONCLUSION

Based on the results and discussion in the study entitled Characteristics of Respondents at The Muhammadiyah University East Kalimantan show that the majority are aged 19–21 years, namely 647 people (91.5%). Most of them were female (389 respondents, or 55%), and male (318 respondents, or 45%). Most of the respondents were in the Bachelor of Management Study Program with 175 (24.8%). Most of the respondents live together with their parents or guardians 502 respondents (71%). There is a significant relationship between procrastination ( $r:0.557$ ,  $p:0.000$ ), social support ( $r:-0.592$ ,  $p:0.000$ ), and self-efficacy factors ( $r:0.0703$ ,  $p:0.000$ ) and the stress level of University Muhammadiyah East Kalimantan students who have moderate to strong strengths. It is hoped that educational institutions and parents can play an active role in reducing other factors that cause stress during online learning

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