

## Relationship between Online Academic Self-Efficacy and Procrastination Behavior in Students

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### Abstract

*The Covid-19 pandemic has an effect on students which requires them to do online learning. This condition has an impact on students to carry out procrastination behavior. This study aims to determine the relationship between online academic self-efficacy and procrastination behavior in students. The research method used is quantitative with a correlational design. With a sample of 266 participants who are actively studying in Salatiga, and use techniques cluster random sampling Data collection using online academic self-efficacy scale, and procrastination scale. The research results show that the value  $R_{xy} = -0.097$  and  $sig. = 0.114$  which means there is a negative relationship between self-efficacy online academic and procrastination behavior in students.*

### Keywords

self-efficacy; academicon line; procrastination behavior.



## I. Introduction

Learning during the Covid-19 pandemic was carried out using a variety of systems, namely remotely and using the internet (Aklima & Antara, 2020). Changes in the learning process from face-to-face to online learning and working from home for educators are changes that must be implemented by every school and tertiary institution so that they continue to carry out the teaching and learning process (Argaheni, 2020). The impact of online learning is that students experience confusion because of online learning, students become passive, less creative and productive, accumulation of information or concepts for students becomes less useful, students experience stress, and increases students' language literacy skills (Argaheni, 2020). According to Moawad (2020) online learning in fact still encounters many problems such as students' laziness to take online lectures, lack of adequate infrastructure, lack of student motivation in carrying out assignments and choosing to postpone work so that it leads to stress conditions or even burnout due to the large number of assignments. which must be completed at the end. Apart from problems in implementation, online learning activities also leave various kinds of problems as a side effect, one of which is procrastination (Marantika, 2020). The outbreak of this virus has an impact of a nation and Globally (Ningrum et al, 2020). The presence of Covid-19 as a pandemic certainly has an economic, social and psychological impact on society (Saleh and Mujahiddin, 2020). Covid 19 pandemic caused all efforts not to be as maximal as expected (Sihombing and Nasib, 2020).

Late adolescents who are currently pursuing knowledge in tertiary institutions are called students. Learning to be a leader, socializing, organizing, studying science is a student's task as a student in order to achieve success in his life. Students are also considered as a group of scholars and intellectuals, who bear a heavy burden on their shoulders to determine the nation's future (As'ari, 2007). Understanding problems, classifying problems, and determining the best way out of these problems is what is

expected of students who have higher capacities. However, many problems can arise from within students as academics such as the many activities that must be completed, poor time management, many demands that must be met, and many coursework.

Students as academics often get quite a lot of workload, especially assignments related to the subjects they choose, the purpose of giving these assignments is to find out students' understanding of the material that has been presented, even so that students have the responsibility to complete assignments. However, in practice problems are often found related to assignments given by lecturers, one of which is that there are still many students who procrastinate doing assignments. and obligations is one of the unpreparedness which until now still often occurs in students (Wardani & Nurwardani, 2019).

In Burka & Yuen's (2008) study it was found that the results of student academic procrastination reached 75%, and 50% of them the delaying behavior conveyed by students occurred consistently and was considered a serious problem. As for another study by Yudistiro (2016) which states that procrastination has a high category of 7.55%, and a very high category of 32.08%. So that in this category, students who practice procrastination usually show the behavior of delaying doing academic assignments in a deliberate way and followed by a feeling that they don't like doing the assignments that must be done. Interviews conducted by Simamora and Nababan (2021) with several lecturers, it is known that there are also many students who do not submit assignments on time. Whereas,

Ferrari, et al (1995) the term procrastination comes from the Latin procrastinate which means to postpone until tomorrow. In general, procrastination is defined as a behavioral tendency to start things slowly and bring bad consequences for procrastinators (Dewitte & Schouwenburg, 2002). In his view, the procrastinator cannot complete his tasks. Not enough time is owned in accordance with the capacity of self-ability is one cause. Procrastination according to Solomon & Rothblum (1984) is a delay in starting or completing 2 deliberate tasks. Ferrari, et al (1995) said that academic procrastination has a negative impact and is an important problem that needs attention because it affects students and other people or the environment in the form of non-optimal results. Procrastination occurs in every area of life, one of which is in the academic field.

Interviews were conducted by researchers on September 19, 2021 with nine (9) respondents who were active students. Based on the information gathered, it can be seen that 7 out of 9 students have a tendency to procrastinate. This tendency is due to encouragement from within and from the surrounding environment of each respondent. Factors from the state of their environment, such as the piling up of assignments they received, both their coursework and other assignments, participating in internal and external campus organizations and activities, as well as the online learning situation in the midst of a pandemic. Several respondents complained about the online learning process where they had difficulty accessing the internet network, which affected the lecture process and the assignments given during online learning also became more numerous. This triggers a tendency to feel lazy in completing the tasks given and choose to postpone by doing other things. Feelings of discomfort about something to be done and other things from within such as self-personality, physical condition that prefers to rest and inability to do more than one thing at the same time (multitasking) such as playing, cleaning the house, or doing other work which are not related to the main task of a student, as well as doing assignments from lecturers that have almost been submitted.

Students procrastinate doing the assignment because it is still a long time to be collected and choose to do other assignments that are not necessary. The impact is that students are not optimal at doing assignments because they are in a hurry, this causes losses such as assignments that are not completed with less than optimal results because

they are worried about doing assignments with less time, difficulty focusing, so learning motivation and self-confidence are low (Damri et al, 2017). The research by Surijah and Tjundjing (2007) proved that students who procrastinate will take longer to complete their studies. Academic procrastination is an obstacle for students to achieve academic success because it can reduce the quantity and quality of learning, increase stress, it even has a negative effect on student life which results in anxiety (Muyana, 2018). According to Risdiantoro & Iswinarti (2016) that students who practice procrastination tend to feel anxious, afraid of not succeeding, difficult to make decisions, constantly dependent, afraid to take risks, not independent, less able to adapt, less able to assess themselves and their abilities, do not like the task, not assertive, and do not obey the rules. These attitudes cause stress, low learning achievement, and low emotional well-being. Academic procrastination has many negative impacts for procrastinators, including low self-esteem, aspects related to affection, namely anxiety, experiencing dissatisfaction, feelings of depression, decreased motivation, stress,

According to Damri, et al (2017) that with the high workload of lectures in tertiary institutions, a student is required to have high self-efficacy so as to avoid academic procrastination. According to Bandura's cognitive theory (1997) that self-efficacy affects people's choices in carrying out the actions they are pursuing. Self-efficacy is the main factor influencing a person's success, because people who have high self-efficacy will find it easy to choose and take action to achieve the desired goals (Malkoc & Kesen, 2018). Meanwhile, self-efficacy can determine when a person starts doing something, how much effort must be made and how long the effort lasts (Stajkovic & Luthans, 1998). Baron and Bryne (2002) say that self-efficacy is an assessment of a person's abilities and competencies in carrying out a task, achieving a goal or when overcoming a problem. Patton (in Permana et al, 2016) explains that self-efficacy is a belief in oneself with full optimism and hope to be able to solve problems faced without feeling hopeless. The difficulty of finding literature and the presence of other activities besides doing assignments are one of the factors that influence self-efficacy (Zusya & Akmal, 2016). According to the researchers, there is an attitude of procrastinating doing assignments that is due to the low self-confidence that students have.

Self-efficacy online academic is a way of individual learning in completing assignments online. Zimmerman and Kulikowich (2016) state three aspects of online academic self-efficacy, namely being able to study in an online environment, time management, and use of technology. The first aspect according to Zimmerman and Kulikowich (2016) learning in an online environment is an activity that is carried out by individuals with their surrounding environment also carrying out online learning which indirectly supports them to achieve their belief in learning that is carried out online. Next is the time management aspect, in which individuals are able to manage time in online learning. The third aspect is the use of technology,

This research is supported by Damri (2017) that overall student self-efficacy is in the high category, meaning that students have high self-confidence to be able to complete lecture assignments. Previous research conducted by Putri (2021) gave the result that there was a significant negative relationship between self-efficacy and students' academic procrastination during the Covid-19 pandemic. Another study conducted by Fadila & Khoirunnisa (2021) found the results of a significant negative relationship between self-efficacy and academic procrastination of students working on their thesis during the co-19 pandemic.

Based on the opinion to the research results above, it can be seen that procrastination behavior is generally still found in college students. According to the author, it can be

emphasized that the status of a student as an academic at a university should have integrity and honesty as the attitude of an academic. So bad behavior such as procrastination should not be owned by students. Based on previous research, procrastination behavior will have a negative effect on a student's self and academic achievement. Although almost similar research has been done previously, different results are still found, so it is necessary to do more research on self-efficacy with academic procrastination. The research that the authors will conduct focuses on online academic self-efficacy by using special online learning self-efficacy measurement tools, so this research is different from previous research. Research on the relationship between online academic self-efficacy and procrastination behavior during a pandemic is still rarely done and has never been done for SWCU students, so this research is important to do.

## II. Research Method

This study uses a quantitative approach that emphasizes numerical data and is processed through statistics (Azwar, 2011). This study uses the correlational method. This research is used to determine whether there is a relationship between the two variables to be studied. Through this approach the researcher wants to see further the correlation of online academic self-efficacy with procrastination. The number of subjects collected from this study amounted to 266 students who met the requirements actively participate in online lectures for more than 1 year. Participant involvement using cluster random sampling technique. An overview of participant demographic data is described in Table 1.

**Table 1.** Participant Demographic Data

<b>Classification of Respondents</b>	<b>Category</b>	<b>Amount</b>	<b>Percentage</b>
Gender	Man	69	30%
	Woman	197	70%
	<b>Total</b>	<b>266</b>	<b>100%</b>
Age	18 years	23	9%
	19 years old	49	18%
	20 years	61	23%
	21 years	72	27%
	22 years	33	12%
	23 years	21	8%
	24 years old	7	3%
	<b>Total</b>	<b>266</b>	<b>100%</b>
Force	2017	20	8%
	2018	29	11%
	2019	133	50%
	2020	84	30%
	<b>Total</b>	<b>266</b>	<b>100%</b>
University	UIN Salatiga	64	24%
	SWCU	202	76%
	<b>Total</b>	<b>266</b>	<b>100%</b>

The data collection used in this study was a questionnaire method or a psychological measurement scale which consisted of two scales, namely the online academic self-efficacy scale and the procrastination scale. The online academic self-efficacy scale that will be seen in this study is measured using a measurement tool derived from the aspects proposed by Zimmerman and Kulikowich (2016). In this research scale, there are three

aspects, namely learning in an online environment, time management, and the use of technology. These three aspects are divided into 22 statement items consisting of one type of item, namely the favorable item. This study uses a Likert scale as an indicator in its rating scale, namely SS (strongly agree), S (agree), TS (Disagree), STS (strongly disagree). The power test results obtained from testing and calculations on the online academic self-efficacy scale consisting of 22 items, 20 items passed. Item selection values range from 0.317 – 0.590, with a Cronbach Alpha value of 0.868. These results indicate that the online academic self-efficacy scale is very reliable.

The procrastination scale is a scale compiled by the author based on 3 aspects of procrastination according to Tuckman (1991), namely: wasting time, avoidance of tasks, and blaming other people with a total of 19 items. This study uses a Likert scale as an indicator in its rating scale, namely SS (strongly agree), S (agree), TS (Disagree), STS (strongly disagree). Furthermore, testing and calculations on the procrastination behavior scale consisted of 19 items and there were 12 items that passed. Item selection values range from 0.449 – 0.678, with a Cronbach Alpha value of 0.865. These results indicate that the procrastination behavior scale is very reliable.

The data analysis technique used in this study is to test the correlation between the two variables using the product moment correlation from Karl Pearson. Overall data analysis in this study using SPSS Statistics 21 for windows.

### III. Result and Discussion

#### 3.1 Statistical Descriptive Analysis

**Table 2.** Self-Efficacy Categorization

intervals	Category	Frequency	Percentage
$68 \leq X \leq 84$	Very high	32	12%
$53 \leq X \leq 68$	Tall	157	59%
$37 \leq X \leq 53$	Low	74	28%
$21 \leq X \leq 37$	Very low	3	1%
<b>Amount</b>		<b>266</b>	<b>100%</b>
<b>Minimum = 23; max = 80; Means = 58.27; SD = 8.638</b>			

Based on the self-efficacy scale categorization table above, it was found that 3 subjects had very low scores with a percentage of 1%, 74 subjects were in the low category with a percentage of 28%, the most subjects namely 157 were in the high category with a percentage of 59%, and 32 subjects are in the very high category with a percentage of 12%. Based on the mean value of 58.27 it can be said that the self-efficacy scale is in the high category.

**Table 3.** Categorization of Procrastination

intervals	Category	Frequency	Percentage
$39 \leq Y \leq 48$	Very high	29	11%
$30 \leq Y \leq 39$	Tall	108	41%
$21 \leq Y \leq 30$	Low	105	39%
$12 \leq Y \leq 21$	Very low	24	9%
<b>Amount</b>		<b>266</b>	<b>100%</b>
<b>Min = 12; Max = 48; Mean = 30.99; SD = 7.211</b>			

Based on the results of the categorization of the procrastination scale, 108 (41%) subjects were in the high category, the second order was the low category with 105 (39%) subjects. In the third order, namely the very high category with 29 subjects (11%) then in the last order, namely the very low category with 24 subjects (9%). Based on the mean value of 30.99, it can be said that the procrastination scale is in the high category.

### 3.2 Assumption Test Normality

**Table 4.** One-Sample Kolmogorov-Smirnov Test

		<i>Self-Efficacy</i>	Online Academic Procrastination
N		266	266
<i>Normal Parameters</i>	<i>Means</i>	58,27	30.99
	<i>std. Deviation</i>	8,638	7,211
<i>Most Extreme Differences</i>	<i>absolute</i>	.077	.064
	<i>Positive</i>	.077	.064
	<i>Negative</i>	-.060	-.035
<i>Test Statistics</i>		.077	.064
asympt. Sig. (2-tailed)		.001C	.011 C

Based on the table above, it is known that the probability value is 0.200 because the probability value is greater than 0.05 ( $p > 0.05$ ) this indicates that the data is normally distributed. Thus, all data in this study meet the normality test requirements.

### 3.3 Linearity Assumption Teste 4

**Table 5.** Linearity Test

			<i>Sum of Squares</i>	<i>df</i>	<i>Mean Squares</i>	<i>F</i>	<i>Sig.</i>
Procrastination * Self-Efficacy	<i>Between Groups</i>	<i>(Combined)</i>	2680584	41	65,380	1,320	.107
		<i>Linearity</i>	129,832	1	129,832	2,260	.107
		<i>Deviation from Linearity</i>	2550,752	40	63,769	1,287	.131
	<i>Within Groups</i>		11098.382	224	49,546		
	<i>Total</i>		13778.966	265			

In this study a linearity test was conducted to determine whether the self-efficacy variable with procrastination has a significant positive or negative relationship. Based on the table of linearity test results, it shows that the deviation of linearity value is 0.1287 with a significance of 0.131 ( $p > 0.05$ ). These results indicate that there is a linear relationship between self-efficacy and procrastination.



### 3.4 Correlation Hypothesis Test

**Table 6.** Karl Pearson Hypothesis Test

		<i>Self-Efficacy</i> Online Academic	Procrasti nation
<i>Self-Efficacy</i> Online Academic	<i>Pearson Correlation</i>	1	-.097
	<i>Sig. (2-tailed)</i>		.114
	N	266	266
Procrastination	<i>Pearson Correlation</i>	-.097	1
	<i>Sig. (2-tailed)</i>	.144	
	N	266	266

From the results of the normality test that was done previously, it shows that in this study it is normally distributed, a correlation test can be carried out using the product moment from Pearson. Based on the results of the correlation test that has been done, it was found that the coefficient  $r = -0.097$  with  $p = 0.114$  ( $p > 0.05$ ). This shows that there is a negative relationship between the variables of self-efficacy and procrastination, which means that the lower the self-efficacy of students, the higher their academic procrastination.

### 3.5 Discussion

Based on the results of the research that has been done, it is found that there is a negative relationship between online academic self-efficacy and procrastination in students. From the results, the correlation coefficient of online academic self-efficacy and procrastination was  $-0.097$  with a significance of  $0.114$  ( $p > 0.05$ ). This shows that there is a negative relationship between online academic self-efficacy and procrastination in students, so that the higher the online academic self-efficacy in students, the lower the procrastination in students, and vice versa.

The results of this study are supported by several previous studies which also prove that self-efficacy can affect one's achievement of planned goals. Lang (2013) said that the higher a person's self-efficacy in carrying out a given task, the greater the chance he gets to succeed. In other words, the existence of online academic self-efficacy in a person will play a very important role in determining the success or failure of a person in carrying out assigned tasks. As stated by Bandura (1997) self-efficacy greatly determines how strong the effort, persistence, tenacity that a person exerts in a job. Someone who has high self-efficacy tends to be calm in facing difficult tasks or situations.

This study has also obtained the results of the category of student procrastination behavior, based on the results of the overall analysis of procrastination at a high level with a percentage of 41%. This category means that many students exhibit the behavior of often delaying online lecture assignments, causing delays in completing assignments. This study also found that overall students' online academic self-efficacy was in the high category with a percentage of 59%. Even though there are interesting facts about the two variables, namely that there are high results, there are differences in the percentage numbers they have, and the two variables are linear. This research is also in accordance with research conducted by Damri, et al. (2017) who got results on self-efficacy with a high percentage of 71.90%, and in student academic procrastination with a moderate percentage of 53.42%. In other words, a high level of self-confidence is considered insufficient without being

implemented in the form of real actions. This allows for factors such as self-control, parenting, peer influence, self-confidence, motivation, persistence, self-esteem which make students still exhibit procrastination behavior. Procrastination behavior can also be caused by certain environmental conditions. Seeing the covid-19 pandemic has made all lecture activities carried out online, so that students will be lazier to do their coursework, while there is a lack of parental supervision of their children who support a student not doing assignments. Ferrari,

From the results of this study, it can be concluded that students who have high online academic self-efficacy can try several actions to deal with difficulties in the online assignments they have, and require some energy so that they often take quite serious attention. So with online academic self-efficacy in students determines how much effort is spent and how much he is able to survive in facing lecture assignments. According to Mulki, et al (2008) the stronger the online academic self-efficacy of students, the more diligent they are in completing assignments. When they encounter obstacles, a student will not give up on completing the assignments they have.

It is undeniable that this research has several limitations, such as the uneven distribution of questionnaires to students due to the lack of connections between researchers and other students. Furthermore, the second limitation, in collecting this data, researchers are not allowed to distribute questionnaires directly even though several campus activities have been carried out in a hybrid manner, because they are still in the Covid-19 pandemic situation which forces researchers to distribute questionnaires online and requires quite a long time.

#### **IV. Conclusion**

Based on the results of the research that has been done, it can be concluded that there is a negative relationship between online academic self-efficacy and procrastination in students. With the results of the categorization of online academic self-efficacy, it gets a percentage of 59% and procrastination gets a percentage of 41%. It means the higher the online academic self-efficacy, the lower the procrastination behavior, conversely the lower the online academic self-efficacy, the higher the procrastination behavior.

In conducting this research, the researcher realized that there were many deficiencies in it. For that, there are several follow-up suggestions, namely: For students who already have high online academic self-efficacy in order to be able to maintain and improve aspects of online academic self-efficacy. Researchers hope that it can become new knowledge for students how to have good online academic self-efficacy, such as achieving confidence in online learning, good time management, and having confidence in using technology as a means to support online learning. Second for future researchers it is hoped that they can conduct further research on online academic self-efficacy variables considering that there is still little research on this topic. And can collect more varied and complete respondents taking into account the limitations of this study regarding factors such as self-control, parenting style considering that less supervision will make a person behave not on time, the surrounding environment, self-confidence, motivation, self-esteem or other.



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