

THE INFLUENCE OF TIME MANAGEMENT ON ACADEMIC PROCRASTINATION MEDIATED BY SELF-REGULATED LEARNING IN THE COVID-19 PANDEMI AT SMK PGRI 1 JAKARTA

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Abstract

This study aims to determine the effect of time management on academic procrastination mediated by self-regulated learning during the COVID-19 pandemic in students of SMK PGRI 1 Jakarta. The research method used in this research is a survey or questionnaire distribution using a Likert scale. The sample used in this study obtained 245 respondents from SMK PGRI 1 Jakarta students. Based on the research conducted, the results show that there is a positive and significant effect of self-regulated learning in mediating the indirect effect of time management on academic procrastination.

Abstrak

Penelitian ini bertujuan untuk mengetahui pengaruh manajemen waktu terhadap prokrastinasi akademik yang dimediasi oleh self-regulated learning di masa pandemi covid 19 pada siswa SMK PGRI 1 Jakarta. Metode penelitian yang digunakan dalam penelitian ini adalah survey atau penyebaran kuesioner dengan menggunakan skala likert. Sampel yang digunakan dalam penelitian ini didapatkan 245 responden siswa SMK PGRI 1 Jakarta. Berdasarkan penelitian yang dilakukan diperoleh hasil bahwa terdapat pengaruh yang positif dan signifikan dari self-regulated learning dalam memediasi pengaruh tidak langsung antara manajemen waktu terhadap prokrastinasi akademik.

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INTRODUCTION PRELIMINARY

Education is one of the things that is important and needed in life because with education one can gain knowledge. In general, education is obtained formally and informally. School is a place used for studying formally. The learning process carried out in schools is used as a means to develop students' knowledge and skills. Schools are used as a medium for interaction between students and teachers to develop intervention skills. Formal education has several levels such as elementary, junior high and high school levels, each individual who carries out formal education is given assignments from school as a form of practice in solving various problems in the subject concerned.

Seeing the current situation, the world is being hit by the Covid 19 pandemic. Corona Virus Disease 2019 (Covid 19) is declared an infectious disease that attacks the acute respiratory system corona virus 2 (SARS-CoV-2). As a result of the pandemic, the government is taking action to limit the activities of its people to break the chain of transmission of Covid 19. The government is making all kinds of efforts to reduce the rate of spread of Covid 19, one of its efforts is to limit community activities and strictly urge people to always stay at home during specified period of time. This restriction also has an impact on the education sector because activities at school are abolished and students must carry out the learning process at home which is called Distance Learning, which means that the learning system uses a medium that helps interaction between teachers and students.

In the application of Distance Learning also has problems experienced by students. This problem was obtained when the researcher underwent Teaching Skills Practice, many students submitted assignments at the end of time and even submitted them late. So that the late submission of the assignment has an impact on their academic grades. This is a problem because when the implementation of distance learning takes place, students have more free time, which should be completed on time. This means that there is an act of academic procrastination during the PJJ. There are several factors that can influence the occurrence of these actions. According to (Blerkom, 2013), namely: (1) *learning environment*; (2) self-motivated; (3) Prioritization; (4) *self-regulation*; and (5) time management.

Seeing this, the researcher conducted a survey of the learning problems that students faced in the learning process for 32 students, and the results of the survey showed that the problems triggered the causes of academic procrastination. Based on the data obtained from distributing the questionnaires, it is known that the results show a *learning environment* of 18.3%; self-motivated 18.3%; prioritization 16.6%; *self-regulation* 25.8%; and time management of 20.8%. This states that overall these factors can affect academic procrastination, but *self-regulation* and time management factors have a greater factor than other factors.

Several studies have revealed that *self-regulation* in learning can influence a person to carry out academic procrastination as mediation. The opinion of Sun *et al.*, (2018) regarding *self-regulated learning* is the ability of students in the learning process to self-regulate cognitively so that the goals are achieved. The higher the ability of students to regulate themselves, the less likely they are to do academic procrastination. But on the contrary, when in the learning process, if students do academic procrastination, then they have *self-regulation*. Reducing academic procrastination in students can be an important factor in realizing students' academic goals, but this is hampered because the level of students' time management abilities is still low. Time management balanced with *self-regulated learning* will significantly reduce students' academic procrastination so that academic goals can be achieved. Based on this background, the researcher is interested in conducting research with the title "The Influence of Time Management on Academic

THEORITICAL REVIEW

1. Academic Procrastination

In the learning process, students cannot be separated from having to do assignments in the field of study concerned and must be completed within a predetermined time. By giving assignments to students, it directly teaches students to use time effectively. In its implementation, there are obstacles that are experienced, namely academic procrastination, which is interpreted as a delay in activities that can have a negative impact. Eerde (2020) academic procrastination is considered as individuals who have a tendency to delay individual work. This is supported by the opinion of Ulum (2016) who argues that academic procrastination is an act of negligence and intentional delay without regard to time so that it has detrimental consequences for the perpetrators. Agree with Betsy Ng, (2018) the intentional act of delaying work despite knowing the negative effects.

(Tuckman, 1991) suggests that there are three indicators that have been identified to measure academic procrastination, namely: (1) tend to waste time in the sense of delaying the time for completion of a given assignment so that the time is wasted, (2) avoiding assignments (*task avoidance*) is defined as the attitude of avoiding tasks that are less liked and considers the task too hard to complete, and (3) blaming others (*blaming others*) is defined as the tendency to assume other people make a job difficult so that they carry out an attitude of academic procrastination.

2. Time Management

Time management has a big role in one's success, one of which is success in the field of education. One's ability to have the ability to manage time in order to achieve goals and reduce errors such as unorganized, inconsistent planning, ambiguity, and avoiding the nature of wasting time. Eerde (2020) time management is an effective way to get work done by managing time. According to Boyraz (2016) time management is defined as a tool for managing time with plans that are made effectively so that tasks can be completed. According to the synthesis of the three opinions above, time management is an activity to manage time effectively so as to reduce time wastage. As revealed by Maulana (2017) time management is the method used to determine priorities in carrying out activities so that goals can be achieved.

According to (Macan, 1990) revealed the *Time Management Behavior Scale* in his research, time management has the following indicators: (1) Setting goals and priorities, (2) Making plans, (3) Being able to manage time well, and (4) Avoiding failure .

3. Self-Regulated Learning

In general, independent learning to self-regulate or commonly referred to as *self-regulated learning* is used as a major aspect in the student learning process. The main purpose of teaching *self-regulated learning* is to improve personal qualities and develop a person's high self-efficacy in arranging things to fit the plan so that the goals set will be achieved. The meaning of *self-regulated learning* according to Panadero (2017) is behavior to regulate and motivate oneself with strategies that have been created so that goals can be achieved. This is supported by Betsy Ng (2018) who defines it as a way for individuals to manage themselves in learning by controlling themselves. David CD

(2020) as a competency for implementing the process of planning, supervising and self-regulating when carrying out independent learning.

Pintrich *et al.*, (1993), *Motivated Strategies for Learning Questionnaire (MSLQ)* suggests that there are several indicators on *self-regulated learning*, namely: (1) *Intrinsic goal orientation*, (2) *Extrinsic goal orientation*, (3) *Task value*, (4) *Control of learning beliefs*, (5) *Self-efficacy for learning performance* and (6) *Test anxiety*.

METHOD

In this study itself uses a quantitative approach and the method used is survey method. The measuring tool used in this study is by using a questionnaire, the data obtained is in the form of answers to statements that have been filled in by respondents through the Google form. Each statement item is filled in using a Likert scale model with 5 alternative answers that are used to measure attitudes and opinions that require respondents to show their level of agreement. The population in this study were 306 students in class X and XI from SMK PGRI 1 Jakarta and the sampling technique used was purposive sampling. Calculation of the number of samples in this study using the Slovin formula of 245 respondents.

In testing this research using analysis techniques with the Partial Least Square (PLS) method. This study uses a causal modeling or relationship and influence, or it can also be called path analysis. In testing the hypothesis that will be proposed using the Structural Equation Modeling (SEM) fit analysis technique operated using Smart PLS 3.0. The analysis technique performed in the PLS method is divided into three stages, namely outer model analysis, inner model analysis, and hypothesis testing.

RESULTS AND DISCUSSION

1. Outer Model Analysis

The outer model is used to assess the validity and reliability of a construct model in a study (Hair *et al.*, 2014). Individual indicator values can be said to be reliable if they have a value above 0.7, however according to Ghozali (2014) for research in the scale development stage, a loading factor value of 0.5 to 0.6 is still acceptable. Following are the results of SmartPLS calculations for the loading factor in this study:

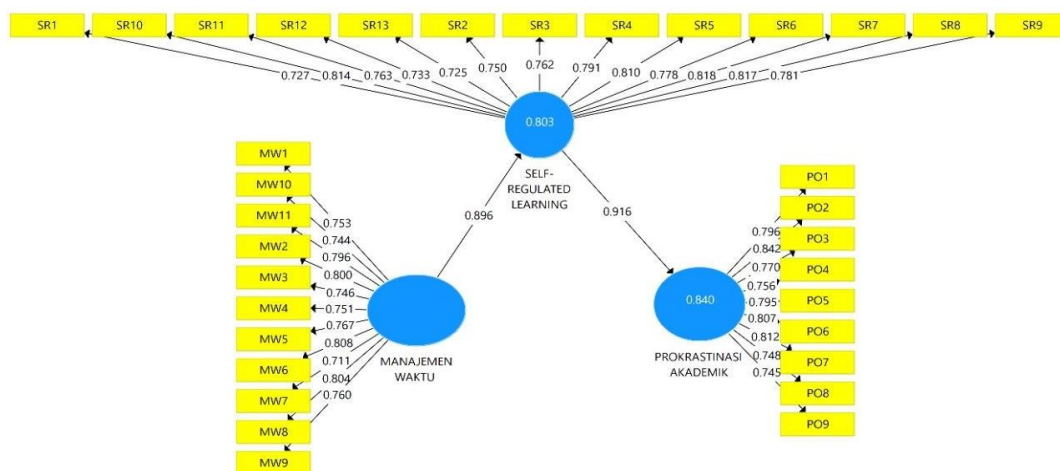


Figure 1. Loading Factor Results
Source: Data Processed by Researchers (2022)

Based on the above model, it can be concluded that all indicators of the Academic Procrastination (PO), Time Management (MW), and Self-Regulated Learning (SR) constructs have a value of > 0.7 , which means that all indicators of all variables meet the validity requirements. Validity and reliability can be seen from the Cronbach Alpha test, Composite reliability, and Average Variance Extracted (AVE). The value suggested by Ghozali (2014) for AVE is >0.5 , Composite reliability is >0.6 , and Cronbach Alpha is >0.7 . Following are the results of SmartPLS calculations for Cronbach Alpha, Composite reliability, and Average Variance Extracted (AVE) in this study:

Table 1. Cronbach Alpha Test Results, Composite reliability, and Average Variance Extracted (AVE)

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Manajemen Waktu	0.930	0.940	0.590
Prokrastinasi Akademik	0.923	0.936	0.618
Self-Regulated Learning	0.944	0.951	0.601

Source: Data Processed by Researchers (2022)

Based on the table above, the Academic Procrastination variable has an AVE value of 0.618, Cronbach Alpha of 0.923, and Composite reliability of 0.936. This means that the Academic Procrastination variable has a valid and reliable construct. The Self-Regulated Learning variable has an AVE value of 0.601, Cronbach Alpha of 0.944, and Composite reliability of 0.951. This means that the Self-Regulated Learning variable has a valid and reliable construct. Then the Time Management variable has an AVE value of 0.590, Cronbach Alpha of 0.930, and Composite reliability of 0.940. This means that the Time Management variable has a valid and reliable construct.

Based on the analysis of Cronbach Alpha, Composite reliability, and Average Variance Extracted (AVE) on the variables Academic Procrastination, Time Management and Self-Regulated Learning, it can be concluded that these three variables have valid and reliable constructs.

2. Inner Model Analysis

After all models meet the criteria of the outer model value, the next step is to test the structural model (inner model). Evaluation of the inner model shows the relationship between the constructs and the significance value. In this inner model, it can be evaluated by looking at the r-square value (reliability indicator) for the dependent construct and the t-statistic value from the path coefficient test. The following is a calculation table for the r-square results:

	R Square (R²)
Prokrastinasi Akademik	0.840
Self-Regulated Learning	0.803

Source: Data Processed by Researchers (2022)

Berdasarkan tabel diatas, nilai r-square dari variabel Prokrastinasi Akademik sebesar 0,840 atau 84%, yang artinya terdapat pengaruh antara variabel Manajemen Waktu dengan Prokrastinasi Akademik sebesar 84%. Selanjutnya nilai r-square dari variabel *Self-Regulated Learning* sebesar 0,803 atau 80,3% yang artinya terdapat pengaruh bersama antara variabel Manajemen Waktu dan Prokrastinasi Akademik dengan *Self-Regulated Learning* sebesar 80,3%.

Kemudian nilai f-Square (f^2) digunakan untuk menilai seberapa besar pengaruh relatif dari variabel laten independen terhadap variabel laten dependen. Berikut merupakan tabel perhitungan untuk hasil f-Square (f^2):

Tabel 3 F-Square

F Square	Prokrastinasi Akademik	<i>Self-Regulated Learning</i>
Manajemen Waktu		4,077
<i>Self-Regulated Learning</i>	5,240	

Source: Data Processed by Researchers (2022)

Berdasarkan tabel diatas, dapat dilihat bahwa pengaruh antara konstruk konstruk variabel *self-regulated learning* dengan konstruk variabel prokrastinasi akademik sebesar 5,240 imana nilai tersebut $> 0,35$ yang berarti keduanya memiliki pengaruh yang kuat. Pengaruh antara konstruk variabel manajemen waktu dengan konstruk variabel *self-regulated learning* sebesar 4,077, dimana nilai tersebut $> 0,35$ yang berarti keduanya memiliki pengaruh yang kuat. Pengujian Hipotesis

Uji hipotesis dilakukan untuk memastikan hipotesa awal penelitian sesuai dengan hasil penelitian. Dasar yang digunakan dalam pengujian hipotesis adalah nilai yang terdapat pada *output result for inner weight*. Pada penelitian ini tingkat error yang dimiliki ialah 5%, maka dari itu t-tabel pada penelitian ini sebesar 1,97. Pada hipotesis penelitian ini dilakukan pengukuran pengaruh langsung (*direct effect*) dan pengaruh tidak langsung (*indirect effect*). Pengukuran pengaruh langsung dapat dilihat dari hasil koefisien jalur (*path coefficient*), sedangkan pengukuran pengaruh mediasi pada penelitian ini dilihat dari hasil pengaruh tidak langsung.

Analisis koefisien jalur digunakan untuk menguji hipotesis pengaruh langsung suatu konstruk independen terhadap konstruk dependen. Berikut merupakan tabel perhitungan untuk hasil koefisien jalur (*path coefficient*):

Table 4. Path Coefficient

Total Effect	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Manajemen Waktu -> Prokrastinasi Akademik	0.821	0.822	0.014	57,928	0.000
Manajemen Waktu -> <i>Self-Regulated Learning</i>	0.896	0.897	0.010	86,245	0.000
<i>Self-Regulated Learning</i> -> Prokrastinasi Akademik	0.916	0.917	0.009	100,406	0.000

Source: Data Processed by Researchers (2022)

H1: Time Management Has a Positive and Significant Influence on Academic Procrastination

Based on the results of the path coefficient test in the table above, it can be seen that the time management variable has a positive influence on academic procrastination which is directly seen from the original sample of 0.821 and t-statistic > 1.96 , namely 57.928. Then, based on the p-values of $0.000 < 0.5$, the time management variable has a significant effect on academic procrastination directly. So, it can be concluded that time management has a positive and significant effect on direct academic procrastination, so H1 in this study is accepted.

H2: Self-Regulated Learning Has a Positive and Significant Effect on Academic Procrastination

Based on the results of the path coefficient test in the table above, it can be seen that the variable self-regulated learning has a positive influence on academic procrastination which is directly seen from the original sample of 0.896 and t-statistic > 1.96 , namely 86.245. Then, based on the p-values of $0.000 < 0.5$, the self-regulated learning variable has a significant effect on academic procrastination directly. So, it can be concluded that self-regulated learning has a positive and significant effect on direct academic procrastination, so H2 in this study is accepted.

H3: Time Management Has a Positive and Significant Effect on Self-Regulated Learning

Based on the results of the path coefficient test in the table above, it can be seen that the time management variable has a positive influence on self-regulated learning which is directly seen from the original sample of 0.916 and t-statistic > 1.96 , namely 100.406. Then, based on the p-values of $0.000 < 0.5$, the time management variable has a significant effect on self-regulated learning directly. So, it can be concluded that time management has a positive and significant effect on direct self-regulated learning, so H3 in this study is accepted

Indirect effect analysis is useful for testing the hypothesis of the indirect effect of an independent construct on a dependent construct mediated by an intervening or mediator construct. The following is a calculation table for the results of the indirect effect:

Table 5. Indirect Effect

	<i>Original Sample (O)</i>	<i>Sample Mean (M)</i>	<i>Standard Deviation (STDEV)</i>	<i>T Statistics (O/STDEV)</i>	<i>P Values</i>
Manajemen Waktu -> Self-Regulated Learning -> Prokrastinasi Akademik	0.821	0.822	0.014	57,928	0.000

Source: Data Processed by Researchers (2022)

H4: *Self-Regulated Learning* Memediasi Pengaruh Manajemen Waktu Terhadap Prokrastinasi Akademik Secara Positif dan Signifikan

Berdasarkan hasil perhitungan pada tabel *indirect effect* di atas, dapat dilihat bahwa manajemen waktu berpengaruh terhadap prokrastinasi akademik dengan *self-regulated learning* sebagai mediator antar kedua variabel independen dengan dependen. Dilihat dari nilai *original sample* yaitu sebesar 0,821 dan nilai *t-statistic* > 1,96 yaitu 57,928. Kemudian berdasarkan *p-values* yaitu sebesar $0,000 < 0,5$, maka variabel manajemen waktu berpengaruh terhadap prokrastinasi akademik dengan *self-regulated learning* sebagai mediasi berpengaruh positif dan signifikan secara tidak langsung. Jadi, dapat disimpulkan bahwa manajemen waktu berpengaruh positif dan signifikan terhadap prokrastinasi akademik dengan *self-regulated learning* sebagai mediasi, maka H4 dalam penelitian ini diterima.

CONCLUSIONS AND SUGGESTION

Based on the results of data analysis in research on the effect of time management on academic procrastination mediated by self-regulated learning during the Covid 19 pandemic in PGRI 1 Jakarta Vocational High School students, it can be concluded as follows:

There is a positive and significant relationship between time management which has a direct positive and significant effect on academic procrastination. The higher time management in students will reduce their academic procrastination, this is because they have the ability to manage time and are able to prioritize the most important things when the learning process takes place. So it can be concluded that strong time management will reduce the negative actions of academic procrastination of students at SMK PGRI 1 Jakarta. Based on the results of the first hypothesis test, H1 is accepted.

There is a positive and significant relationship between self-regulated learning which has a direct positive effect on academic procrastination. The higher the students' self-regulated learning, the less students' academic procrastination will be, this is because students are able to regulate themselves in setting goals and managing their own abilities in the learning process. So it can be concluded that strong self-regulated learning will reduce the negative actions of academic procrastination in SMK PGRI 1 Jakarta students. Based on the results of the first hypothesis test, H2 is accepted.

There is a positive and significant relationship between time management and direct positive effect on self-regulated learning. So it can be concluded that the higher the time management of students, the more self-regulated learning will increase in students. This is because both are positive factors in supporting the learning process to take place and can reduce the occurrence of academic procrastination among students at SMK PGRI 1 Jakarta. Based on the results of the first hypothesis test, H3 is accepted.

There is a positive and significant relationship between self-regulated learning mediating the effect of time management on academic procrastination in a positive and significant way. So it can be concluded that students' time management can reduce the occurrence of academic procrastination through self-regulated learning. Through their self-awareness in prioritizing the most important thing when the learning process takes place so that it will reduce academic procrastination which will then produce maximum learning results.

Based on the results of the first hypothesis test, H4 is accepted.

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