

# Phenomenon of Academic Procrastination during the Covid-19 Pandemic Influenced by Academic Resilience and Social Support

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## ABSTRACT

The goal of this research is to know the phenomenon of academic procrastination during the covid-19 pandemic influenced by academic resilience and social support to the students of online business and marketing skill competency in vocational high school in the area of Surakarta with paying attention to self-regulated learning of students. This research used probability sampling technique and the sample were collected by using stratified proportional random sampling from 303 students. The measuring tools were academic procrastination scale, academic resilience scale, social support scale, and self-regulated learning scale. The data analysis technique used Moderated Regression Analysis. Results of the research showed that: 1) there is a significant negative influence of academic resilience towards academic procrastination; 2) there is a significant negative influence of social support towards academic procrastination; 3) self-regulated learning can moderate academic resilience towards academic procrastination; 4) self-regulated learning can not moderate social support towards academic procrastination.

**Keywords:** Academic resilience, Social support, Academic procrastination, Self-regulated learning

## INTRODUCTION

Online learning that is applied nowadays to cut off the spread of covid-19 is still leaving some issues, one of them is the increasing numbers of academic procrastination (Rahimi & Vallerand, 2021). Based on the research of Liviana et al. (2020) showed 70.29% students are stressed because of online learning related to the competitive academic pressure and it leads to the students being overwhelmed by the huge amount of assignments with little spare time. The difficulty in understanding the material that are given by the teacher, the lack of references for the students, material delivery technique by the teacher that is not maximum enough, the lack of signal, and the amount of assignments are the main issues cause the academic procrastination in covid-19 pandemic (Wulandari et al. 2021). Academic procrastination is a tendency to postpone behavior or activity related to the academic activity and assignments (Grunschel et al. 2016). Academic procrastination involves the postponement of urgent assignments and it is such an influential multifaceted phenomenon towards the preference to work under pressure, decision to procrastinate, and finishing assignments before the deadline (Sandhya & Gopinath, 2019). Academic procrastination happens almost in all circles of students, no exception for vocational high school students who are prepared to find a job right away after graduating. Academic procrastination that happens in the students' circles consists of various aspects. According to Steel (2016) Rothblum, and Mann's seminal paper on academic procrastination as a starting point, we provide an updated review of academic procrastination and consolidate this knowledge with a procrastination typology. The goal of our study was to show that while the degree of procrastination is largely contingent on the trait of conscientiousness, the other four major personality

traits determine how procrastination manifests. According to implications of need theory, we operationalised these four traits by the reasons students gave and the activities students pursued while procrastinating. Method: Participants were 167 students of an undergraduate introductory psychology course. It was designed as a self-directed computerised course enabled considerable amounts of procrastination. Students filled out a Big Five Inventory and wrote a short essay detailing: (a) the aspects are wasting time, avoiding assignments, and blaming other people. In general, academic procrastination has two causes which are internal factors (from the individual itself) and external factors (from the individual's perspective to other people's attribute towards him/her).

Internal factors consist of motivation (Senécal et al. 1995), personality variable (Rosário et al. 2009), and goal achievement orientation (Howell & Watson, 2007). Some researches (J. Ferrari & Emmons, 1995; J. R. Ferrari et al. 1998), relate the procrastination to the personality variable such as how low

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**How to cite this article:** Cahyani LM, Kristiani, Sabandi M (2022). Phenomenon of Academic Procrastination during the Covid-19 Pandemic Influenced by Academic Resilience and Social Support. Pegem Journal of Education and Instruction, Vol. 13, No. 1, 2022, 41-49

**Source of support:** Nil

**Conflict of interest:** None.

**DOI:** 10.47750/pegegog.13.01.05

**Received :** 05.05.2022

**Accepted :** 09.07.2022

**Published:** 01.11.2022

the self-confidence and self-pride is, perfectionism, impulsive dysfunction, depression, and anxiety (Rosário et al. 2009). Other internal factors are the excessive fear of failure (Soltani et al. 2016), laziness (McCloskey, 2011), bad time management (J. C. Hong et al. 2021), and a lot of assignments that should be finished (Pinxten et al. 2019). Moreover, academic resilience is suspected to have a role in bringing out the behavior of academic procrastination. Academic resilience is an ability to revive from difficult and pressuring situations in academics (Cassidy, 2016). Students' academic resilience is different between each other because of different responses by each student. Academic resilience will be useful to deal with learning challenges in pandemic,

One of them is reducing the behavior of academic procrastination (Madjid et al. 2021). If there is an academic resilience, the students will be capable to survive and revive dealing with troubles and issues in the process of learning. However, the students with low academic resilience tend to avoid finishing their assignments and they are really potential in doing academic procrastination. Based on the research results by Soltani et al. (2016) showed that academic resilience has significant negative influence towards academic procrastination. The lower academic resilience, the higher academic procrastination is.

External factors that cause the academic procrastination are social support, the style of parents' nurturing, and the lenient environment (J. R. Ferrari et al. 1998) however, procrastination tendencies were significantly related to satisfaction with social and emotional support received from one's friends but not from one's immediate family members. In the second study (n = 107. Social support is the information or feedback from other people showing that a person is loved and cared, appreciated, respected, and involved in the communication network and reciprocal responsibility (Cohen & Hoberman, 1983). The students need social support while doing online learning, from family, same-age friends, special people, so that they can overcome the troubles in the process of learning and they can finish their assignments (Al-rosyid, 2018). Those matters are supported by some researches by Al Rosyid (2018), Putri et al. (2020), and Sari et al. (2019) which showed that there is a significant negative relationship between social support and academic procrastination. The lower social support, the higher academic procrastination is.

Other factors that can increase the tendency of academic procrastination is the low self-regulated learning (Cheng & Xie, 2021). The higher self-regulated learning, it will lower the academic procrastination behavior (Darmawan, 2018). Dominant self-regulated learning towards students causes the effort in planning, execution, and assignment finishing process, will be implemented as good as possible. The effort can help the students to avoid academic procrastination. The reason is the students have self-regulated learning that

describes the individual ability in arranging and controlling some things that lead the thought, motivation, and behavior in reaching the goal (Meilani et al. 2017)(B. Grunschel et al. (2018) stated that procrastination will not be done if the students can organize themselves in learning.

If the students are not overcoming academic procrastination issues as soon as possible, it will have negative impacts to other matters such as the declining of students' learning achievement, a lot of time wasting, unfinished assignments or finished assignments with bad results, and the declining of productivity and work ethic of the students, thus the students' quality will be low. Aside from that, it will influence punctuality in finishing academic assignments and causing academic deception.

At the time of pandemic, there is no research yet that explores the influence of academic resilience and social support toward academic procrastination with self-regulated learning as the moderator. The result of researches by Kimhi et al. (2020) and Soltani et al. (2016) showed that academic resilience has a significant negative relationship towards academic procrastination. Different researches by Ko et al. (2019), Ahmadi et al. (2020), El-Fattah et al. (2017), and Öksüz et al. (2014) showed that academic resilience has a significant positive relationship towards academic procrastination. Result of research by Al Rosyid (2018), Putri et al. (2020), and Sari et al. (2019) showed that social support has a significant negative relationship towards academic procrastination. Different result by Eliana et al. (2019) showed that social support has a significant positive relationship towards academic procrastination. Researches by Cheng & Xie (2021), Motie et al. (2012), Ziegler & Opdenakker (2018) showed that self-regulated learning has significant negative influence towards academic procrastination. Result of research by Santika & Sawitri (2016) showed that there is a negative and significant relationship between self-regulated learning and academic procrastination to the students. The higher students' self-regulated learning, the lower academic procrastination. Based on those researches, there are still some research gaps in the form of different results and those are still volatile, thus it needs to have a further study to know the influence of academic resilience and social support toward academic procrastination with the self-regulated learning as the moderator to the marketing students in vocational high school.

## METHOD

### Research Design

Quantitative research was used as the research design. The influence of academic resilience and social support towards academic procrastination with self-regulated learning as moderator variable were examined using moderated regression analysis. In addition, a survey questionnaire was utilized as the

quantitative research method and hypotheses were developed to explain the influence between independent variables towards dependent variable.

### Population and Sample/ Study Group/Participants

Population in this research was all of the students of the Online Business and Marketing Skills Competency Department in Surakarta vocational high schools in the academic year 2021/2022 with total numbers were 1.240 students. Sampling technique for this research was a probability sampling technique which is a technique to provide a similar opportunity for the population members to be chosen as a sample. In order to determine the total samples, this research used slovin formula by using error level 5%. Based on the calculation by using the slovin formula, the amount of total samples (n) were 303 students.

### Data Collection

Research data were conducted through questionnaires distributed to the students via google form. The applied questionnaires were previously prepared enclosed-questionnaires. Likert scale was applied to score the research questionnaires. Academic procrastination variable was measured by applying a scale developed by McCloskey (2011), it consists of six indicators which are psychological belief about abilities, distraction of attention, social factors, time management skills, personal initiative, and laziness. Academic resilience variable is arranged based on the characteristic.

According to Connor & Davidson (2003), there are five indicators which are personal competence, high standards, level of tenacity, trust and tolerance for negative things, positive acceptance and good relationship, control, and the influence of spirituality. Social support variable is arranged by applying The Multidimensional Scale of Perceived Social Support yang developed by Zimet et al. (1988). It consists of three indicators such as support from family, friends and other people. Self-regulated learning variable is arranged based on characteristics according to Zimmerman (1989), there are 11 indicators which are goal setting and planning, rehearsing and memorizing, organizing and transforming, self evaluating, self consequence, seeking social assistance, environmental structuring, and keeping records and monitoring.

### Data Analysis

Analysis was carried out by following hierarchical regression procedure which is a series of linear regression analysis with a goal to test the moderation effect. There are eighteen (18) models of regression that could be estimated. First to sixth models were used to test the first and second hypothesis about the influence of the main independent variable towards the dependent variable. Seventh to eighteenth models were used to know the potential influence of the moderator variable towards the dependent variable and it was used to test the third and fourth hypothesis about moderation effect. The following are the results of hierarchy analysis to answer hypotheses that are tested in this research (Table 2).

**Table 1:** Hierarchical Regression Test Results Analysis

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Main variable						
Academic resilience	-1.017 (-16.171)***	-0.579 (-6.906)***	-	-	-0.739 (-10.161)***	-0.472 (-5.588)***
Social support	-	-	-0.564 (-13.300)***	-0.275 (-6.016)***	-0.295 (-6.527)***	-0.204 (-4.508)***
Interaction variable						
Academic resilience*Self-regulated learning	-	-	-	-	-	-
Social support*Self-regulated learning	-	-	-	-	-	-
Control variable						
Gender	-	0.061 (0.862)*	-	0.059 (0.816)*	-	0.061 (0.894)*
Achievement motivation	-	0.021 (0.385)*	-	0.025 (0.441)*	-	0.075 (1.387)*
Perfectionist	-	-0.126 (-1.017)*	-	-0.407 (-3.476)***	-	-0.152 (-1.266)*
Extraversion	-	-0.065 (-1.524)*	-	-0.070 (-1.618)*	-	-0.044 (-1.058)*
Agreeableness	-	0.029 (0.569)*	-	0.056 (1.061)*	-	-0.046 (0.909)*
Conscientiousness	-	-0.145 (-3.163)**	-	-0.147 (-3.149)**	-	-0.140 (-3.156)**

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Neuroticism	-	-0.158 (-3.571)***	-	-0.172 (-3.813)***	-	-0.150 (-3.475)***
Openness to experience	-	-0.003 (-0.080)*	-	-0.029 (-0.663)*	-	-0.008 (-0.190)*
Duration of using social media	-	-0.023 (0.997)*	-	0.019 (0.781)*	-	0.019 (0.821)*
Constant	6.871 (26.355)***	6.577 (18.213)***	4.916 (28.795)***	6.374 (17.533)***	6.896 (28.218)***	6.688 (19.076)***
N (number of samples)	303	303	303	303	303	303
VIF	1.000	2.254	1.000	1.668	1.522	2.444
Durbin Watson (DW)	1.840	1.971	1.821	1.942	1.918	1.989
R	0.682	0.769	0.608	0.759	0.729	0.786
R2	0.465	0.591	0.370	0.576	0.531	0.617
ΔR2	-	0.126	-	0.206	-	0.086

\*significant to  $p < 0,10$ ; \*\*significant to  $p < 0,05$ ; \*\*\*significant to  $p < 0,01$

**Table 2:** Hierarchical Regression Test Results Analysis

Variable	Model 7	Model 8	Model 9	Model 10	Model 11	Model 12
<i>Main variable</i>						
Academic resilience	-0.820 (-10.602)***	1.767 (3.824)***	-0.535 (-6.312)***	1.337 (2.999)**	-	-
Social support	-	-	-	-	-0.403 (-8.012)***	0.612 (0.659)**
<i>Interaction variabel</i>						
Self-regulated learning	-0.280 (-4.155)***	2.335 (5.016)***	-0.189 (-2.542)**	1.719 (3.801)***	-0.384 (-5.456)***	-0.657 (0.038)**
Academic resilience*Self-regulated learning	-	-0.647 (-5.672)***	-	-0.473 (-4.273)***	-	-
Social support*Self-regulated learning	-	-	-	-	-	-0.262 (-3.392)**
<i>Control variabel</i>						
Gender	-	-	0.044 (0.620)*	0.058 (0.841)*	-	-
Achievement motivation	-	-	0.089 (1.476)*	0.093 (1.587)*	-	-
Perfectionism	-	-	-0.054 (-0.429)*	-0.108 (-0.878)*	-	-
Extraversion	-	-	-0.067 (-1.588)*	-0.065 (-1.585)*	-	-
Agreeableness	-	-	0.038 (0.742)*	0.008 (0.159)*	-	-
Conscientiousness	-	-	-0.137 (-3.019)**	-0.119 (-2.670)**	-	-
Neuroticism	-	-	-0.171 (-3.871)***	-0.131 (-2.975)**	-	-
Openness to experience	-	-	-0.005 (-0.118)*	-0.006 (-0.158)*	-	-
Duration of social media use	-	-	0.020 (0.856)*	0.021 (0.901)*	-	-
Constant	7.178 (27.142)***	-3.208 (-1.735)*	6.643 (18.517)***	-0.772 (-0.436)*	5.805 (25.179)***	1.814 (1.514)*

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<i>Variable</i>	<i>Model 7</i>	<i>Model 8</i>	<i>Model 9</i>	<i>Model 10</i>	<i>Model 11</i>	<i>Model 12</i>
N (number of samples)	303	303	303	303	303	303
VIF	1.596	2.813	2.350	2.989	1.536	1.807
Durbin Watson (DW)	1.863	1.892	1.967	1.934	1.837	1.918
R	0.703	0.737	0.774	0.790	0.653	0.670
R2	0.494	0.543	0.600	0.623	0.427	0.448
ΔR2	-	0.049	0.057	0.023	-	0.021

  

<i>Variable</i>	<i>Model 13</i>	<i>Model 14</i>	<i>Model 15</i>	<i>Model 16</i>	<i>Model 17</i>	<i>Model 18</i>
<b>Main variable</b>						
Academic resilience	-	-	-0.457 (-5.370)***	-0.671 (-8.488)***	2.044 (3.545)***	2.078 (3.758)***
Social support	-0.244 (-5.120)***	0.097 (0.351)*	-0.186 (-3.962)***	-0.258 (-5.354)***	-0.497 (-1.439)**	-0.789 (-2.424)**
<b>Interaction variable</b>						
Self-regulated learning	-0.160 (-2.049)*	0.191 (0.660)*	-0.109 (-1.445)	-0.146 (-2.105)**	2.345 (5.244)***	1.857 (4.225)***
Academic resilience*Self-regulated learning	-	-	-	-	-0.683 (-4.713)***	-0.641 (-4.635)***
Social support*Self-regulated learning	-	-0.090 (-1.259)*	-	-	0.066 (0.741)**	0.158 (1.865)*
<b>Control Variable</b>						
Gender	0.044 (0.614)*	0.049 (0.679)*	0.051 (0.746)*	-	-	0.062 (0.934)*
Achievement motivation	0.077 (1.263)*	0.078 (1.272)*	0.109 (1.854)**	-	-	0.114 (2.007)**
Perfectionism	-0.330 (-2.699)**	-0.334 (-2.734)**	-0.109 (-0.876)*	-	-	-0.175 (-1.456)*
Extraversion	-0.073 (-1.702)*	-0.072 (-1.673)**	-0.047 (-1.132)*	-	-	-0.046 (-1.154)*
Agreeableness	0.061 (1.156)*	0.05 (1.057)*	0.049 (0.980)*	-	-	0.018 (0.359)*
Conscientiousness	-0.141 (-3.028)**	-0.135 (-2.884)**	-0.136 (-3.067)**	-	-	-0.122 (-2.818)**
Neuroticism	-0.183 (-4.050)***	-0.173 (-3.787)***	-0.158 (-3.641)***	-	-	-0.120 (-2.796)**
Openness to experience	-0.028 (-0.660)*	-0.028 (-0.651)*	-0.008 (-0.202)*	-	-	-0.011 (-0.281)*
Duration of social media use	0.017 (0.687)*	0.017 (0.687)*	0.018 (0.752)*	-	-	0.018 (0.806)*
Constant	6.430 (17.734)***	5.079 (4.484)***	6.716 (19.163)***	7.053 (27.753)***	-2.883 (-1.620)**	-0.939 (-0.546)**
N (number of samples)	303	303	303	303	303	303
VIF	1.844	2.991	2.484	1.822	2.719	2.628
Durbin Watson (DW)	1.942	1.956	1.989	1.920	1.970	1.958
R	0.763	0.765	0.788	0.734	0.764	0.805
R2	0.582	0.585	0.620	0.538	0.583	0.649
ΔR2	0.134	0.003	0.035	-	0.045	0.066

\*significant to p<0.10; \*\*significant to p<0.05; \*\*\*significant to p<0.0



## FINDINGS

From table 1, the researcher included the main variable of academic resilience towards model 1 and social support variable towards model 3 individually. In the model 1 and model 3, they obtained score  $t$  value negative. In the model 2 and model 4, they regressed the main variable individually by adding all control variable (gender, achievement motivation, perfectionism, extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, and the duration of using social media). In the model 2, there is an increasing number of square ( $R^2$ ) by 0.126. It means that the addition of a control variable to the regression model can add the influence of academic resilience towards academic procrastination by 12.6%. It also happened to model 4, after adding a control variable to the regression model, there is an increasing number of square ( $R^2$ ) by 0.206, it means the control variable can increase the influence of social support towards academic procrastination by 20.6%. In the model 5, the researcher combined the two main variables. Observed from academic resilience variable and social support variable, they have score  $t$  value -10.161 and -6.527 with significance score (sig.) 0.000 and significance (sig.) 0.000. Because of significance score  $<0.005$ , it can be concluded that academic resilience and social support variables have significant negative influence towards academic procrastination. In the regression model 6, the researcher regressed and added two main variables by adding control variables at the same time. This model explained 78.6% variables reflecting the better increase than model 5. In the model 6, variable  $X_1$  has a coefficient ( $\beta$ )-0.472. Mathematically, according to the coefficient, the increasing of score  $X_1$  for 1, will cause the reduction of score  $Y$  for 0.472 (by assumption the other independent variables are constant). Conceptually, that coefficient showed that the influence of academic resilience towards academic procrastination is negative, the higher academic resilience, the lower academic procrastination. Based on the result of regression to model 6, it resulted in a score  $t$  by -5.588 with significance score (sig.) is 0.000. Because it obtained significance score  $<0.05$ , it can be decided that the influence of  $X_1$  towards  $Y$  is significant. It can be concluded that academic resilience has a significant negative effect towards academic procrastination for the marketing students in Surakarta vocational high school (first hypothesis is supported). In the model 6, variable  $X_2$  has a regression coefficient ( $\beta$ ) by -0.204. Mathematically, according to that coefficient, the increasing score  $X_2$  for 1 will cause the reduction of score  $Y$  by 0.204 (by assumption the other independent variables are constant). Conceptually, that coefficient showed that the influence of social support towards academic procrastination is negative, the higher social support, the lower academic procrastination. Based on the regression result of the model 6, it has score  $t$  for -4.058 with significance score (sig.) is 0.000. Because it obtained a significance score  $<0.05$ , it can be decided that the influence

of  $X_2$  towards  $Y$  is significant. It can be concluded that social support has a significant negative effect towards academic procrastination for the marketing students in Surakarta vocational high school (second hypothesis is supported).

In table 2, there are model 7 and model 11. the researcher added main variables of academic resilience and social support individually by adding self-regulated learning moderation variable. Afterwards, the researcher added control variables to model 9 and model 13. In the model 9 and model 13, it resulted that control variables can add the moderation effect of main variables toward the reduction of academic procrastination. In the model 10 and model 14. the researcher regressed the academic resilience and social support variables individually by adding self-regulated learning moderation variabel and all control variables at the same time. In the model 18, the researcher regressed all main variables by adding all control variables and moderation variables. Based on model 18. it obtained variable result  $ZX_1$  has coefficient regression by -0.641. Mathematically, according to that coefficient, the increasing score  $ZX_1$  for 1 will cause the reduction of score  $Y$  for 0.641 (by assumption the other independent variables are constant). Conceptually, that coefficient showed the moderation effect of self-regulated learning to the influence of academic resilience towards academic procrastination is negative, the higher self-regulated learning. the lower the influence of academic resilience towards academic procrastination. Based on the regression result of model 18, it obtained result score  $t$  towards variable regression coefficient  $ZX_1$  by -4.635 with significance (sig.) is 0.000. Because the result of significance score is  $<0.005$ , it can be decided that the influence of  $ZX_1$  towards  $Y$  is significant. It can be concluded that self-regulated learning can moderate the influence of academic resilience towards academic procrastination (third hypothesis is supported).

In the model 18. variable  $ZX_2$  has a regression coefficient of 0.158. According to that coefficient. the increasing score  $ZX_2$  for 1 will cause an increasing score  $Y$  for 0.158 (by assumption the other independent variables are constant). Conceptually, the coefficient showed that the effect of self-regulated learning moderation variable to the influence of social support towards academic procrastination is positive. It means that the higher self-regulated learning. the stronger the influence of social support towards academic procrastination. Based on the regression result to model 18. it obtained result score  $t$  to the variable regression coefficient  $ZX_2$  for 1.865 with significance (sig.) is 0.068. Because the significance score  $>0.05$ , then it can be decided that the influence of  $ZX_2$  towards  $Y$  is not significant. It can be concluded that self-regulated learning can not moderate the influence of social support towards academic procrastination for the marketing students. Surakarta vocational high school (fourth hypothesis is not supported). In table 2, there are model 7 and model 11.

the researcher added main variables of academic resilience and social support individually by adding self-regulated learning moderation variable. Afterwards, the researcher added control variables to model 9 and model 13. In the model 9 and model 13, it resulted that control variables can add the moderation effect of main variables toward the reduction of academic procrastination. In the model 10 and model 14. the researcher regressed the academic resilience and social support variables individually by adding self-regulated learning moderation variabel and all control variables at the same time. In the model 18, the researcher regressed all main variables by adding all control variables and moderation variables. Based on model 18. it obtained variable result  $ZX_1$  has coefficient regression by  $-0.641$ . Mathematically, according to that coefficient, the increasing score  $ZX_1$  for 1 will cause the reduction of score Y for  $0.641$  (by assumption the other independent variables are constant). Conceptually, that coefficient showed the moderation effect of self-regulated learning to the influence of academic resilience towards academic procrastination is negative, the higher self-regulated learning. the lower the influence of academic resilience towards academic procrastination. Based on the regression result of model 18, it obtained result score t towards variable regression coefficient  $ZX_1$  by  $-4.635$  with significance (sig.) is  $0.000$ . Because the result of significance score is  $<0.005$ , it can be decided that the influence of  $ZX_1$  towards Y is significant. It can be concluded that self-regulated learning can moderate the influence of academic resilience towards academic procrastination (third hypothesis is supported). In the model 18. variable  $ZX_2$  has a regression coefficient of  $0.158$ . According to that coefficient. the increasing score  $ZX_2$  for 1 will cause an increasing score Y for  $0.158$  (by assumption the other independent variables are constant). Conceptually, the coefficient showed that the effect of self-regulated learning moderation variable to the influence of social support towards academic procrastination is positive. It means that the higher self-regulated learning. the stronger the influence of social support towards academic procrastination. Based on the regression result to model 18. it obtained result score t to the variable regression coefficient  $ZX_2$  for  $1.865$  with significance (sig.) is  $0.068$ . Because the significance score  $>0.05$ , then it can be decided that the influence of  $ZX_2$  towards Y is not significant. It can be concluded that self-regulated learning can not moderate the influence of social support towards academic procrastination for the marketing students. Surakarta vocational high school (fourth hypothesis is not supported).

## DISCUSSION

### The influence of Academic Resilience Towards Academic Procrastination.

Academic resilience is proven to have significant influence towards academic procrastination for the marketing students

of Surakarta vocational high school. The influence tends to be negative. The higher academic resilience, the lower academic procrastination is. In other words, a good academic resilience for the students will prevent them from doing academic procrastination. This finding is appropriate to the research result of Soltani et al. (2016) they showed that academic resilience has significant negative influence towards academic procrastination. The lower academic resilience, the higher academic procrastination is.

### The Influence of Social Support Towards Academic Procrastination

Social support is proven to have significant influence towards academic procrastination for the marketing students of Surakarta vocational high school. The influence tends to be negative. The higher social support, the lower academic procrastination is. In other words, a good social support for the students will prevent them from doing academic procrastination. This finding is appropriate to the research result of Al Rosyid (2018), Putri et al. (2020), and Sari et al. (2019) that showed the significant negative relationship between social support and academic procrastination. The lower the social support level. the higher academic procrastination level is.

### The Moderation of Self-Regulated Learning to the Influence of Academic Resilience Towards Academic Procrastination

Self-regulated learning is proven to be able to moderate the influence of academic resilience towards academic procrastination for the marketing students of Surakarta vocational high school. In other words, a good self-regulated learning for the students will reduce (or even remove) the influence of academic resilience in preventing academic procrastination. It can be interpreted that academic resilience will be more effective in preventing academic procrastination, when the students have a low self-regulated learning, and vice versa. It can be interpreted that the students who have a high self-regulated learning, whether the academic resilience is high or low, it can not cause or prevent academic procrastination. This finding is appropriate to the research result by Cheng & Xie (2021), Motie et al. (2012), Ziegler & Opdenakker (2018) they showed that self-regulated learning will reduce (or even remove) the cause of academic procrastination.

### The Moderation of Self-Regulated Learning to the Influence of Social Support Towards Academic Procrastination

Self-regulated learning is not proven to be able to moderate the influence of social support towards academic procrastination for the marketing students of Surakarta vocational high

school. It showed that a good social support for the student will be effective to prevent academic procrastination whether they have a good self-regulated learning or not. This finding is appropriate to the research result by Madjid et al. (2021) which said that social support will be effective in reducing academic procrastination without any self-regulated learning.

## CONCLUSION

In conclusion, there is a significant negative influence of academic resilience towards academic procrastination and a significant negative influence of social support towards academic procrastination. In the test of moderation variable, it can be concluded that self-regulated learning is able to moderate the influence of academic resilience towards academic procrastination. The result showed that the higher self-regulated learning, the weaker the influence of academic resilience towards academic procrastination. In other words, a good self-regulated learning for the students will reduce (or even remove) the influence of academic resilience in preventing academic procrastination. Nevertheless, self-regulated learning is not able to moderate the relationship of social support towards academic procrastination. It showed that a good social support for the students is effective to prevent academic procrastination whether they have good self-regulated learning or not. Based on the result of the hypothesis test, there are other variables which can increase the influence for academic procrastination, such as gender, achievement motivation, perfectionism, extraversion, agreeableness, conscientiousness, neuroticism, openness to experience, and the duration of using social media.

The result of this research is already supported by the previous research result, thus it can be more convincing. The combination between a good academic resilience and social support can help the students to finish their academic assignments. Students who have high academic resilience will have academic endurance and high power in struggling with their assignments. They are supported by external factors too, such as family, friends, and special people who will encourage the students to finish the assignments. This result can be recommended for schools about the importance of giving psychoeducation for the students, thus they can have high endurance and power in struggling and self-control to study well. It needs the contributions from the students, schools, and family to push their success. People around like the family need to give more attention to their children, so that they have academic endurance and high self-regulated learning. It can lead to them being able to challenge various troubles in the learning process. With academic resilience and self-regulated learning, a student will be able to have self-control and try to finish his/her assignments according to the time.

## LIMITATION

The limitations of this study include that this study only assesses the influence of academic resilience and social support toward academic procrastination by adding 9 control variables. It is hoped that in the future we will conduct research by adding other variables that have the potential to affect academic procrastination.

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