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The Effect of Self Concept and Learning Facilities On Students' Academic Achievement in Online Learning Moderated By Self Efficacy

Septyan Budy Cahya [1*], Veni Rafida [2], Raya Sulistyowati [3]
[1-3] Universitas Negeri Surabaya, Indonesia
Email : septyancahya@unesa.ac.id *

Abstract. *This study aims to analyze the influence of self-concept and learning facilities on the academic achievement of Business Education Study Program students in online learning moderated by self-efficacy. The variables studied are self-concept, learning facilities, and online learning self-efficacy. The urgency of this study is to explore various factors related to students' academic achievement in online learning to improve and help support the online learning process to be better, so that the expected learning objectives can be achieved. This type of research is survey research and has a quantitative approach. The population of this study was all students who were active and still taking online lectures, approximately 177 students. Meanwhile, the research sample was taken using the nonprobability sampling method with a saturated sampling technique. The data analysis technique used Moderated Regression Analysis (MRA). Based on the results of the study, self-concept and learning facilities have an influence on student achievement both partially and simultaneously. Furthermore, self-efficacy was found to moderate the influence of self-concept and learning facilities on student achievement.*

Keywords *; self concept, learning facilities, self efficacy, academic achievement, online learning.*

1. INTRODUCTION

Online learning is basically no longer a new concept. In recent years, the internet has supported the development of technology for online learning activities by giving rise to various digital platforms (Yavuzalp & Bahcivan, 2020) such as Google Classroom, Google Meet, Zoom, and so on (Mustakim, 2020). Although online learning has become part of today's teaching and learning activities, there are still many educational institutions that have not implemented it in practice (Scherer et al., 2021). Learning achievement is the learning outcome achieved after going through the teaching and learning process. Learning achievement can be shown through the grades obtained by students or learners. Every learning activity certainly always hopes to produce maximum learning. Achieving high learning achievement is not an easy thing, because learning success is greatly influenced by many factors that can influence it, including internal and external factors. In online learning during the pandemic era, several Business Education Study Program students felt that their learning achievement had decreased. Schleicher (2020) argues that the pandemic has exposed the shortcomings of the current education system including access to the equipment needed for online learning, the environment needed to encourage focused learning, and the disproportionate ratio between resources and needs. This certainly has an impact on student learning achievement. Related to this, Harti et al. (2021) stated that lecturers as educators have implemented online learning as optimally as possible, starting from planning, implementation to evaluation of learning.

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Furthermore, the results of Harti et al.'s research. (2021) on the implementation of the use of online learning systems for students in the midst of the Covid 19 pandemic found that the online learning process caused by the COVID-19 pandemic was not free from obstacles for both lecturers and students, such as unstable network access, less than optimal learning, lack of interaction between lecturers and students, limited internet quota and others.

Self-concept is a variable that is quite important in the learning process and is identified as important as a form of realizing the potential of someone who is intellectually gifted (Kanadli, 2016). Self-concept is defined as a view of oneself based on past experiences and achievements, current motives and achievements, and predictions about one's future (Wu, 2015). Self-concept is part of personality development. As stated by Rogers, the most important concept of personality is self. Self contains ideas, perceptions and values that include awareness of oneself. Self-concept is a representation of self that includes self-identity, namely personal characteristics, experiences, roles, and social status (Desmita, 2012). In the implementation of online learning, it is currently difficult to describe the condition of students regarding the quality of social relationships with others (lecturers, peers, campus staff) who are good, active in learning activities in class, confident in doing something, and able to solve problems when facing learning difficulties faced. Even in the implementation of learning, most students often turn off the video during synchronous learning using zoom learning media, google meet, or other learning applications. Such conditions cause a decrease in the level of self-concept of students. Whereas based on previous research, it shows that self-concept has a positive effect on academic achievement. Research shows a reciprocal effect model, which confirms that achievement affects self-concept and self-concept affects achievement (Chae, 2018).

Furthermore, what supports the implementation of online learning is learning facilities. Learning facilities are everything needed in the teaching and learning process, both mobile and non-mobile, so that the achievement of educational goals can run smoothly, orderly, effectively and efficiently. Online learning requires adequate learning facilities that can be used from home. Learning facilities are an inseparable part of the educational process as stated by Hasbullah, (2012) that educational facilities are one of the factors that can be used to achieve educational goals. Therefore, complete learning facilities from home or other places that can be reached by students are mandatory so that students' teaching and learning activities can take place effectively and efficiently. Challenges in online learning include weak supervision of students, expensive quota costs and poor networks in remote areas (Sadikin & Hamidah, 2020). Students who come from various regions certainly have different facilities so that the learning experiences and learning outcomes obtained are also different. Aguilera-hermida (2020) stated

that the lack of supporting resources such as access to learning centers, libraries, interaction with lecturers and others, is also a challenge that students often encounter during online learning.

Online learning self-efficacy is a student's belief in their own ability to learn and succeed in an online learning environment (Taipjutorus, 2014). Online learning self-efficacy is one of the key factors for student success in an online learning environment (Ithriah, Ridwandono, & Suryanto, 2020; Kundu, 2020; Yavuzalp & Bahcivan, 2020). Key (2020) stated that studying in a virtual environment during a pandemic can cause frustration, loneliness, and difficulties. However, this can actually be overcome if students have confidence in themselves and put in their effort and will (Blanco et al., 2020). Therefore, students need to be encouraged to recognize their abilities and believe in their own abilities, especially in online learning situations like today (Aguilera-hermida, 2020). Because, students who have high self-efficacy will be more persistent in facing obstacles and more motivated than those who have lower self-efficacy (DeNoyelles, Hornik, & Johnson, 2014). They will also use more self-regulation strategies that are important for success in online learning, which ultimately leads to increased performance and overall learning outcomes (Bradley, Browne, & Kelley, 2017).

From the explanation above, the purpose of this study is to analyze the influence of self-concept, learning facilities, and self-efficacy on the academic achievement of students in the Business Education Study Program, Surabaya State University in online learning. The urgency of this study is to determine the various factors related to student academic achievement during online learning to improve and help support the online learning process to be better, so that the expected learning objectives can be achieved.

2. LITERATURE REVIEW

Self-Concept

Based on the self-enhancement model, self-concept is a determinant of academic achievement. The self-enhancement model implies that self-concept is a consequence of academic achievement. The measure of achievement from the previous self-concept effect to the next (to support skill development) (Magee & Upenieks, 2019). Self-concept is a mediating construct that influences various psychological and behavioral outcomes. Especially in school, self-concept influences academic achievement, subject choice, and subject interest (Möller et al., 2020).

Self-concept is defined as a view of oneself based on past experiences and achievements, current motives and achievements, and predictions about one's future (Wu, 2015). These results

are supported by many studies that self-concept influences academic achievement and has a close causal relationship (Fernández-Lasarte, 2019); (Klapp, 2018); (Toraman et al., 2020). Epstein's phenomenological theories are the basic theory in developing self-concept studies in this study. Phenomenological theory identifies self-concept as the core of personality with directive and integrative properties that can be understood when self-concept is redefined as a "self-theory" that has been unconsciously built by oneself (Harris, 2019).

Learning Facilities

Learning facilities are everything related to the learning process so that it can affect learning achievement. These learning facilities are also commonly known as facilities and infrastructure provided at the place of learning, both at home and in the educational environment. And the components of learning facilities that are supporting elements of learning consist of three components that are interrelated with each other, including media or learning aids, learning equipment, and study rooms (Hamalik, 2003).

According to (Dewi, Et al 2017) that learning facilities are divided into two parts, namely learning facilities which can be in the form of equipment, materials and furniture that are directly used in learning activities such as stationery, media for learning, and teaching aids. While infrastructure is all basic equipment that indirectly supports the implementation of the education process, for example classrooms, laboratory rooms, library services and toilets. Educational facilities include all facilities needed in the teaching and learning process, both mobile and non-mobile, so that the achievement of educational goals can run smoothly, effectively, and efficiently. An example of an important learning facility on campus is a wifi facility. With the current pandemic situation, students really need wifi facilities at home because the education system during the pandemic is online or online education. The implementation of online lectures needs to be supported by facilities and infrastructure. The learning process will take place well and learning objectives will be achieved if it is equipped with facilities and infrastructure (Sholekhah & Hadi, 2014). Research by Fijar et al. (2018) states that learning outcomes are influenced by learning facilities at home.

Self-Efficacy

Self-efficacy is the core of Bandura's social cognitive theory, which states that individual success depends on how deeply the interaction between individual behavior, personal factors and environmental conditions (Bandura, 1997). Self-efficacy is a person's belief and assessment of their ability to learn or perform a particular task (Schunk & Dibenedetto, 2016). Self-efficacy determines and controls an individual's thoughts and the way they act or behave (Alqurashi, 2016). In the context of education, self-efficacy is an important factor that

contributes to academic achievement (Bandura, 1997; Meral et al., 2012; Yusuf, 2011). Self-efficacy will influence several aspects of performance that are important to learners in terms of effort exerted and persistence in completing tasks (Taipjutorus, 2014). Self-efficacy is also related to academic goals, where students with high self-efficacy tend to pursue higher academic goals (Taipjutorus, 2014). In addition, high self-efficacy will foster self-regulation skills that lead to more successful academic outcomes (Bradley et al., 2017).

As with conventional learning, several studies agree that self-efficacy is one of the key factors in student success in online learning environments (Ithriah et al., 2020; Kundu, 2020; Yavuzalp & Bahcivan, 2020; Zimmerman & Kulikowich, 2016). Taipjutorus (2014) defines online learning self-efficacy as students' beliefs in their own abilities to learn and succeed in online learning environments. Online learning self-efficacy is closely related to self-regulation and motivation (Taipjutorus, 2014). A study conducted at a small university in South Georgia also confirmed the relationship between self-efficacy and self-regulation (Bradley et al., 2017). Bradley found that students who felt highly connected to campus and had high self-efficacy for online learning tended to use self-regulation strategies more effectively to complete assignments than students with minimal connections to campus and low self-efficacy. Meanwhile, Xiao's (2012) research found that successful online learners had higher self-efficacy and were more motivated as they gained skills during their studies.

Academic Achievement

Academic achievement is one of the important prospects for students' academic success (Mozammel, Ahmed, & Shakar, 2021). Academic achievement refers to several methods of stating or expressing a student's academic ranking (Ismail, Mahmood, & Abdelmaboud, 2018). Academic achievement, whether in traditional or online learning, can generally be defined as the achievement of certain results in an assignment, exam, subject, or degree, and is usually expressed in numerical values or grade point average (GPA) (Broadbent & Poon, 2015; Richardson, Abraham, & Bond, 2012). Kosasi et al. (2020) stated that the academic success of students in a higher education institution is measured by the Grade Point Average (GPA) or IPK, with a maximum value of 4. A good GPA varies from institution to institution. The majority agree that the interval of 3 to 4 represents good academic achievement (Suryawan & Putra, 2016).

Online Learning

Online learning is a form of two-way relationship between students and teachers at different times and/or places using various technological media (Ithriah et al., 2020). According to Artino & Jones (2012), online learning means learning without the temporal, spatial, and

intellectual support provided in traditional classes. Learning in traditional classes usually provides structured, planned time and space specifically for learning and is also equipped with teachers who can organize and design the learning (Artino & Jones, 2012). Unlike conventional face-to-face learning, online learning not only facilitates the presentation of multimedia teaching materials but also encourages students to take the initiative to research on their own and to share their insights with peers in online forums (Kundu, 2020; Tsai, 2017). So that in online learning, personal responsibility, independence, and perseverance are needed because no one controls the learning except the students themselves (Dwijuliani et al., 2021). In addition, since online learning is delivered through technology-enhanced devices, students must be prepared and competent in dealing with computers and the internet (Chung, Noor, & Mathew, 2020).

3. METHODS

This type of research is survey research, while the approach used is quantitative. The population and sample of this study are all students of the Business Education Study Program, Surabaya State University with active status, as many as 177 students.

The data analysis used is the Moderated Regression Analysis (MRA) statistical analysis. Multiple regression analysis using the regression equation formula:

$$\mathbf{Y = a + b1X1 + b2X2}$$

This study also uses a moderation variable, so that the subsequent regression analysis will be carried out together, namely all independent variables and moderating variables. In this study, testing was carried out using an absolute difference test, the equation formula that will be used in this test is:

$$\mathbf{Y = a + b1X1 + b2X2 + b3X3 + b4 \left| X1\text{-}X3 \right| + b5 \left| X2\text{-}X3 \right|}$$

4. RESULTS

This study is aimed at students who are taking online learning in the Unesa Business Education Study Program to determine the effect of self-concept and learning facilities on students' academic achievement moderated by self-efficacy. The data collected are in the form of survey results which are then analyzed and interpreted by researchers to solve research problems. The following is a description of the results of data analysis and discussion of research results.

Respondent Characteristics

The respondents in this study were 177 respondents. The following is the profile of respondents based on gender and study program. The results obtained are as follows:

Table.1 Gender of Respondents

Gender	Frequency (F)	Percentage (%)
Male	40	22.5
Female	137	77.5
Total	177	100.00

Based on the table above, most of the respondents were female, namely 137 people or 77.5%, while 40 people or 22.5% were male.

Validity and Reliability Test.

Validity and reliability tests were conducted for respondent data at the preliminary survey stage of 30 respondents with a total of 47 instruments describing the variables of self-concept, learning facilities, and self-efficacy.

Validity tests are used to measure the validity or otherwise of a research instrument. Validity tests are conducted by comparing the calculated r value with the table r. An item is said to be valid if the calculated r> table r. To find the table r, you can use the formula df = n – 2, where n is the number of sample sizes used during the instrument trial. In this study, the sample size during the instrument trial was 30, with a significance level of 5%, so the table r was obtained as 0.3610. The following are the results of the validity test conducted using SPSS software:

Table 2. Self Concept Validitas Test

Item Number	R	Remarks
P1-P21	≥ 0.405	Valid

Table 3. Learning Facilities Validitas Test

Item Number	R	Remarks
P1-P8	≥ 0.633	Valid

Table 4. Academic Self efficacy Validitas Test

Item Number	R	Remarks
P1-P18	≥ 0.514	Valid

Based on the table above, it shows that 47 statement items have a calculated r coefficient value > r table, which means that the statement items are declared valid.

To complete the validity test, a reliability test is conducted so that the questionnaire used can be trusted as a data collection tool. The basis for decisions in the reliability test is based on the Cronbach's Alpha value. The following are the results of the reliability test.

Table 5. Reliability Test

Variable	***Cronbach's Alpha***	**Critical Value**	**Remarks**
Self Concept	0.924	0.700	Reliable
Learning Facilities	0.874	0.700	Reliable
Self Efficacy	0.967	0.700	Reliable

Based on the table above, it shows that all variables have a Cronbach's Alpha value > 0.700, and it can be concluded that all variable items are reliable so they can be used to conduct research.

Multicollinearity Test

Tabel 6. Multicollinearity Test before Moderation

Coefficients[a]

Model		**Collinearity Statistics**		**Conclusion**
		Tolerance	**VIF**	
1	**(Constant)**			
	X1	.698	1.433	No multicollinearity
	X2	.698	1.433	No multicollinearity

Tabel 7 Multicollinearity Test with Moderation

Coefficients[a]

Model		**Collinearity Statistics**		**Conclusion**
		Tolerance	**VIF**	
1	**(Constant)**			
	Zscore(X1)	.502	1.993	No multicollinearity

Zscore(X2)	.444	2.251	No multicollinearity
Zscore(Z)	.675	1.482	No multicollinearity
moderating_1	.721	1.387	No multicollinearity
moderating_2	.729	1.372	No multicollinearity

From the table above shows that the tolerance value on variables X1 and X2 is 0.698 and the VIF value is 1.433. Each variable has a tolerance value> 0.1 and has a VIF value <10, so it can be concluded that each variable does not experience multicollinearity. The results of the multicollinearity test after moderation in Table 5.7 also show tolerance values> 0.1 and have a VIF value <10. Based on the results of the multicollinearity test presented in table 5.6 and table 5.7, it can be concluded that the research data before and after moderation did not experience multicollinearity. Testing on model 2 was carried out after testing on model 1 stated that there was no multicollinearity.

Normality Test

Tabel 8. Normality Test before Moderation

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		177
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	6.6175025
Most Extreme Differences	Absolute	.197
	Positive	.171
	Negative	-.197
Test Statistic		1.127
Asymp. Sig. (2-tailed)		.164[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Tabel 9. Uji Normalitas setelah Moderasi

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		177
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	5.65455082
Most Extreme Differences	Absolute	.173
	Positive	.103
	Negative	-.173
Test Statistic		1.103
Asymp. Sig. (2-tailed)		.224[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction

The results of the One-Sample Kolmogorov-Smirnov test of all residual data values used in this study were 0.164 > 0.05. This shows that all data used as research samples are normally distributed. Table 5.9 shows that the Asymp. Sig (2-tailed) value in the One-Sample Kolmogorov-Smirnov test of all residual data values used in this study was 0.224 > 0.05. This shows that all data used as research samples were normally distributed.

Heteroscedasticity Test

Tabel 10. Heteroscedasticity Test before Moderation

	Variabel	***Sig. (2-Tailed)***	**Conclusion**
Model 1	X1	.668	No Heteroscedasticity
	X2	.573	No Heteroscedasticity

Tabel 11. Heteroscedasticity Test with Moderation

	Variabel	***Sig. (2-***	**Conclusion**

		Tailed)	
Model1	Zscore(X1)	.697	No Heteroscedasticity
	Zscore(X2)	.473	No Heteroscedasticity
	Zscore(Z)	.780	No Heteroscedasticity
	moderating_1	.589	No Heteroscedasticity
	moderating_2	.316	No Heteroscedasticity

Based on table 11, it can be concluded that the significance value of each independent variable in this study is greater than > 0.05. X1 is 0.668, X2 is 0.573. So, it can be concluded that the research data before moderation did not experience heteroscedasticity. Based on table 5.11, it can be concluded that the significance value of each variable in this study is greater than > 0.05. Zscore (X1) is 0.697, Zscore (X2) is 0.473, Zscore (X3) is 0.780, moderating_1 is 0.589, moderating_2 is 0.316. So, it can be concluded that the research data after moderation does not experience heteroscedasticity.

Linear Regression Analysis

Tabel 12 Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.954	.039		75.435	.000
	Self Concept	.014	.001	.360	7.542	.000
	Learning Facilities	.121	.001	.598	12.515	.000

a. Dependent Variable: Y

From the results of the regression analysis above, the following regression equation is formed: Y = 1.954 + 0.014 X1 + 0.121 X2. From this equation it shows that self-concept and learning facilities have a direct relationship with learning achievement. Variable X1 against Y

gets a coefficient value of 0.014 with a significance of 0.000 which is smaller than the specified significance level, which can be interpreted that self-concept (X1) has an effect on student achievement (Y). Variable X2 gets a coefficient value of 0.121 with a significance of 0.000 which is smaller than the specified significance level, which can be interpreted that learning facilities (X2) have an effect on student achievement.

Tabel 13. F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.753	2	.876	227.243	.000[b]
	Residual	.671	174	.004		
	Total	2.424	176			

a. Dependent Variable: Y

b. Predictors: (Constant), X2, X1

The table above shows the results of the f-test with an f-value of 227.243 and a sig value of 0.000 <0.05, so it can be concluded that the regression model used is feasible to use. So it can be concluded that there is a simultaneous influence between self-concept and learning facilities on student academic achievement.

Tabel 14. Coefficient Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.850[a]	.723	.720	.06210

a. Predictors: (Constant), X2, X1

b. Dependent Variable: Y

Based on the results of table 14, it can be concluded that the Adjusted R Square value is 0.720. This means that the variable of student learning achievement can be explained by the variables of self-concept and learning facilities as much as 72.0%. While the remaining 28.0% is influenced by other variables outside the study.

Moderated Regression Analysis

Tabel 15 Moderated Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	3.644	.008		439.183	.000
	Zscore(X1)	.033	.006	.181	4.656	.000
	Zscore(X2)	.027	.006	.135	3.380	.000
	Zscore(Z)	.024	.005	.207	4.787	.000
	moderating_1	.051	.008	.434	8.329	.000
	moderating_2	.046	.008	.394	7.234	.001

a. Dependent Variable: Y

From the results of the regression analysis above, the following regression equation is formed: Y = 3.644 + 0.033 ZX1 + 0.027 ZX2 + 0.024 ZZ + 0.051 moderating1 + 0.046 moderating2. From this equation we can see that the coefficient value of the moderating_1 variable is 0.051 with a significance level of less than 5%, namely 0.000. This shows that self-efficacy (Z) is a moderating variable that strengthens the influence of self-concept (X1) on learning achievement (Y). Furthermore, the coefficient value of the moderating_2 variable is 0.046 with a significance level of less than 5%, namely 0.001. This means that the self-efficacy variable (Z) also moderates the influence of the learning facilities variable (X2) on learning achievement (Y).

Tabel 16. F test

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.900	5	.380	124.088	.000[b]
	Residual	.524	171	.003		

Total	2.424	176

a. Dependent Variable: Y

b. Predictors: (Constant), moderating_2, Zscore(X1), moderating_1, Zscore(Z), Zscore(X2)

The table above shows the results of the f-test with an f-value of 124.088 and a sig value of 0.000 <0.05, so it can be concluded that the regression model used is feasible to use. So it can be concluded that there is a simultaneous influence between self-concept, learning facilities, and self-efficacy on student academic achievement.

Tabel 17. Coefficient of Determination Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.885[a]	.784	.778	.05534

a. Predictors: (Constant), moderating_2, Zscore(X1), moderating_1, Zscore(Z), Zscore(X2)

b. Dependent Variable: Y

Based on the table above, the Adjusted R-Square value produced is 0.778, indicating that student learning achievement is influenced by self-concept, learning facilities, and self-efficacy as a moderation of 77.8%, while 22.2% is influenced by other factors not explained in this study.

5. DISCUSSION

The Influence Of Self-Concept On Student Achievement

Based on the results of data analysis, it was found that self-concept has an effect on student achievement. This shows that there is a partial influence between self-concept and achievement. Based on the test results, it can be concluded that the level of self-concept possessed by students can improve students' academic achievement in lectures. Students who have a good level of self-concept are characterized by all aspects of the self-concept dimension being in the high category, namely social, emotional, moral, and cognitive abilities. These four dimensions describe the condition of students related to the quality of social relationships with others (lecturers, peers, campus staff) which are good, active in online learning activities,

confident in doing something, and able to solve problems when facing learning difficulties faced.

These results are in line with the theory put forward by Epstein that self-concept can influence a person's behavior in achieving the expected goals, specifically related to achieving academic achievement. The results of previous studies related to the influence of self-concept on academic achievement also strengthen the results of this study, which states that self-concept influences academic achievement (Chae, 2018); (Klapp, 2018); (Sticca, 2017); (Televantou, 2021); (Toraman et al., 2020). Students with good self-concept will not feel anxious in facing challenges and will be able to overcome obstacles in their learning to achieve success even though they are faced with online lectures during a pandemic. First, students with high self-concept will also support high learning outcomes (Hasan et al., 2021). Self-concept is the main factor that must be the focus of every educator because self-concept describes the character of each individual seeing themselves.

The Influence of Learning Facilities on Student Achievement

The results of this study can reveal that learning facilities have a positive and significant effect on learning achievement. Learning facilities are everything needed in the teaching and learning process, both mobile and non-mobile, so that the achievement of educational goals can run smoothly, regularly, effectively and efficiently. Online learning requires adequate learning facilities that can be used from home because learning facilities are an inseparable part of the educational process. Students who carry out the online learning process from home need adequate facilities, such as media or learning aids, online learning equipment, and a good and conducive study room.

Learning facilities in online learning as one of the factors in achieving learning goals have a role in improving e-learning learning, the existence of learning facilities so that students are enthusiastic about participating in learning compared to students who have minimal learning. The results of this study are consistently strengthened by supporting the research of Damanik (2019), Dewi (2021), Suryani (2019), Nawas and Kundi (2010). Furthermore, research by (Rimba Hamid, Izlan Sentryo, Sakka Hasan, 2020) explains that the main supporting factors for the effectiveness of online learning during the Covid-19 pandemic are the supporting capacity of facilities such as network access and the ability of devices to access the internet.

The Influence of Self-Concept and Learning Facilities on Student Achievement.

Based on the results of the F test, it was found that the test value was in accordance with the F test criteria, which means that there is a simultaneous influence between self-concept and

learning facilities on the achievement of Business Education Study Program students. This shows that together the variables self-concept and learning facilities have an effect on student achievement

Self-Efficacy Moderates the Effect of Self-Concept on Student Achievement

Based on the results of the second regression analysis with the moderating variable, the results obtained are that there is a moderation effect of self-efficacy on the influence of self-concept on student academic achievement. Generally, self-efficacy also influences academic achievement directly or as a mediator (Cha, 2020); (Høigaard, 2015). The results of the study showed that the hypothesis was accepted. This means that self-efficacy is able to moderate the influence of self-concept on student academic achievement. The regression equation model also shows a positive influence between the level of self-efficacy and the level of student academic achievement. This means that student academic achievement increases when supported by high perceptions of student self-efficacy. Self-efficacy in this study has a positive effect on student academic achievement, indicated by all aspects of the self-efficacy dimension being in the high category, namely magnitude, generality, and strength. These three dimensions describe the condition of students related to the speed and responsiveness of students when facing learning problems that are considered difficult and require high-level thinking, are active and confident when they are going to achieve goals that have been made in relation to achieving learning achievements, and always try to master learning concepts well. The results of the study (Tomás, 2020) related to the effects of hope, self-efficacy, and engagement on academic achievement in the Dominican Republic stated that there was a significant effect between hope and self-efficacy on academic achievement and engagement as a moderator predictor of academic achievement.

Self-efficacy moderates the influence of learning facilities on student achievement.

The results of the analysis stated that there was a moderation effect of self-efficacy on the influence of self-concept on student academic achievement. The results of the study showed that the hypothesis was accepted. This means that self-efficacy is able to moderate the influence of learning facilities on student academic achievement. With good facilities and supported by high self-efficacy, it will have an impact on the online learning process. Online learning self-efficacy is one of the key factors for student success in an online learning environment (Ithriah, Ridwandono, & Suryanto, 2020; Kundu, 2020; Yavuzalp & Bahcivan, 2020). Students who have high self-efficacy will be more persistent in facing obstacles and more motivated than those with lower self-efficacy (DeNoyelles, Hornik, & Johnson, 2014). A person will use more strategies in self-regulation that are important for success in online learning, maximizing the

available facilities, which ultimately leads to increased performance and overall learning outcomes (Bradley, Browne, & Kelley, 2017).

6. CONCLUSION

Based on the results of the study, it can be concluded that self-concept has a significant influence on the achievement of students of the Unesa Business Education Study Program. In addition, learning facilities have also been proven to have an influence on student achievement. Simultaneously, self-concept and learning facilities affect student achievement, indicating a strong relationship between the two factors and academic success. Furthermore, self-efficacy was found to moderate the influence of self-concept and learning facilities on student achievement, strengthening the relationship by showing that individual self-confidence can increase the positive effects of self-concept and learning facilities on academic achievement.

Limitation

This study has several limitations that need to be considered. First, the study was only conducted on students of the Business Education Study Program at Surabaya State University, so the results cannot be generalized to other study programs or universities. Second, the data collection method that relies on questionnaires or interviews relies on the subjective perceptions of respondents, so it has the potential to cause bias. Third, this study did not consider other variables such as learning motivation, social environment, or family support that may also affect student achievement. In addition, the use of a cross-sectional research design only describes correlations at a certain time and cannot show cause-and-effect relationships. Another limitation is the measurement instrument which may be less able to capture the complex dimensions of the variables studied. Finally, this study did not consider contextual factors such as changes in education policy or economic conditions that could affect the results more broadly.

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