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THE EFFECT OF LEARNING ENVIRONMENT, USE OF LEARNING MEDIA, AND LEARNING INDEPENDENCE ON LEARNING OUTCOMES

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Abstract

This research was conducted to determine how much influence the learning environment, the use of instructional media, and independent learning on the learning outcomes of students in class XI economics at SMA Negeri 35 Jakarta during distance learning (PJJ). The method used is a quantitative method with a cause and effect causality approach. The population in this study were 106 students of class XI IPS at SMA Negeri 35 Jakarta. Determination of sample using saturated sampling technique, data collection using survey methods. Data analysis used path analysis techniques with IBM SPSS Statistics 25. The results of this study indicate that the learning environment has a positive and significant effect on learning independence, the use of learning media has a positive and significant effect on learning independence, the learning environment has a positive and insignificant effect on learning outcomes, media use. learning has a positive and insignificant effect on learning outcomes, and learning independence has a positive and significant effect on learning outcomes. It can be concluded that learning independence cannot mediate learning environment variables on learning outcomes, and learning independence variables can mediate the use of learning media variables on learning outcomes.

Abstrak

Penelitian ini dilakukan untuk mengetahui seberapa besar pengaruh lingkungan belajar, penggunaan media pembelajaran, dan kemandirian belajar terhadap hasil belajar pelajaran ekonomi siswa kelas XI di SMA Negeri 35 Jakarta selama pembelajaran jarak jauh (PJJ). Metode yang digunakan adalah metode kuantitatif dengan pendekatan kausalitas sebab akibat. Populasi dalam penelitian ini adalah siswa kelas XI IPS SMA Negeri 35 Jakarta yang berjumlah 106 siswa. Penentuan sampel menggunakan teknik sampel jenuh, pengumpulan data menggunakan metode

survey. Analisis data menggunakan teknik path analysis dengan IBM SPSS Statistics 25. Hasil penelitian ini menunjukkan bahwa lingkungan belajar berpengaruh positif dan signifikan terhadap kemandirian belajar, penggunaan media pembelajaran berpengaruh positif dan signifikan terhadap kemandirian belajar, lingkungan belajar berpengaruh positif tidak signifikan terhadap hasil belajar, penggunaan media pembelajaran berpengaruh positif tidak signifikan terhadap hasil belajar, dan kemandirian belajar berpengaruh positif dan signifikan terhadap hasil belajar. Hal lain dapat disimpulkan bahwa kemandirian belajar tidak dapat memediasi variabel lingkungan belajar terhadap hasil belajar, dan variabel kemandirian belajar dapat memediasi variabel penggunaan media pembelajaran terhadap hasil belajar.

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INTRODUCTION

Since the COVID-19 virus has spread rapidly to all countries including Indonesia, the impact has been felt by the Indonesian state in various fields such as tourism, politics, economy, health, social and education. In the education sector in particular, the spread of the virus has caused many countries to close schools from the lowest level to the university level. Given the importance of education for a country and in order to maintain the creation of educational goals, learning activities must continue to be carried out online or distance learning. Educational goals can be achieved by creating quality graduates and this can be realized, one of which is the achievement of high learning outcomes.

High learning outcomes can be influenced by several factors, namely internal factors and external factors. Internal factors include physical factors and secondly there are psychological factors, such as independent learning, intelligence, talent, interest, discipline, motivation and others. External factors are factors that come from outside individual learners which include the natural and social environment, programs, curriculum, facilities, media, facilities, and teachers (Slameto, 2018, p. 54).

The internal factor of learning independence is an individual's perception or view of himself which is formed through experience and interaction with his environment (Mulyono, 2017). Learning independence is defined as a characteristic of the ability of students to carry out active learning activities driven by the motive to master something they already have (Mudjiman, 2011, p. 1). Stephen Brookfield in (Bunandar, 2016) suggests that independent learning is self-awareness, self-driven, and the ability to learn to achieve its goals. The importance of independent learning is when doing distance learning because by learning independently students can find learning resources from anywhere. Learning resources are not only centered on the teacher, other sources such as from social media, books, the environment, etc. This is in line with the problems that exist in the field, there are still many students who are lazy in participating in distance learning, especially in terms of collecting assignments that are late and often copying their friends' assignments.

Furthermore, another factor that can affect learning outcomes and student learning independence is the learning environment. The learning environment is an interaction between the individual and the environment where the environment provides stimulation to the individual, and vice versa, the individual also responds to the environment (Saptono & E.S., 2016). In the social learning theory (SLT) put forward by Albert Bandura that through the reciprocal interaction between behavior, cognitive, and the individual's environment can be understood (Lesilolo, 2018). The results of research in the field show that during online learning from home students' attitudes and behavior are not good, such as playing games during lessons, lazing about studying, and sleeping when the teacher presents the material. This can happen because of the lack of parental guidance and supervision of children, parental attention during a pandemic like this by conducting online learning also plays a role in influencing student learning outcomes.

Another thing that also has an influence in achieving learning outcomes is the use of learning media, of course the use of learning media adapts to environmental conditions, because the environment and learning media influence each other the selection of media used during online learning must be appropriate. Learning media is a component of

learning resources or physical facilities that contain learning materials in the learner's environment and can stimulate them to learn (Arsyad, 2016, p. 4). During distance learning, the learning media used is online learning media. Brown and Feasey in (Darmawan, 2012, p. 26) explain online learning is a learning activity that uses networks (Internet, LAN, WAN) as a way of delivering, interacting, and equipping, and supported by various forms of learning services. Learning applications that can and are commonly used by educators and students such as zoom meeting, google meets, google classroom, quizizz, kahoot, prezi, moodle, and many other media are used to support the learning process. The use of various online learning media applications makes it possible to improve student learning outcomes and independence during online learning activities.

METHOD

This study uses quantitative data with a causal approach to causality. The research was conducted using a survey method using a questionnaire and the data were analyzed using statistical techniques. Primary data was collected by a survey method which was conducted by distributing questionnaires regarding exogenous variables X1 (learning environment), exogenous variables X2 (learning media), intervening variables X3 (learning independence) to students in class XI IPS at SMA Negeri 35 Jakarta. Meanwhile, for student learning outcomes data in the form of secondary data obtained from the assessment document of the economics subject teacher learning outcomes. The sampling technique with saturated samples is to use the entire population as a sample in the study, which consists of three class XI IPS with a total of 107 students.

The learning environment data collection instrument (X1) used is the family environment. The indicators and sub-indicators of the learning environment (family) instrument are obtained from (Slameto, 2018, p. 60) which includes the atmosphere of the house, the attitude of the parents, the relationship between family members, and the economic condition of the family. The indicators and sub-indicators of the use of online learning media are obtained from (Arsyad, 2016, p. 75) and (Julaikah et al., 2017, p. 64) which include conformity to the objectives, supporting the learning process, benefits, convenience, and quality of the media. The indicators and sub-indicators of the learning independence instrument are obtained from (Mudjiman, 2011, p. 10) which include being confident, active, disciplined, and responsible. Measurement of data for learning environment variables, use of learning media, and learning independence by scoring using a Likert scale.

The data analysis technique uses path analysis techniques (Path Analysis) with IBM SPSS Statistics 25. Testing of research instruments namely validity and reliability tests, analysis de test requirements analysis, namely normality and linearity tests. Classical assumption tests include multicollinearity, heteroscedasticity, and autocorrelation tests, as well as hypothesis testing with t-test, f-test, and Sobel test.

Results And Discussion

All respondents in this study were all students of class XI IPS SMA Negeri 35 Jakarta which consisted of class XI IPS 1, XI IPS 2, and XI IPS 3 both male and female. The number of poor students who were used as respondents was 107 students.

Tabel III.1 Jumlah Responden

No	Kelas	Frekuensi	Presentase
1	XI IPS 1	36	34%
2	XI IPS 2	36	34%
3	XI IPS 3	35	32%
Total		107	100%

Sumber: Data diolah oleh peneliti, 2021.

The following histogram is presented to clarify the frequency distribution above:

Gambar III.1 Histogram of Learning Outcomes Frequency Distribution

Sumber: Data diolah oleh peneliti, 2021.

Student learning outcomes show that in the trend of student learning outcomes there are 104 students who get a score less than the predetermined KKM, namely 75 with a percentage of (97%), 2 (two) students getting a score greater than or equal to 75 and less than 83 with percentage of (2%), then there is 1 (one) student getting a value greater than or equal to 83 and less than 91 with a percentage of (1%). It can be concluded that most of the students of class XI IPS SMA Negeri 35 Jakarta have scores that are still low or below the KKM that has been determined in the PAS odd semester of economics subjects.

Descriptive Variable Learning Environment (Family) (X1)

The average value of the learning environment variable is 4.04. The highest perception of respondents with an average of 4.77 on the statement "My basic needs are met (food, clothing, health, etc.)." Basic needs are the main needs that must be met before other needs in supporting learning. This shows that the parents of students have sufficient economic conditions and can meet the basic needs of students. While the lowest perception of respondents with an average of 3.47 on the statement "My parents always pay attention and guide me when studying at home (PJJ)." shows that parents give a positive attitude and attention to students during distance learning.

Descriptive Variable Use of Learning Media (X2)

The average value of the variable using learning media is 3.86. The highest perception of respondents with an average of 4.13 on the statement "Through video teleconferencing (Google Meet, Zoom) and other online applications the teacher can present the material clearly." shows that online learning applications can help teachers provide and explain material clearly, this means that the use of online learning media can support teaching and learning activities during distance learning. While the lowest perception of respondents with an average of 3.60 in the statement "With the use of online learning media, learning time and place is more effective." shows that the advantages of using online learning media can make learning time and place more effective, this means that the quality of online learning media used is good during distance learning.

Descriptive Variable Learning Independence (X3)

The average value of the learning independence variable was 3.89. The highest perception of respondents with an average of 4.40 on the statement "I am always present on time to take part in learning." shows that during distance learning students are still disciplined in attending classes online, this is indicated by the independence of students who are obedient to take lessons on time. While the lowest perception of respondents with an average of 3.14 on the statement "I actively ask when there is material that I do not understand." shows that students are active in distance learning activities indicated by the independence of students who dare to ask questions during learning.

1. Test Research Instruments

1) Validity Test

Validity is a measure that shows the level of validity of an instrument (Arikunto, 2010, p. 211). Calculation of validity test, if r count > r table, then the statement item is considered valid and vice versa if the statement item is invalid it should be dropped or not used. It is known that there are 58 statement items from 3 (three) independent variables and tested on 31 samples of respondents who tested the instrument, so the r table was 0.355. The results showed that the r calculated Pearson Correlation of all research variable statements was greater than r table or r count > 0.355. In addition, the significance of the correlation results of all variables is below 0.05 or 5%, the calculation results obtained 35 statement items from 3 (three) variables in the study are said to be valid.

2) Reliability Test

The instrument reliability test was conducted to determine the consistency of the instrument as a measuring instrument, so as to obtain a reliable instrument or measurement result. The instrument can be said to be reliable if the Alpha coefficient 0.600 can be interpreted as r arithmetic greater than or equal to r table, and vice versa (Sugiyono, 2016, p. 257).

It is known that all variables have Cronbach's Alpha which is greater than 0.600 so that the variable is declared suitable to be used as a data collection instrument.

2. Test Requirements Analysis

1) Normality Test

The normality test was carried out using the Kolmogorov-Smirnov formula, the data was normally distributed if the calculated significance level was more than the significance level used, which was 0.05, it could be seen from Asymp. Sig. If the Asymp value. Sig > 0.05.

Based on the results of the normality test with a significance value of 0.05. The table above shows the residual value of the regression model in the normality test seen from the Asymp value. Sig. (2-tailed) of 0.200 more than 0.05, it can be concluded that all variables are normally distributed.

2) Linearity Test

The relationship between learning environment variables and learning outcomes is linear with the Deviation From Linearity Sig value. of 0.173. The relationship between

the variables of the use of learning media and learning outcomes is linear with the Deviation Form Linearity Sig value. of 0.422. The relationship between learning independence variables and learning outcomes is linear with the Deviation From Linearity Sig value. of 0.218. Based on the results of the linearity test, it shows that the relationship between the independent variables and the dependent variable each produces a Sig value. Deviation From Linearity with a significance value of more than 0.05 can be concluded that all variables are linear.

3. Classical Assumption Test

1) Multicollinearity Test

The multicollinearity test was carried out by looking at the results of the VIF (variance inflation factor) and tolerance values. The criteria used are, if the VIF value is less than 10 and or the tolerance value is more than 0.01, it can be concluded that there is no multicollinearity and vice versa.

Based on the results of the multicollinearity test showing that the resulting VIF value is less than 10 and the Tolerance value is greater than 0.01, it can be concluded that there is no multicollinearity problem.

2) Heteroscedasticity Test

If the points spread with an unclear pattern, it can be concluded that there is no heteroscedasticity problem in the regression model. The following is the result of the heteroscedasticity test in the form of a scatterplot graph.

Based on the results of the heteroscedasticity test from the scatterplot graph, the points spread randomly and are scattered both above and below the number 0 on the Y axis, and there are no clear patterns or certain patterns such as regular, wave, and narrow. It can be concluded that the regression model does not have heteroscedasticity problems, so that a good regression model can be fulfilled.

3) Autocorrelation Test

Based on the results of the autocorrelation test, the Durbin-Watson value obtained was 1.931. The dU value of 1.7428 is obtained from the Durbin-Watson table with N as much as 107 and k-3 (there are three independent variables) and the value is 4 – dU = 4 – 1.7428 = 2.2572. If viewed based on the requirements of the autocorrelation test with the provisions of dU < DW < (4 – dU), being 1.7428 < 1.931 < 2.2572, it can be concluded that there is no autocorrelation in the model.

4. Path Analysis Test

1) Analysis of Sub-Structure Paths 1

Sub-Structure Correlation Value 1

Learning Environment Variable (X1) has a correlation coefficient of 0.438 to the Independent Learning variable (X3) with a value of Sig. 0.000 where the value of Sig. 0.000 <0.05, meaning that the Learning Environment variable (X1) has a significant relationship to the Learning Independence variable (X3).

Furthermore, for the Variable Use of Learning Media (X2), it has a correlation coefficient of 0.577 to the Independent Learning variable (X3) with a value of Sig. 0.000 where the value of Sig. 0.000 <0.05, it means that the variable of Learning Media Use (X2) has a significant relationship to the Independent Learning variable (X3).

Coefficient of Determination Test (R2) Sub-Structure 1

The coefficient of determination (R2) test is used to determine how far the model's ability to explain variations in exogenous variables affects endogenous variables.

Tabel III.2
Lingkungan Belajar dan Penggunaan Media Pembelajaran Mempengaruhi Kemandirian Belajar

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.635[a]	.403	.392	5.932	.403	35.165	2	104	.000

a. Predictors: (Constant), Media Pembelajaran (X2), Lingkungan Belajar (X1)

Sumber: Diolah oleh IBM SPSS Statistics 25, 2021.

Based on the value of R Square (R2), the magnitude of the influence of the Learning Environment variable (X1), and the Use of Learning Media (X2), simultaneously on the Independent Learning variable (X3) is 0.403 or 40.3%. Meanwhile, the remaining effect can be calculated by subtracting the number 1 with the value of R Square, then 1 – 0.403 = 0.597 or 59.7% is influenced by other variables outside the regression equation or variables not examined. This means that the variable of learning independence that can be explained by the variable of the learning environment and the use of learning media is 40.3%. The magnitude of the influence of other variables is also called error, the error value can be calculated using the formula e = ((1-R Square)) then e1 = ((1-R Square)) = ((1-0.403)) = 0.772 . So, the magnitude of the variant of Learning Independence (X3) which is not influenced by the Learning Environment variable (X1) and the Learning Media Use variable (X2) is 0.772.

For the value of Sig. F Change provides information about the results of the simultaneous correlation test, namely whether there is a relationship between the independent variables simultaneously on the dependent variable. Based on the value of Sig. F Change this that the value of Sig. F Change is 0.000, where the value is 0.000 <0.05, so it can be concluded that the independent variables Learning Environment (X1) and Learning Media Use (X2) simultaneously have a correlation/relationship with the Independent Learning variable (X3). To see how close the correlation / close relationship can be seen from the R value (correlation coefficient). The R value of 0.635, which is then compared with the value of the determination of the correlation according to (Sugiyono, 2016, p. 257) the coefficient value of 0.635 is included in the category of strong correlation.

Hypothesis Testing T Test Sub-Structure Path Analysis 1

The t-test is a test that aims to find out whether the independent variables partially or individually have an influence on the dependent variable.

Tabel III.3 Output Uji t Sub-Struktur 1

Coefficients[a]

Model	Unstandardized Coefficients	Standardized	t	Sig.

				Coefficients		
		B	Std. Error	Beta		
1	(Constant)	11.418	4.915		2.323	.022
	Lingkungan Belajar (X1)	.324	.093	.280	3.498	.001
	Media Pembelajaran (X2)	.609	.100	.486	6.074	.000
a. Dependent Variable: Kemandirian Belajar (X3)						

Sumber: Diolah oleh IBM SPSS Statistics 25, 2021.

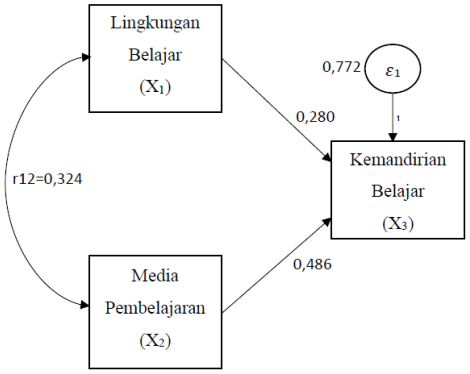
Based on the t-test table that the significance value of the Learning Environment variable (X1) is 0.001 where the value is 0.001 <0.05, it can be concluded that the learning environment variable (X1) has a direct and significant effect on the Learning Independence variable (X3), so the hypothesis Ha is accepted. and Ho is rejected.

Furthermore, the significance value of the Variable Use of Learning Media (X2) is 0.000 where the value is 0.000 <0.05, it can be concluded that the Variable Use of Learning Media (X2) has a direct and significant effect on the Independent Learning variable (X3), so the hypothesis Ha is accepted and Ho is rejected.

Then the path coefficient value is the Standardized Coefficient Beta value. Based on the path diagram, a structural equation can be made and a path diagram for the Sub-Structure 1 model can be drawn as follows:

$X3 = \rho 31.X1 + \rho 32.X2 + \varepsilon 1$

X3 = 0,280.X1 + 0,486.X2 + 0,772



Gambar III.2 Diagram Jalur Sub-Struktur 1

Sumber: Data diolah oleh peneliti, 2021.

The regression problem has a meaning, if the learning environment variable increases by one unit, then learning independence will increase by 0.280 or by 28%. If the variable of learning media usage has increased by one unit, then learning independence will increase by 0.486 or 48.6%.

Hypothesis Testing F Test Path Analysis Sub-Structure 1

The F test can be seen in the Anova table which provides information on whether there is an influence of the learning environment variable (X1), and the variable use of learning media (X2) simultaneously on the learning independence variable (X3). The results of the F test can be seen as follows:

Tabel III.4 Ouput Uji F Sub-Struktur 1

ANOVA[a]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2475.151	2	1237.575	35.165	.000[b]
	Residual	3660.139	104	35.194		

	Total	6135.290	106			

a. Dependent Variable: Kemandirian Belajar (X3)
b. Predictors: (Constant), Media Pembelajaran (X2), Lingkungan Belajar (X1)

Sumber: Data diolah oleh IBM SPSS Statistics 25, 2021.

From the results of the F test, the significance value is 0.000, meaning the value is 0.000 <0.05, it can be concluded that the Learning Environment variable (X1), the Learning Media Use variable (X2) simultaneously/jointly affects the Learning Independence variable (X3). .

2) Sub-Structure Path Analysis 2

Sub-Structure Correlation Value 2

Based on the table, it is shown that the Learning Environment variable (X1) has a correlation coefficient of 0.170 to the Learning Outcome variable (Y) with a Sig value. 0.040 where the value of Sig. 0.040 <0.05, meaning that the Learning Environment variable (X1) has a significant relationship to the Learning Outcome variable (Y). Furthermore, the variable Use of Learning Media (X2) has a correlation coefficient of 0.209 to the learning outcome variable (Y) with a value of Sig. 0.015 where the value of Sig. 0.015 <0.05, it means that the variable of Learning Media Use (X2) has a significant relationship to the learning outcome variable (Y). The learning independence variable (X3) has a correlation coefficient of 0.311 to the learning outcome variable (Y) with a value of Sig. 0.001 where the value of Sig. 0.001 <0.05, meaning that the learning independence variable (X3) has a significant relationship to the learning outcome variable (Y).

Coefficient of Determination Test (R2) Sub-Structure 2

The coefficient of determination (R2) test is used to determine how far the model's ability to explain variations in exogenous variables affects endogenous variables.

Tabel III.5
Lingkungan Belajar, Penggunaan Media Pembelajaran, dan Kemandirian Belajar Mempengaruhi Hasil Belajar Belajar

Model Summary									
					Change Statistics				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change
1	.315[a]	.099	.073	9.558	.099	3.780	3	103	.013

a. Predictors: (Constant), Kemandirian Belajar (X3), Lingkungan Belajar (X1), Media Pembelajaran (X2)

Sumber: Diolah oleh IBM SPSS Statistics 25, 2021.

Based on the value of R Square (R2), the magnitude of the effect of the Learning Environment (X1), Learning Media Use (X2), and Learning Independence (X3) simultaneously on the Learning Outcomes (Y) variable is 0.099 or 9.9%. Meanwhile, the remaining effect can be calculated by subtracting the number 1 with the value of R Square, then 1 – 0.099 = 0.901 or 90.1% is influenced by other variables outside the

regression equation or variables not included in the study. This means that the variables of learning outcomes that can be explained by the variables of the learning environment, the use of learning media, and learning independence are 9.9%.

The magnitude of the influence of other variables is also called error, the error value can be calculated using the formula e = ((1-R Square)) then e2 = ((1-R Square)) = ((1-0.099)) = 0.949 . So, the magnitude of the learning outcome variance (Y) which is not influenced by the Learning Environment variable (X1), the Learning Media Use variable (X2), and the learning independence variable (X3) is 0.949.

For the value of Sig. F Change provides information about the results of the simultaneous correlation test, namely whether there is a relationship between the independent variables simultaneously on the dependent variable. Based on the value of Sig. F Change this that the value of Sig. F Change = 0.013, where the value is 0.013 <0.05 so it can be concluded that the variables of the Learning Environment (X1), Use of Learning Media (X2), and learning independence (X3) simultaneously (together) there is a correlation/relationship with the variable Learning Outcomes (Y).

To see how close the correlation / close relationship can be seen from the R value (correlation coefficient). The R value is 0.315, which is then compared with the value of the correlation coefficient according to (Sugiyono, 2016, p. 257) the coefficient value of 0.315 belongs to the category of weak/low correlation.

Hypothesis Testing T Test Sub-Structure Path Analysis 2

The t-test is a test that aims to find out whether the independent variables partially or individually have an influence on the dependent variable.

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	30.501	8.121		3.756	.000
	Lingkungan Belajar (X1)	.058	.158	.039	.369	.713
	Media Pembelajaran (X2)	.065	.188	.040	.348	.729
	Kemandirian Belajar (X3)	.354	.158	.271	2.238	.027

a. Dependent Variable: Hasil Belajar (Y)

Tabel III.6 Output Uji t Sub-Struktur 2

Sumber: Diolah oleh IBM SPSS Statistics 25, 2021.

Based on the table it is shown that the significance value of the Learning Environment variable (X1) is 0.713 where the value is 0.713 > 0.05, it can be concluded that the Learning Environment variable (X1) has no significant effect on the dependent variable Learning Outcomes (Y), so the hypothesis Ha is rejected and Ho accepted.

Furthermore, the significance value of the Variable Use of Learning Media (X2) is 0.729, where the value is 0.729 > 0.05, it can be concluded that the variable Use of Learning Media (X2) has no significant effect on the dependent variable Learning Outcomes (Y), so the hypothesis Ha is rejected. and Ho is accepted.

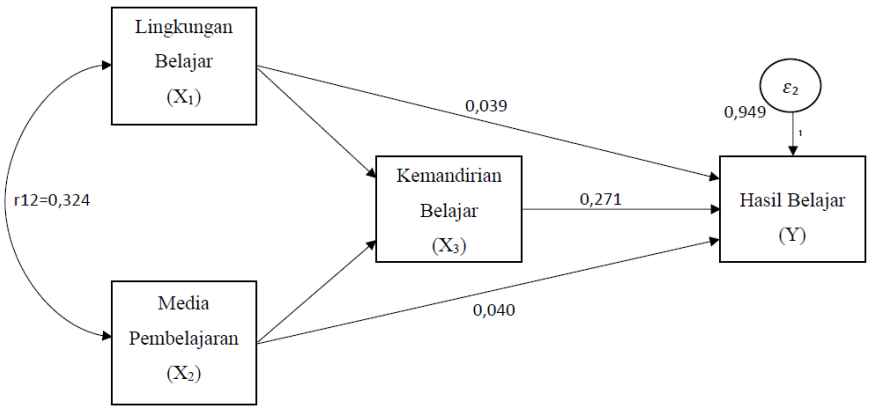
The significance value of the independent learning variable (X3) is 0.027 where the value is 0.027 <0.05, it can be concluded that the learning independence variable (X3)

has a significant effect on the dependent variable learning outcomes (Y), so the hypothesis Ha is accepted and Ho is rejected.

Then the path coefficient value is the Standardized Coefficient Beta value. Based on the path diagram, structural equations can be made and a path diagram for the Sub-Structure 2 model can be drawn as follows:

$Y = \rho yx1.X1 + \rho yx2.X2 + \rho y3.X3 + \varepsilon 2$
$Y = 0{,}039.X1 + 0{,}040.X2 + 0{,}271.X3 + 0{,}949$

The regression problem has a meaning, if the learning environment variable increases by one unit, then the learning outcomes will increase by 0.039 or by 3.9%. If the variable use of learning media has increased by one unit, then the learning outcomes will increase by 0.040 or by 4%. If the learning independence variable increases by one unit, the learning outcomes will increase by 0.271 or by 27.1%.



Gambar III.3 Diagram Jalur Sub-Struktur 2
Sumber: Data diolah oleh peneliti, 2021.

Hypothesis Testing F Test Path Analysis Sub-structure 2

The F test can be seen in the Anova table which provides information on whether there is an influence of the learning environment variable (X1), and the variable use of learning media (X2) simultaneously on the learning independence variable (X3). The results of the F test can be seen as follows:

Tabel III.7 Ouput Uji F Sub-Struktur 2

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1035.990	3	345.330	3.780	.013[b]
	Residual	9408.683	103	91.346		
	Total	10444.673	106			

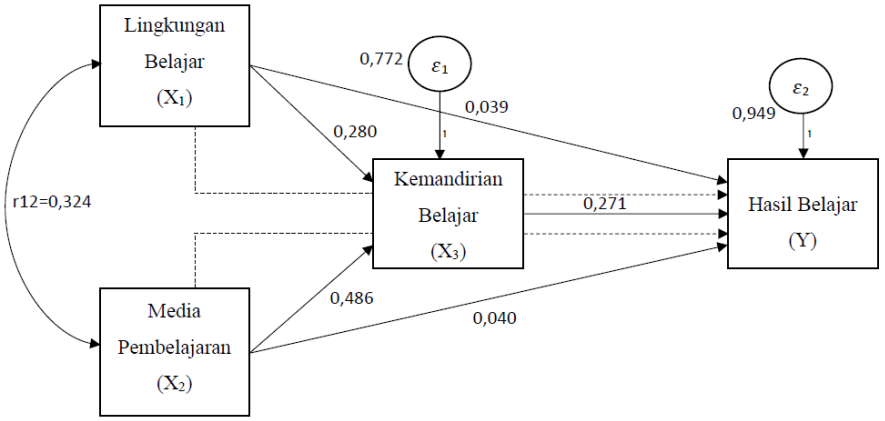
a. Dependent Variable: Hasil Belajar (Y)

b. Predictors: (Constant), Kemandirian Belajar (X3), Lingkungan Belajar (X1), Media Pembelajaran (X2)

Sumber: Diolah oleh IBM SPSS Statistics 25, 2021.

From the results of the F test, the significance value is 0.013, meaning that the value is 0.013 < 0.05, it can be concluded that the learning environment variable (X1), the use of learning media (X2), and the independent learning variable (X3), simultaneously affect the outcome variable. Learn (Y).

Analysis of the influence between variables was carried out to determine the direct influence, indirect effect, and the total effect of the variables in the study. The following is a table of direct influence, indirect effect, and total effect of the path diagram model that has been formed as follows:



Gambar III.4 Diagram Jalur Sub-Struktur 2
Sumber: Data diolah oleh peneliti, 2021.

The magnitude of the direct influence of the Learning Environment (X1) on Learning Outcomes (Y) is 0.039. The magnitude of the influence of the Learning Environment variable (X1) on Learning Outcomes (Y) indirectly through Learning Independence (X3) = 0.280 X 0.271 = 0.07588. The magnitude of the total effect given by the Learning Environment variable (X1) on the Learning Outcome variable (Y) is the result of the sum of the direct and indirect effects, namely 0.039 + 0.07588 = 0.11488.

The direct influence of the use of learning media (X2) on learning outcomes (Y) is 0.040. The magnitude of the influence of the Variable Use of Learning Media (X2) on the variable Learning Outcomes (Y) indirectly through Learning Independence (X3) = 0.486 x 0.271 = 0.131706. The magnitude of the total effect given by the Variable Use of Learning Media (X2) on the Learning Outcome variable (Y) is the result of the sum of the direct and indirect effects, namely 0.040 + 0.131706 = 0.171706.

5. Indirect Effect Hypothesis Test

Sobel Test

Direct hypothesis testing between variables used t-test output data on the t-statistics value and significance value, then the indirect effect to determine the significance value was carried out with the Sobel test. From the results of the Sobel test, it shows that the p-value is 0.05950408 ($p > 0.05$), it can be concluded that learning independence cannot mediate learning environment variables on learning outcomes. From the results of the Sobel test, the results show that the p-value is 0.03549031 ($p < 0.05$), it can be concluded that learning independence can mediate the variable use of learning media on learning outcomes.

H1. There is a positive and significant influence between learning environment variables on learning independence variables. **Hypothesis (H1) is accepted.**

The results of this study are similar to the research researched by (Hermil, 2017)

regarding the Effect of Family Environment and Boarding Environment on Independent Learning of Biological Education Students, Faculty of Tarbiyah and Teacher Training at Uin Alauddin Makassar, stating that there is a positive and significant influence of the family learning environment on independent learning. During the Covid-19 pandemic, learning is carried out online from home, of course, there is also a lot of interaction between families at home, especially parents and students. This is relevant to the theory put forward by Sartain in (Purwanto, 2017, p. 28) that the environment includes all conditions in this world that in some way affect behavior, growth, development or life processes. The environment can directly have a positive or negative influence on students' independence in learning. A family environment with parents who have concern, care for their children, and always support their children's future will certainly always encourage children to continue learning compared to parents who do not care about their child's development.

H2. There is a positive and significant influence between the variables of the use of learning media on the learning independence variable. **The hypothesis (H2) is accepted**.

The use of online learning media during PJJ (distance learning) can help increase student independence. The results of this study are supported by research conducted (Banat & Martiani, 2020) on Physical Education Student Learning Independence Using Google Classroom Media Through Hybrid Learning in Professional Education Learning in the Covid-19 Pandemic Period, showing that the average level of student learning independence in terms of indicators learning independence using google classroom media is very strong. This is relevant to the theory proposed by (Arsyad, 2016, p. 4) learning media is a component of learning resources or physical facilities that contain learning materials in the environment of students and can stimulate them to learn. The use of learning media can stimulate students to continue learning, so that students become more independent in learning.

H3. There is a positive and insignificant effect between the learning environment variables on the learning outcomes variables. **Hypothesis (H3) is rejected.**

Research investigated by (Pranata, 2020) on the Effect of the Family Environment on Economic Learning Outcomes for Class XII Social Sciences at SMAN 15 Merangin, stated that the family environment had a significant effect on economic learning outcomes at SMAN 15 Merangin.

H4. There is a positive and insignificant effect between the variables of the use of learning media on the variables of learning outcomes. **Hypothesis (H4) is rejected.**

Research that examines the use of learning media and varies such as research conducted by (Putra et al., 2017) on the Effect of Using Android Application-Based Learning Media on Student Learning Outcomes, stating that the use of android application-based learning media has a significant influence on student learning outcomes. and seen from the use of android application-based learning media has a positive influence in the learning process.

H5. There is a positive and significant effect between learning independence variables on learning outcomes variables. **Hypothesis (H5) is accepted.**

A similar study conducted by (Syilvitri, 2020), stated that there was a significant effect of learning independence on the learning outcomes of economic subjects at SMAN 1 Muaro Jambi. The better the level of learning independence with efforts to be active in teaching

and learning activities, the better the student learning outcomes will be. This can be due to students who are independent in learning have a wider level of knowledge. This is relevant to the theory put forward by Schunk and Zimmerman in (Sumarmo, 2010) independent learning is a way of learning that can be done because of the influence of students' thoughts, feelings, strategies and behaviors that refer to the achievement of goals. With good learning independence, students have a wider level of knowledge because they are always learning so as to make learning outcomes better.

H6. There is a positive and insignificant effect between the learning environment variables on the learning outcomes variables mediated by the learning independence variable. **Hypothesis (H6) is rejected.**

The results of another study examined by (Azhari & Yanto, 2015) regarding Determinants of Economic Learning Achievement Class X With Independent Learning as a Mediator Variable (Case Study at SMAN 7 Semarang), the results showed that learning independence could mediate the influence of the family environment on learning achievement. However, this study found something different, the significance of the learning environment at home (family) had no effect on student learning outcomes through student learning independence, but still had a positive influence. This can be caused by various factors such as the data collected cannot prove the influence between the independent variable and the dependent variable through the intervening variable, but that does not mean that there is no relationship and influence between the independent variable and the dependent variable through the intervening variable (mediation) but rather the data on environmental variables. This study (family) did not succeed in proving the effect of the relationship.

H7. There is a positive and significant influence between the variables of the use of learning media on the learning outcomes variable which is mediated by the variable of learning independence. **Hypothesis (H7) is accepted**.

The author did not find the mediating effect of the learning independence variable as an intervening variable related to the effect of the use of learning media on learning outcomes through the variable of learning independence. Similar research examines the teacher's role variable in which there are indicators of the use of learning media and is mediated by the variable of learning independence. This research was investigated by (Azhari & Yanto, 2015) on the Determinants of Class X Economics Learning Achievement with Independent Learning as a Mediator Variable (Case Study at SMAN 7 Semarang). The results showed that learning independence could mediate the influence of the teacher's role on learning achievement in economics subjects. This is relevant to the theory put forward by (Arsyad, 2016, p. 4) that learning media is a component of learning resources or physical facilities that contain learning materials in the learner's environment and can stimulate them to learn.

CONCLUSIONS AND SUGGESTIONS

1) The learning environment has an effect on learning independence

2) Learning media has an effect on learning independence

3) The learning environment affects learning outcomes

4) The use of learning media affects learning outcomes

5) Learning independence has an effect on learning outcomes

6) The learning environment affects learning outcomes through independent learning

7) Learning media has an effect on learning outcomes through independent learning

Schools should pay more attention to the use of learning media used during online learning and the role of the teacher in operating it properly, this is done in order to help support teaching and learning activities run optimally. Parents in the family environment must be firm in educating children and supporting children to be more independent. Parents must be able to motivate children to be enthusiastic about learning, by providing support and guidance at any time if children have difficulties at school, because the assistance provided makes students more enthusiastic in learning.

REFERENCES

Arsyad, A. (2016). *Media Pembelajaran*. Raja Grafindo Persada.

Azhari, A. D., & Yanto, H. (2015). Determinan Prestasi Belajar Ekonomi Kelas X Dengan Kemandirian Belajar Sebagai Variabel Mediator (Studi Kasus di SMAN 7 Semarang). *Jurnal Pendidikan Ekonomi*, *4*(3). http://journal.um.ac.id/index.php/jptpp/article/download/7105/3134

Banat, A., & Martiani. (2020). Kemandirian Belajar Mahasiswa Penjas Menggunakan Media Google Classroom Melalui Hybrid Learning Pada Pembelajaran Profesi Pendidikan Di Masa Pandemi Covid-19. *Jurnal Teknologi Pendidikan (JTP)*, *13*(2), 119. https://doi.org/10.24114/jtp.v13i2.20147

Bunandar, A. E. S. (2016). *Analisis Kemandirian Belajar Siswa pada Mata Pelajaran Biologi di Kelas X Mas Al-Mustaqim Kubu Raya* [Universitas Muhammadiyah Pontianak]. http://repository.unmuhpnk.ac.id/39/1/ADE ENY SURYANI BUNANDAR 101630380.pdf

Darmawan, D. (2012). *Pendidikan Teknologi Informasi dan Komunikasi*. Remaja Rosdakarya.

Hermil. (2017). *Pengaruh Lingkungan Keluarga dan Lingkungan Kost terhadap Kemandirian Belajar Mahasiswa Pendidikan Biologi Fakultas Tarbiyah dan Keguruan UIN Alauddin Makassar*. UIN Alauddin Makassar.

Julaikah, D. I., Kurniawati, W., Rahman, Y., Saksono, L., & Prasetyawati, T. (2017). *Buku Ajar Media Pembelajaran* (A. Rohman (ed.); 1 ed.). CV. Cipta Media Edukasi.

Lesilolo, H. J. (2018). Penerapan Teori Belajar Sosial Albert Bandura Dalam Proses Belajar Mengajar Di Sekolah. *KENOSIS: Jurnal Kajian Teologi*, *4*(2), 186–202. https://doi.org/10.37196/kenosis.v4i2.67

Mudjiman, H. (2011). *Manajemen Pelatihan Berbasis Belajar Mandiri*. Pustaka Belajar.

Mulyono, D. (2017). The influence of learning model and learning independence on mathematics learning outcomes by controlling students ' early ability. *International Electronic Journal of Mathematics Education*, *12*(3), 689–708. https://www.iejme.com/download/the-influence-of-learning-model-and-learning-independence-on-mathematics-learning-outcomes-by.pdf

Pranata, A. (2020). Pengaruh Lingkungan Keluarga Terhadap Hasil Belajar Ekonomi Kelas XII IPS di SMA N 15 Merangin. *Jurnal Ekonomi dan Pendidikan*, *5*(2), 6–10. http://journal.stkipypmbangko.ac.id/index.php/ekopendia/article/view/363/288

Purwanto, N. (2017). *Psikologi Pendidikan*. Remaja Rosdakarya.

Putra, R. S., Wijayati, N., & Mahatmanti, F. W. (2017). Pengaruh Penggunaan Media Pembelajaran Berbasis Aplikasi Android Terhadap Hasil Belajar Siswa. *Jurnal Inovasi Pendidikan Kimia*, *11*(2).

Saptono, A., & E.S., D. P. (2016). Learning Environment, Self-Efficacy, And Attitude Impact Vocational Students' Entrepreneurial Intention? *Indonesian Journal Of Educational Research*, *2*(1).

Slameto. (2018). *Belajar dan Faktor-faktor yang Mempengaruhi / Slameto* (6 ed.). Rineka Cipta.

Sugiyono. (2016). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D.* Alfabeta.

Sumarmo, U. (2010). Kemandirian belajar: apa, mengapa, dan bagaimana dikembangkan pada peserta didik. In *Makalah pada Seminar Tingkat Nasional. FPMIPA UNY Yogyakarta Tanggal* (Vol. 8). FPMIPA UPI. http://math.sps.upi.edu/.

Syilvitri. (2020). *Pengaruh Kemandirian Belajar dan Sikap Guru dalam Belajar Mengajar terhadap Hasil Mata Pelajaran Ekonomi di Kelas XI SMA N 1 Muaro Jambi*. Universitas Jambi.