Effect of Academic Clinics on the Progress of Student Achievement at the Universitas Terbuka

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This study discusses the Effect of Academic Clinics on the Progress of Open University Student Achievement at Universitas Terbuka Denpasar Indonesia. The results of the study stated that the provision of academic guidance in the form of academic clinics with online tutorial guidance strategies, face-to-face tutorials for students who had an average score below 2.00 had the effect of increasing student achievement indexes. However, students' independent learning skills must be continuously improved so that they can help improve their achievement index.

Keywords: Learning Assistance Guidance , Independent Learning Skills Training , Improving Learning Achievement

1. INTRODUCTION

The difference in face-to-face learning systems with Higher Education Colleges makes students experience several problems. These problems include problems in planning independent learning, problems using time in learning and doing other work, problems of limited access to finding sources of teaching materials and lecturers as learning resources, so that obstacles in the distance learning system result in poor quality of learning outcomes . The low quality of learning outcomes is reflected in the achievement of the Achievement Index each semester which averages below 2.00.

Open University has students who are scattered in various regions also have problems such as low student achievement index. One example in the UT Regional Office Denpasar, in the 2017 semester.2 there were 21% of students with a grade point below 2.00 of the number of Economics Faculty students who registered in that semester. The student will tend not to continue studying anymore, so there is a need for certain treatments from related institutions

From the background of the problem the writer wants to provide experimental treatments to a number of students to be given an academic clinic in the form of learning assistance Face to Face Tutorials and Online Tutorials

2. METHOD

2.1 Experimental Method.

Research design with 1 semester experimental research method. There are 3 experimental classes, the first class is a face-to-face tutorial class, the second class is an online tutorial class and the third class is a control class that is the class that is not given any treatments. The method can be described in the following table,

EXPERIMENTAL RESEARCH

Group	Random Assg	Preliminary Research	Intervention	Advanced Research
		Pretes 2018.Feb		Postes 2018.June
Class 1	R	O1	X1	O2+O5
Class 2	R	O1	X2	O3+O5
Class 3	R	O1	X3	O4+O5
Control Class	R	O1		O5

Information
R = Random Assigment
O1 = GPA on pre-test

O2 = Online Tutorial independent learning skills questionnaire in the post test
O3 = Independent Learning Skills Training Questionnaire in post-test
O4 = Face to Face Tutorial self-learning Skills Questionnaire at post test
O5 = Student Achievement Index (GPA) in 2018.1 (2018. June)
X1 = Online Tutorial for GPA students less 2
X2 = Face to Face Tutorial for GPA students less 2
X3 = SLST (Student Learning Skills Training) for less GPA students 2

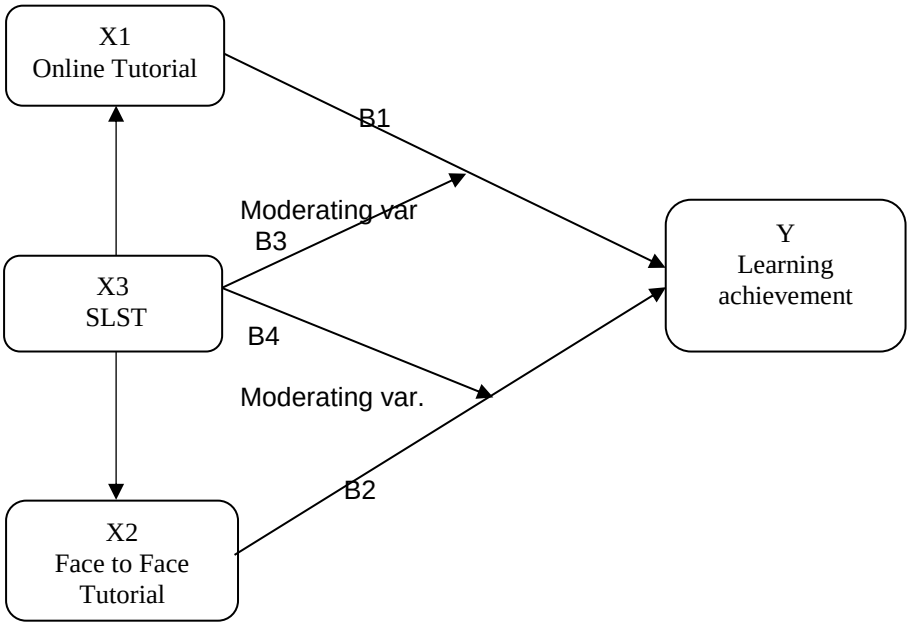
Interpretation of Student Achievement Index

GPA	Level of Independent Learning Success
3.5 - 4	High
3.00 – 3.4	Above average
2.5 - 2.9	Average
2.0 – 2.4	Below average
Under 2.0	Low

2.2. Path Analysis Method

To find out how much influence the Academic Clinic has on the progress of student learning achievement, the research method used is an association with the path analysis method. The number of respondents is 120 students

Designing models based on theoretical concepts are as follows :



a. Online Tutorial Variables (X1) directly influence Learning Achievement (Y)
b. The Student Learning Skills Training (SLST) X3 moderates the Face to Face Tutorial (X2) variable to the Learning Achievement variable (Y)
c. The Student Learning Skills Training (SLST) X3 moderates the Online Tutorial (X1) variable to the Learning Achievement variable (Y)
d. Online Tutorial Variable (X1), Face to face Tutorial (X2), and Independent Learning Skills Training variable (X3) affect Learning Achievement (Y).Learning Achievement (Y).

Determining the equation of the structural model:

Structural Equation

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e_5$$

Information
Y = Learning Achievement (Achievement Index)
b = Koefisien Jalur
X_1 = Tutorial On line
X_2 = Face to Face Tutorial
X_3 = Student Learning Skills Training
e = Error

3. Result and Discussion

3.1 Experimental Research Results

To find out whether the existence of an academic clinic will affect the progress of student learning achievement it is necessary to compare the student achievement index at the beginning of the semester (2017.2) and the same student achievement index in the following semester (2018.1).Di dapat Hasil sebagai tertera pada table berikut :

COMPARISON OF GPA (BEFORE) AND GPA (AFTER)
THERE ARE ACADEMIC CLINICS

STUDENT ACHIEVEMENT INDEX								
	TUTON CLASS (X1)		FACE TO FACE CLASS (X2)		SLST CLASS (X3)		CLASS CONTROL	
RESPONDENT	PRE	POST	PRE	POST	PRE	POST	PRE	POST
1	< 2	3,64	<2	3,88	< 2	2,21	< 2	1,77
2	< 2	3,9	< 2	3,76	< 2	1,69	< 2	1,56
3	< 2	4	< 2	3,85	< 2	3,03	< 2	1,54
4	< 2	3,92	< 2	3,04	< 2	2,6	< 2	1,69
5	< 2	3,9	< 2	3,78	< 2	3,32	< 2	1,77
6	< 2	4	< 2	3,96	< 2	2,31	< 2	1,56
7	< 2	4	< 2	4	< 2	2,43	< 2	1,54
8	< 2	4	< 2	4	< 2	1,77	< 2	1,4
9	< 2	3,92	< 2	4	< 2	2,23	< 2	1,69
10	< 2	3,92	< 2	4	< 2	2,24	< 2	1,77
11	< 2	3,83	< 2	3,96	< 2	2,07	< 2	1,56
12	< 2	3,83	< 2	3,96	< 2	2,26	< 2	1,54
13	< 2	3,92	< 2	3,93	< 2	2,17	< 2	1,4
14	< 2	3,92	< 2	4	< 2	2,06	< 2	2,81
15	< 2	2,81	< 2	3,78	< 2	2,16	< 2	2,21
16	< 2	2,21	< 2	3,96	< 2	2,76	< 2	2,73
17	< 2	3,45	< 2	4	< 2	2,21	< 2	2,26
18	< 2	3,41	< 2	4	< 2	2,91	< 2	3,21
19	< 2	3,61	< 2	4	< 2	1,56	< 2	2,33
20	< 2	3,74	< 2	3,72	< 2	1,54	< 2	2,23
21	< 2	3,55	< 2	3,8	< 2	2,73	< 2	2,24

22	< 2	2.,2	< 2	3,59	< 2	2,26	< 2	2,07
23	< 2	2,21	< 2	3,64	< 2	3,21	< 2	2,26
24	< 2	3,7	< 2	3,68	< 2	2,33	< 2	2,17
25	< 2	3,61	< 2	3,55	< 2	1,4	< 2	2,06
total		86,61	0	95,84	0	57,46	0	49,37
Average		3,4644	0	3,8336	0	2,2984	0	1,9748

SOURCE: Data from Regional Office – UT Denpasar SRS on 5 November 2018

Experimental Class Average GPA Table

Experimentation Class	PRE	POST	Level of success
Tuton Class (X1)	< 2	3,46	Above average
Face to face Class (X2)	< 2	3,83	High
SLST Class (X3)	< 2	2,29	Average
Control Class	< 2	1,97	Low

From the results of the experimental research, it was found that students' GPA Before being given treatment compared to after being given treatment experienced a significant increase, they were in a GPA greater than 2,00. In Tuton Class (X1) the criteria for GPA above Average, Face to Face Class (X2) have criteria for High GPA, SLSTClass (X3) have average criteria, but Control Classes have low criteria. It can be seen that the control class that was not given any treatments had a low GPA. Meanwhile the results of the Post test on student responses to each class to the given treatment get the results that the average Tuton Class score (X1), Face to Face Class (X2) and SLST Class (X3) are above average, while responses the control class has an average score in the range of average self-learning abilities.

3.2. Structural Equation

$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e_5$

Obtained Results,

Y = -8,85 + 0,59 X1 + 0,94 X2 – 0,49 X3

-0,809 3,05 13,2 -2,35

SIGNIFICANT TABLES
Dependent Variable: Y (Student GPA)

Variable	Coefficient	t count	t table (α,n-k)	Conclusion
C	-8,85	-0,8	1,98 (0,05, 116)	Not significant (t hit<t table)
X1(Tuton)	0,59	3,05	1,98 (0,05, 116)	significant (t hit>t table)
X2 (F t F)	0,94	13,2	1,98 (0,05, 116)	significant (t hit>t table)
X3 (SLST)	-0,49	-2,35	1,98 (0,05, 116)	significant (t hit>t table)
		hitung	**tabel**	
R- Squared	0,639			
D-W		0,99	dl= 1,65(0,05,3,120) du=1,75(0,05,3,120)	3,01 > 1,75 ..(4-dw>du) There is no neg autocorrelation
F Stat		68,7	2,68 (0.05, 2,116)	F hit> F tabel (var

				independent has a relevant relationship with the dependent variable)

Source : Sawitri Hendrin and Gede Suwardika 2018, processed

That there is a positive and significant relationship between the Student Achievement Index (Y) with the Tuton variable (X1) and Face-to-Face Tutorial (X2), but the negative relationship with the SLST (X3) variable

If effort X1 (Tuton) is increased by 1 unit, it will increase student GPA by 0.59 units, if effort X2 (Face to Face) is increased by 1 unit, it will increase student GPA by 0.94 units, but effort X3 (SLST) as a variable intervening has not been able to moderate Tuton's variables but is able to moderate Face to Face to increase student GPA.

R squared of 0.639 means that around 64% of this model can be explained by independent variables, while about 36% of this model has not been explained by independent variables, there are still other independent variables that can explain the dependent variable, or there are variables outside Tuton, Face to face Tutorial and Student Learning Skill Training can influence the development of student GPA

The DW value of 0.99 is in the 4-dw> du area (α, k, n), 4 - 0.99> 1.75 (0.05, 3, 120) which is 3.01> 1.75 in the area no negative autocorrelation

The calculated F value of 68.7 is greater than F table = 2.68 (α, k, nk) or (0,05,3,116) indicating that the independent variables are Tuton (X1), Face to Face Tutorial (X2) and Student Learning Skill Training (X3) has a relationship that is relevant to the dependent variable (Student Achievement Index)

4. CLOSING

From the results of the experimental research, it was found that students' GPA Before being given treatment compared to after being given treatment experienced a significant increase, they were in a GPA greater than two. In Tuton Class (X1) the above average GPA criteria, Face-to-face Tutorial Class (X2) has the criteria of a High GPA, SLST Class (X3) has an average criterion, but the Control Class has low criteria. It can be seen that the control class that was not given any treatments had a low GPA.

Meanwhile Post test results about the responses of students in each class to the treatments given get the results that the average scores of Tuton Class (X1), Face to Face Tutorial Class (X2) and SLST Class (X3) are above average, whereas control class responses have an average score in the range of average independent learning abilities.

Based on the result of research, it is suggested some things as follows:

Based on the results of the research that has been done, there needs to be a coaching strategy for students who are classified as emergency students, namely those who still have an achievement index below 2.00.

The student strategy needed is the provision of academic clinics in the form of tutoring assistance.

Face-to-face Tutorial tutoring is an academic clinic strategy that is proven to be suitable for this group of emergency students, arguing also that Face-to-Face Tutorials contribute 50% to the value of the End of semester Exam. However, the tutorial for Face-to-Face Tutorials must meet the criteria of 25 people, in this criteria field there are few obstacles if the number of students is not even 25 per course, with these constraints, another Strategy to provide academic clinic assistance is by group / online Tutorial class specifically catered to face-to-face where these students are collected per class with a minimum number of 5 people a maximum of 20 people by the Information Technology expert facilitator. The facilitator should be 1 person compared to 5 people or 7 people. The task of the Facilitator is to guide students per group in the implementation of the Online Tutorial (Tuton) starting from the activation of Tuton, the Tuton meeting from initiations 1 to 8, guiding discussion of Tuton and guiding the 3 Tasks of Tuton.

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