# Analysis Of Determinants Affecting Student Interest In Joining Academic And Non-Academic Competitions

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Abstract: Accreditation of majors besides determined human resources both lecturers and also related to students. One of the related students is related to the academic and non-academic fields, which are determined by different determinants. This, the majors should think about the ability to improve their students. The purpose of this research is to determine what factors affect student interest in academic and non-academic fields in the majors or departments. The research method used is a quantitative approach through survey techniques with statistic descriptive analysis with IBM SPSS Statistics 21 program. The results of this study show that organizational experience, learning environment, reading habits, the intensity of guidance affect student interest in academic fields. This research conclusion is an organizational experience, learning environment, reading habits, intensity guidance is the factors that affect student interest in academic and non-academic fields. Therefore, to increase the interest of students in academic and non-academic fields, the majors or departments should include in the annual work program. The contribution of this research is to assist the majors in increasing the interest of students in academic fields, to make the accreditation of majors better again.

Keyword: analysis determinant, student interest, academic and non-academic

### 1 INTRODUCTION

Data of the State University of Semarang (UNNES) showed that the total number of students of the school's foreign education study in the semester of the academic year 2017/2018 was 367. Every year the total number of fans who register to take the admission test at the school's foreign education study Program occurs fluctuating. In the year 2013/2014, the number of applicants reached 727 for a capacity of 90. The number continues to increase, in 2014/2015 a total of 698 with a capacity of 90. In 2015/2016, the number of applicants was 657 for a capacity of 85 seats. In 2016/2017 the number of pen lists decreased to 755 with 90 capacity, and in 2017/2018 experienced an increase in the number of registrants to be 727 for a capacity of 85 seats http://data.unnes.ac.id/[1].The expectation of any prospective student or student proceeding in college is to achieve the success of the chosen field. Hope and this reality become a gap that occurs in society because, in reality, the number of students 'income with the number of students' graduation is not proportional, i.e. the number of high student income is not balanced with a high number of student graduation as well[2]. The role of lecturers in teaching is one of the important factors in growing and improving the interest and motivation of learning students who can ultimately improve the quality of student learning[3]. When students have a high motivation for learning, they will be encouraged and strive to improve their skills in improving academic and non-academic learning performance[4]. The academic climate should be able to provide a learning atmosphere that adheres to the principles of freedom, independence, activity, engagement, challenges and strengthening, as well as safety and comfort so, that students have the opportunity to develop Self-potential according to the needs of itself, society, nation and State as mandated by the Constitution 1945[5]. Later in the early 20th century, Dewey in 1913 discussed the importance of interest and proposed two factors in building interest: identification

and application. Dewey[6] argues that if a student acknowledges and identifies herself with a learning activity, she will devote all her attention to the learning process. Therefore, Dewey proposes that a better way to teach is to arouse learners instead of forcing learners to work hard[7]. Regarding the importance of interest, [8] Say that at all ages, interests play an important role in one's life and have a great impact on behaviour and attitudes, especially during childhood. Because the child's personality type is largely determined by growing interest during childhood. Besides, the learning experience of children is also very influential in the development of child interest. Graduation problems do not happen only to universities in Indonesia. America which is a ruler state also has the same problem that the number of students who do not graduate due to various factors, namely those who often leave the lesson for personal reasons, demands of employment, Students' dissatisfaction with academic environment. dissatisfaction with campus values[9] and further strengthened according to Carey, as quoted by[9] data found at one of the American universities that only a third of the students can pass 4 years. This number is generally associated with the student's final assignment in each field. Another problem [10], [11] is the interest of student competition in academic and non-academic fields[12],[13]. Based on this, it is worth studying the factors that affect the student interest in the school's Nonformal Education in competing in academic and nonacademic areas. According to Jayalangkara, as quoted by[9] various factors influence the smooth study of students, namely from students themselves in the form of intelligence, physical and mental state, motivation to enter the college and also Personality. Other factors that are also related are the system or learning process that includes the program or education curriculum, as well as other supporting factors such as interest suitability, previous educational background, family, social, and

also economic and culture[14]. This research is to answer the problems experienced by the majors concerning student interests in competing in the fields of academic and non-academic. The purpose of this research is to know (a) identify students ' interest in the creation of academic work in academics, (b) Identifying student interest in a non-academic work (c) to identify how much interest Students in making academic scientific work, (d) Identifying how much student interest in making non-academic works, (e) identify factors that cause low student interest in making academic and non-scientific work Academic.

# 2 METHOD

The approach used is through the survey approach is aimed at knowing (a) identifying the interest of students in the creation of academic works of academics, (b) Identifying student interest in the work of non-academic works, (c) Identify how much student interest in making academic scientific work, (d) Identifying how much student interest in making non-academic work, (e) identifies factors that cause low-interest Students in creating scholarly and non-academic works. The data collection techniques used are poll (questionnaire). His sampling technique stratified proportional random sampling. The sampling is proportionally proportional to the comparison of the number of members of the subpopulation, or from each subpopulation sampled in proportion to the number of members in that subpopulation.

Using the Description statistical analysis with SPSS program to see the interest in students 'foreign Education Department (a) identifying students ' interest in the creation of academic works in academics, (b) Identifying students' interest in non-academic works, (c) Identify how much interest students have in making academic works, (d) Identify how much interest students have in making non-academic works, (e) Identify factors that cause low student interest in making academic and non-academic scientific work.

### RESULTS AND DISCUSSION

# **Descriptive test**

Tabel 1. Descriptive Statistics

### **Descriptive Statistics**

V a r	N	Rang e	Mini mum	Maxi mu m	Mean		Std. Deviati on
i a b e I	Stati stic	Stati stic	Statis tic	Stati stic	Sta tisti c	Std. Error	Statisti c
Organizational experience	105	3.00	1.00	4.00	2.2 476	.084 28	.86359
Student Environment	105	4.00	1.00	5.00	3.8 857	.096 00	.98366
Reading habits	105	4.00	1.00	5.00	2.4 952	.104 94	1.0752 8
Intensity guidance	105	4.00	1.00	5.00	3.3 238	.109 52	1.1222 9
Academic and Non-academic activities	105	42.0 0	33.00	75.0 0	49. 333 3	.849 23	8.7019 7
Valid N (listwise)	105						

# Test prerequisite Analysis Test Normality

# a. Test Kolmogorov Smirnov

Test Kolmogorov-Smirnov stated that when the value of the Siginifikansi or probability value p > 0.05 then it is said that the sample is normal distribution, and conversely when the value of significance or probability value p < 0.05 then said the sample distribution is not normal[15]

Tabel 2. Test result normality

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		60
	Mean	.0000001
Normal Parameters	Std. Deviation	283391812.060 58300
	Absolute	.068
Most Extreme Differences	Positive	.061
	Negative	068
Test Statistic		.068
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

- a. Test distribution is Normal.
- b. Calculated from data.
- $c. \ Lilliefors \ Significance \ Correction.$
- d. This is a lower bound of the true significance.

The test result of normality above obtained significance value is 0.200. The figure indicates a significant number because it is higher than the significance of 5% (0.05). It

gives an overview that the data from each of the variables are normally distributed.

### b. P-Plot

Test the normality can be seen also through the graph P-Plot, if the residual data Plot follows diagonal line Then it can be ensured that the data is used distributed normally. The P-Plot test results can be seen in the following image:

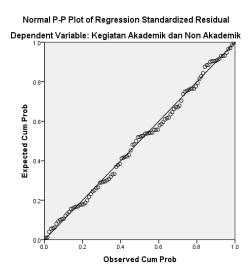


Figure 1. P-Plot

The Figure shows that the graphic P-Plot of regression standardized residual with the spread of data around the diagonal line follows the normal line direction so that it is concluded that the data is a normal distribution.

# c. Grafik Histogram

The normality test can be seen through the histogram, if the data forms a bell-like pattern it can be concluded that the data is a normal distribution. The histogram test results can be seen in the following figure:

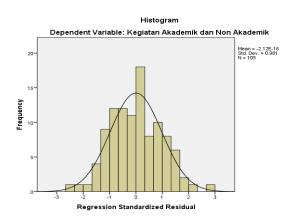


Figure 2. Histogram Chart

The figure shows that the data dissemination shows a bell-like pattern to conclude that the data is a normal distribution.

### Heterokedastisitas Test

The heteroskedasticity test aims to test if a regression model occurs a variance inequality of the residual of an observation to another observation. Heteroskedasticity indicates a good regression model. In other words, homoscedasticity or does not occur heteroskedasticity. The way to detect the presence or absence of heteroscedasticity one of them by looking at the plots graph between the predicted value of the dependent variable is: ZPRED with the residual SREZID. The following processing results using SPSS program.

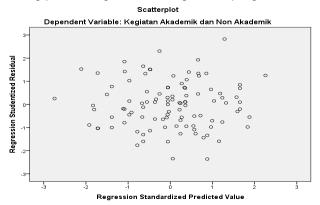


Figure 3. Heteroskedasititas test Results

Based on the Scatterplot output above, it appears that the dots spread out and did not form a certain pattern clearly so that it could be concluded that no heteroskedasticity problem occurred.

### **Multicholinerity Test**

Multicholinerity test is used to determine the presence or absence of the classical assumptions of the multicollinearity assumption, namely the existence of a linear relationship between the Indeptor variable (VIF). When the tolerance value is > 0.1 and the VIF is < 10, it can be concluded there is no multicollinearity between the free variables in the regression model. Here is the value of VIF on this research model:

Table 3. Multicolonierita test Results

Coefficients <sup>a</sup>							
	Z	andardi ed ficients	Standardi zed Coefficie nts				nearity istics
Model	В	Std. Error	Beta	t	Sig.	Toler ance	VIF
1 (Constant)	22. 988	3.418		6.7 25	.00		
Organizationa I experience	3.3 14	.792	.329	4.1 84	.00	.980	1.021
Student Environment	2.2 77	.755	.257	3.0 14	.00	.830	1.204
Reading habits	1.7 96	.686	.222	2.6 19	.01 0	.843	1.186
Intensity guidance	1.6 75	.695	.216	2.4 10	.01 8	.754	1.327

a. Dependent Variable: academic and non-academic activities

Based on the table above visible from each free variable has a tolerance value of > 0.1 and a VIF of < 10. So, it can be concluded that there is no multicollinearity among the free in this regression model.

Table 4. Autocorrelation test

Model Summary <sup>b</sup>

Mo del	R	R Squa re	Adjuste d R Square	Std. Error of the Estimat e	Durbin- Watson
1	.628ª	.395	.370	6.90428	2.002

a. Predictors: (Constant), Intensity guidance, organizational experience, reading habits, student environment

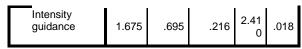
According to the "Model Summary" output table above, the Durbin-Watson (d) value is 1.157. Next, this value will we compare with the values of the Watson Durbin table at significance 5% with the formula (k; N). As for the number of independent variables is 3 or "k" = 3, while the number of samples or "N" = 105, then (k; N) = (4; 105). This number is then seen on the distribution of the value of the Watson Durbin table. Then found dL value of 1.592 and dU of 1.689. See image distribution values for the Watson Durbin table. The value of Durbin-Watson (dL) of 1.592 is smaller than the upper limit (dU) which is 1.758 and less than (4-DU) 4-1,689 = 2.002. So, as the basis of decision making in Durbin Watson above, it can be concluded that there are autocorrelation symptoms.

## **Hypothesis Test**

The results of the analysis of the influence of organizational experience, environment, reading habits and the intercity of guidance on academic and non-academic activities can be presented in the following table:

Table 5. Hypothesis Test Coefficients <sup>a</sup>

		OOCII				
		Unstandardize d Coefficients		Standa rdized Coeffici ents		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	22.98 8	3.418		6.72 5	.000
	Organizational experience	3.314	.792	.329	4.18 4	.000
	Student Environment	2.277	.755	.257	3.01 4	.003
	Reading habits	1.796	.686	.222	2.61 9	.010



a. Dependent Variable: academic activities and non-academic

Based on the output of SPSS in the table 4.36 above, the regression model obtained as follows:

Y = B0 + b1 X1 + b2 X2 + b3 X3 + b4 X4

Y = 22.988 + 3.314 X1 + 2.277 X2 + 1.796 X3 + 1.675 X4

# Interpretation of the regression equation as follows:

- The value of constants (22.988) can be interpreted by assuming if the organizational experience variable, environment, reading habits and guidance intercity of its value is 0, the academic and nonacademic activities are worth 22.988.
- If the organizational experience variable (X1) has an increase in one unit and another independent variable remains, then the academic and nonacademic (Y) activities will increase by 3.314.
- If the environment variable (X2) has an increase of one unit and another independent variable remains, then the academic and non-academic (Y) activities will increase by 2.277.
- If the custom reading variable (X3) has an increase of one unit and another independent variable remains, then the academic and non-academic (Y) activities will increase by 1.796.
- 5. If the guidance intensity variable (X4) has increased by one unit and another independent variable remains, then the academic and non-academic (Y) activities will increase by 1.675.

**Table 6.** Individual Significant tests/ Partial test (t- test)

	Coefficients <sup>a</sup>								
		di. Coef	andar zed ficient s	Stand ardize d Coeffic ients			Cor	relatio	ns
Мс	odel	В	Std. Error	Beta	t	Si g.	Zero- order	Par tial	Part
1	(Constant)	22. 98 8	3.41 8		6.7 25	.0 00			
	Organizational experience	3.3 14	.792	.329	4.1 84	.0 00	.356	.38 6	.326
	Student Environment	2.2 77	.755	.257	3.0 14	.0 03	.420	.28 9	.235
	Reading habits	1.7 96	.686	.222	2.6 19	.0 10	.388	.25 3	.204
	Intensity guidance	1.6 75	.695	.216	2.4 10	.0 18	.386	.23 4	.188

a. Dependent Variable: academic activities and non-academic

b. Dependent Variable: academic activities dan non-academic

Based on the result of T statistical test in the table above While the partial contribution of each variable is obtained the following values:

- 1. The variable contribution of organizational experience to academic and non-academic activities is (0,386) 2 x 100% = 14.89%. This suggests that a partial variable organizational experience (X1) affects and contributes to a variable of academic and non-academic (Y) activities of 14.89%.
- The contribution of environmental variables to academic and non-academic activities is (0,289) 2 x 100% = 8.35%. This suggests that a partial environmental variable (X2) affects and contributes to a variable of academic and non-academic (Y) activities of 8.35%.
- Variable contributions to the habit of reading on academic and non academic activities are (0,253) 2 x 100% = 6.4%. This suggests that a partial variable habit of reading (X3) affects and contributes to variable academic and non-academic (Y) activities of 6.4%.
- 4. Contributions to the intensity of guidance on academic and non-academic activities are (0,234) 2 x 100% = 5.47%. This suggests that a partial variable intensity of guidance (X4) affects and contributes to a variable of academic and nonacademic (Y) activities of 5.47%.on each variable obtained significant value as follows:

Table 7. Partial contributions

Coefficients <sup>a</sup> Unstandar Standa dized rdized Coeffici Coefficient ents Correlations Std. Si Zero-Parti Model Error Beta order al (Constant) 22. 3.41 6.7 .0 988 25 00 8 Organizational 3.3 .0 .32 4.1 .792 .329 .356 .386 experience 84 00 Student 3.0 .0 .23 2.2 .289 .755 .257 .420 Environment 14 03 Reading habits 1.7 .20 2.6 .0 .686 .222 .388 .253 96 19 10 4 Intensity 2.4 .0 .18 1.6 guidance .695 .216 .386 .234 10 18 8

- a. Dependent Variable: academic activities and non-academic
- Organizational experience variables (X1) known magnitude t-count 4.184 greater than this 1.664 insignificance 0.000. Due to the value of sig. < 0.05 then it can be noted that the tests were conducted rejecting Ho and accepting Ha, so that one hypothesis was accepted. This means that an organizational experience affects both academic and non-academic activities.

- Environment variables (X2) unknown magnitude T 3.014 and greater than the this IE 1.664 in the significance of 0.003 less than 0.05 then the test is done rejecting Ho and accepting Ha, so that the two hypotheses are acceptable. This means that the environment affects both academic and nonacademic activities.
- 3. Variable habit reading (X3) known magnitude T count 2.619 and greater than the this IE 1.664 in the significance of 0.010 less than 0.05 then the test is done rejecting Ho and accepting Ha, so that the three hypotheses are acceptable. This means that the habit of reading affects academic and non-academic activities.
- 4. Variable intensity guidance (X4) known magnitude T count 2.410 and greater than the this IE 1.664 in the significance of 0.018 less than 0.05 then the test is done rejecting Ho and accepting Ha, so the four hypotheses are acceptable. This means that the intensity of guidance affects academic and non-academic activities

**Table 8.** Simultaneous significant tests/ (F-test)

 $\Lambda N \cap V \Lambda^a$ 

	ANOVA								
Mod	del	Sum of Squares	df	Mean Square	F	Sig.			
1	Regressi on	3108.425	4	777.106	16.302	.000 <sup>b</sup>			
	Residual	4766.908	100	47.669					
	Total	7875.333	104						

a. Dependent Variable: academic activities and non-academic

b. Predictors: (Constant), Intensity guidance, organizational experience, reading habits, student environment

Based on the table above is known statistical test results F, where the value is 16.302 > F table, is 3.111 with significance value 0.000 < 0.05 then the three hypotheses are acceptable. Thus it can be said that collectively or simultaneously there is a significant influence between the organizational experience, the environment, the habit of reading and the intercity of guidance on academic and non-academic activities

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Table 9. Coficienty codetermind

### Model Summary b

Mode I	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.628 <sup>a</sup>	.395	.370	6.90428

- Predictors: (Constant), Intensity guidance, organizational experience, reading habits, student environment
- Dependent Variable: academic activities and nonacademic

Based on the table it can be noted that in table R there is a score of 0.628, which means that the correlation between organizational experience, environmental, reading habits and intercity of guidance as well as academic and non-academic activity of members are good. Whereas that indicates that the value of R Square is 0.395 or 39.50% that the variable of academic and non-academic activities is influenced by organizational experience variables, environment, reading habits and guidance intercity. The remaining 60.5% is influenced by a variable not in the study.

### CONCLUSION

Means that an organizational experience influential against academic and non-academic activities is known the magnitude of 4.184 t-count greater than the this 1.664 insignificance 0.000. Because the value is sig. < 0.05. That the environment affects the academic and non-academic activities known to magnitude 3.014 and greater than the this namely 1.664 in the significance of 0.003 less than 0.05. The habit of reading influence on academic and non-academic activities is known to magnitude 2.619 and greater than the this namely 1.664 in the significance of 0.010 less than 0.05. The intensity of guidance affects the academic and non-academic activities known to magnitude 2.410 and greater than the this namely 1.664 in the significance of 0.018 less than 0.05.A partial variable organizational experience (X1) affects and contributes to a variable of academic and non-academic (Y) activities of 14.89%.A partial environmental variable (X2) affects and contributes to a variable of academic and non-academic (Y) activities of 8.35%. A partial variable habit of reading (X3) affects and contributes to a variable of academic and non-academic (Y) activities of 6.4%. A partial variable intensity guidance (X4) affects and contributes to a variable of academic and non-academic (Y) activities of 5.47%. Collectively or simultaneously there is a significant influence between organizational experience, environment, reading habits and intercity guidance on academic and non-academic activities.

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