

# The Effect of Work Culture, Academic Environment, Verbal Communication and Service Quality toward Student Achievement

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## ABSTRACT

*This study aims to obtain information on the significant effect on student achievement, which is influenced by the variables of work culture, academic environment, verbal communication and quality of service. Descriptive quantitative research methodology, data analysis techniques using path analysis, with a sample of 380 students of the Faculty of Engineering - Jakarta State University. The results of the study (1) there is a influence of work culture on service quality, (2) there is a effect of academic environment on service quality, (3) there is a influence of the verbal communication on service quality, (4) there is a influence of service quality on student achievement. and (5) there is a influence of work culture, work environment, verbal communication and service quality on student achievement.*

**Keywords:** *Work culture, Academic environment, Verbal communication, Service quality, Student achievement.*

## 1. INTRODUCTION

Higher education faces the most challenge elements in running its program that are science and technology globalization. Educational institution needs to improve its management strategy to face issue of quality. The institution management strategies rely on education service quality and communicating academic environment to society especially students [1]. The success of a tertiary institution is determined by student outcomes, as well as student outcomes at the faculty of engineering, Jakarta State University. Based on key performance indicator data 2 that 72% of student outcomes are working and entrepreneurship in accordance with their scientific background, must continue to be improved. Therefore effect of work culture, academic environment, communication and service quality will be toward student achievement.

All the institutions compete to offer teaching and learning for undergraduate students. Those colleges and universities try hard to advance their service quality in order to invite more students. State University of Jakarta, has undergraduate and diploma study programs in 8 faculty and postgraduate where the faculty of engineering is responsible for various vocational curricula, in the study programs of mechanical engineering, electrical and

electronic, civil, fire, PKK, culinary, cosmetology, and fashion. Likewise with the achievements of student competitions outside the campus related to independent learning (MBKM).

Communication leadership and teaching quality affect the quality of education [2]. Therefore the success of student achievement will be influenced by the culture of the organizational work environment, verbal communication, and service quality. However, the most information aspect is about successful or failure in work reflect quality of the educational institution.

Service quality can affect student satisfaction in achieving their achievements [3]. The quality of academic services in this case includes work culture, integrity of leaders and lecturers in the success of student academic progress.

Based on the description above, research hypotheses are grown as follow: (1) there is a influence of work culture on service quality, (2) there is effect of academic environment on service quality, (3) there is a influence of the verbal communication on service quality, (4) there is a influence of service quality on student achievement. and (5) there is a influence of work culture, work environment, verbal communication and service quality on student achievement.

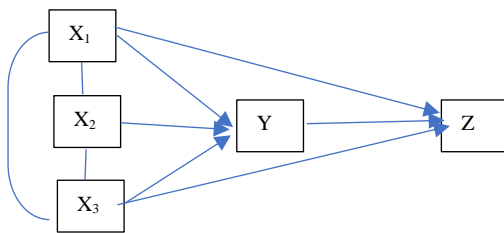
## 2. METHOD

This research used casual survey method and applied path analysis technique. This technique was applied on analyse variables that influence applicant student achievement.

Questionnaires were spread to 8570 populations. Instrument was tried out to 40 respondents. Research sampling technique used Slovin formula, that was:

$$n = \frac{N}{1+Ne^2} [4]$$

Design of the study can be drawn as diagram below:



**Figure 1.** Research design

X<sub>1</sub>: work culture

X<sub>2</sub>: academic environment

X<sub>3</sub>: Verbal Communication

Y: Service quality

Z: Student achievement

Inferential descriptive of data analysis used  $\alpha = 0,05$ .

Research hypothesis are:

- 1)  $H_o : \rho_{1.1} \leq 0$   
 $H_i : \rho_{1.1} > 0$
- 2)  $H_o : \rho_{2.1} \leq 0$   
 $H_i : \rho_{2.1} > 0$
- 3)  $H_o : \rho_{3.1} \leq 0$   
 $H_i : \rho_{3.1} > 0$
- 4)  $H_o : \rho_{4.1} \leq 0$   
 $H_i : \rho_{4.1} > 0$
- 5)  $H_o : \rho_{5.1} \leq 0$   
 $H_i : \rho_{5.1} > 0$

$\rho_{1.1}$ : direct influence of work culture (X<sub>1</sub>) variable to service quality (Y)

$\rho_{2.1}$ : direct influence of academic environment (X<sub>2</sub>) variable to service quality (Y)

$\rho_{3.1}$ : direct influence of verbal communication (X<sub>3</sub>) variable to service quality (Y)

$\rho_{4.1}$ : direct influence of service quality (Y) variable to student achievement (Z)

$\rho_{5.1}$ : direct influence of work culture (X<sub>1</sub>), academic environment (X<sub>2</sub>), verbal communication (X<sub>3</sub>) and service quality(Y) on student achievement (Z)

## 3. RESULT AND DISCUSSION

Data description includes work culture (X<sub>1</sub>) variables, academic environment variable (X<sub>2</sub>), verbal communication variable (X<sub>3</sub>), service quality (Y) and student achievement (Z).

Data descriptions are:

**Table 1.** Data description of the research

variables	Z	Y	X <sub>1</sub>	X <sub>2</sub>	X <sub>3</sub>
Sample	380	380	380	380	380
Score range	45	47	72	56	65
Max score	100	105	137	112	124
Min score	55	58	72	58	62
Interval class	5	5	8	6	7
Mean	77,24	75,2	112,6	89,4	82,1
Median	86	79	122	91	88
Modus	80	79	122	91	88
Standar deviation	6,12	7,79	14,78	8,26	8,95

Validity of standar deviation measurement are 3,12

**Table 2.** Instrument validity and reliability

variable	Item	valid	drop	coefficient
X1	30	24	6	0,82
X2	40	35	5	0,91
X3	30	25	5	0,87
Y	30	23	7	0,76
Z	32	28	4	0,88

Validity measurement in social are 0,5

**Table 3.** Normality test

variable	n	t <sub>table</sub>	t <sub>calculated</sub>	Conclusion
X1	380	0,1687	0,0562	Normal
X2	380	0,1696	0,0518	Normal
X3	380	0,1437	0,0719	Normal
Y	380	0,1674	0,0682	Normal
Z	380	0,1424	0,0773	Normal

According to normality validity, it can be concluded that  $t_{calculated} < t_{tabel}$  are has been valid

**Table 4.** Correlation Coefficient

Regression model	F <sub>calculated</sub>	F <sub>table</sub>	Conclusion
Z on Y $\bar{Y}=29,75+0,423Y_1$	18,921 1,59	3,87 1,86	Significant linier regression coefficient
Y on X <sub>1</sub> $\bar{Y}_1=30,15+0,224X_1$	14,512 0,507	3,87 1,86	Significant linier regression coefficient
Y on X <sub>2</sub> $\bar{Y}_2=27,45+0,522X_2$	22,67 0,59	3,87 1,86	Significant linier regression coefficient
Y on X <sub>3</sub> $\bar{Y}_3=30,97+0,725X_3$	57,58 0,677	3,87 1,86	Significant linier regression coefficient

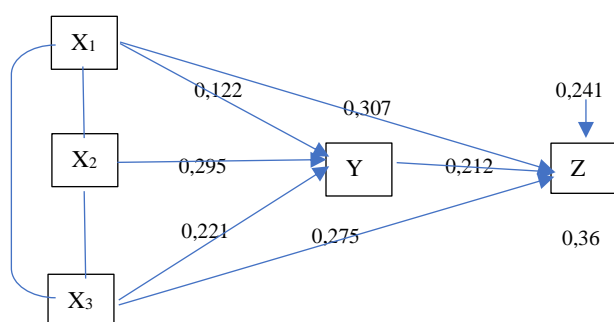
Y on $X_4$ $\hat{Y}_4 = 32,34 + 0,187X_4$	57,785 0,67	3,87 1,86	Significant linier regression coefficient
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According to correlation coefficient estimation galat test, it can be concluded that all the regression model from each variable has establish linier graph and coefficient regression are significant in  $F_{table} \alpha = 0,05$

**Table 5.** Path Analysis coefficient

Path	coef	$t_{hit}$	$t_{0,05}$	$t_{0,01}$	$R^2$	$\epsilon$
$\rho_{1.1}$	0,122	3,202	1,96	2,58	0,36	0,453
$\rho_{2.1}$	0,295	1,417	1,96	2,58		
$\rho_{3.1}$	0,221	2,755	1,96	2,58		
$\rho_{4.1}$	0,212	2,381	1,96	2,58	0,275	0,342
$\rho_{5.1}$	0,241	3,022	1,96	2,58	0,307	0,241

The result may be shown as:



**Figure 2.** Summary of path analysis model research

1. Positive effect of work culture ( $X_1$ ) toward service quality (Y): 0,122 this number indicate the effect of work culture has given influence to the service quality. Research finding shows that the work culture influences service quality. A work environment based on a greated reliable work team, trust, innovation, stability, oriented team, aggressiveness oriented to optimal work results and joint team success is the key to service quality [5]. Also Harahap in Kroeber and Kluckhohn, comprehensive totality, implicit explicit behaviour pattern [6].
2. Positive effect of academic environment ( $X_2$ ) toward service quality (Y): 0,295. This number has indicate service quality become the most dominant aspect in order to academic environment of university. This research foud hat a good service quality will a good academic environment with statistic vale as 0,295. According to Basith, Ichwanto and Syahputra about academic self-efficay as predictor of academic achievement, has confirm that, different majors have a signifcat influence on academic selt-efficacy compared to the gender and yeas of study. The students of social sciences major have higher academic sel efficacy than those in the exact sciences major, and self efficacy has a positive relationship

and is also a predictor in determining academic achievement [7]. This show that ay improvement in academic self efficacy will be accompanied by an improvement in the academic achievement. Hamsan in journal, Relationships between academic environment, the study research suggested that university should develop intention program, appropriate counselling service to student. Besides, student should learn good time management skills and habit in order to develop positive psychological well being [8]. Future study are encourage to include more possible sources of student psychological will being, add more size of sample and apply different data collection tools for deeper investigation.

3. Positive effect of verbal communication ( $X_3$ ) towards service quality (Y): 0,212, this number explain that verbal communication has given influence into service quality. The finding shows that verbal communication gave effect on service quality in choosing an educational institution for study. This means that entertainment, pamphlet, information from relatives and word of mouth and other kind verbal communication encourage to choose one of their good study in campus. Good verbal communication is correct and directed according to the program objectives to advance the campus both in the learning process, the target curriculum for maximum student achievement. Grifin's theory states that applicants' process in deciding to continue their educational at a study program in a campus started from recognizing campus and a the learning support element student achievement [9].
4. Positive effect of service quality (Y) toward student achievement (Z): 0,212. This number explain that service has not given influence into student achievement process to students. The result of the research shows that service quality influence student achievement in choosing an educational for study. When output students who are studying in a campus experienced to other people include the achievement to study program. The information will influence achievement student to accept or reject the campus for their future educational institution. Bothe support this condition by saying that students' achievement based on students' satisfactory of service quality so they will be lifelong customers of the educational institution [10].
5. Positive effect of work culture ( $X_1$ ), academic environment ( $X_2$ ), verbal communication ( $X_3$ ) and service quality(Y) on student achievement (Z): 0,241 this number indicate that independent variable has given influence into student achievement. Th finding shows that work culture, academic environment, verbal communication and service quality influence their students achievement continuing study in educational institution or study program campus.

The statistic value of 0,241 expresses that wok culture, academic environment, verbal communication, service quality a campus will impact on their students achievement. Generally, the good students achievement are derived from wok culture, academic environment, verbal communication, service quality, professional lecturers and good job position of graduates will be for image campus. Valerie and Bitner said that students as customers choose a study program, decide to take it, and do it as a result of evaluation process of finding alternative and developing their image about campus [11].

#### 4. CONCLUSION

Data analysis shows influence of wok culture, academic environment, verbal communication, service quality, and their student achievement their study t the campus. Clearly, findings of the research are: first, work culture influence service quality about campus. Second academic environment influence service quality their study at campus. Third, verbal communication influence service quality about campus. Fourth service quality impacts on student achievement in continuing their study at campus. Fifth, work culture, academic environment, verbal communication, have an influence on the quality of service together to improve student achievement.

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