FACTORS AFFECTING STUDENT’S QUALITY IN HIGHER EDUCATION

William
Tya Wildana Hapsari Lubis
Study Program of Management, Sekolah Tinggi Ilmu Ekonomi Mikroskil

Abstract: This study aims to research the influence of student’s behavior, lecturer’s competency, and school’s facilities on the student’s quality at Sekolah Tinggi Manajemen Informatika dan Komputer (STMIK) Mikroskil and Sekolah Tinggi Ilmu Ekonomi (STIE) Mikroskil. This research is a descriptive study with a quantitative method approach. The population in this study were undergraduate students totaling 3,493 students, the sample size used in this study is 360 students obtained using the Slovin formula. The sampling technique is stratified random sampling techniques applied to each study program. The data analysis method is multiple linear regression analysis. The results showed that student’s behavior, lecturer’s competency, and school’s facilities had a positive and significant effect on Student’s quality by 43.5%. Future researchers are suggested to carry out the process and learning management in improving student’s quality.

Keywords: Human Resources Development, Student’s Behavior, Lecturer’s Competency, School’s Facilities, Student’s Quality


The 2010 population census shows that Indonesia’s population dependency ratio is 51.31. This shows that in every 100 people of productive age (15-64 years) there are 51 people of unproductive age (0-14 and 65 +) (BPS, 2011). This census data also shows that Indonesia will enter a demographic dividend period in the range of 2035-2040. The government’s efforts have also shown its seriousness in improving human resources (HR) in Indonesia. This is indicated by the increase in the literacy rate of Indonesia’s population from 88.6% in 2000 to 95.4% in 2016 (Secretariat, 2018) and the increase in Indonesia’s human development index from 66.53 in 2010 to 71.39 in 2018 (BPS, 2019).

To improve the quality of human resources to support optimal economic growth, the role of tertiary institutions in the demographic transition period is needed to produce a quality workforce (Cuaresma et al., 2014). The low enrollment rate of universities means that many countries are unable to fully benefit from the demographic dividend (Bloom and Rosovsky, 2001). This is also in line with the statement of the Minister of Finance of the Republic of Indonesia which states 4 steps that need to be achieved to optimize the demographic dividend so that Indonesia can avoid Middle Income
Traps, namely: 1.) Improving the quality of human resources, 2.) Developing infrastructure, 3.) Reforming the bureaucracy, and 4.) Transparency and collaboration (Jannah, 2018).

In the efforts of universities to produce good quality human resources, attention to various aspects is required. Mediawati (2010) and Isnaini et al. (2015), found that a lecturer’s competency affects learning achievement and student satisfaction. Meanwhile, Hendikawati (2011) and Riyani (2012), found that besides the competency of lecturers, the college environment also influences learning achievement. Besides lecturers, higher education facilities, and infrastructure, student’s behavior as an important subject in the implementation of higher education needs to be a priority as Hanifah and Abdullah (2001) and Sari (2013), found in their research that showed learning behavior affects academic achievement.

In this study, researchers aimed to research the influence of student’s behavior, lecturer’s competency, and school’s facilities on student’s quality. The purpose of this study was to determine whether there was an influence: 1) student’s behavior, 2) lecturer’s competency, and 3) school’s Facilities on Student’s quality of 3,493 undergraduate students at Sekolah Tinggi Manajemen Informatika dan Komputer (STMIK) Mikroskil and Sekolah Tinggi Ilmu Ekonomi (STIE) Mikroskil to then formulate a regression model for student’s quality. The results of this study are expected to be input in developing strategies to form good quality students and be able to produce quality graduates who are ultimately able to participate in preparing good quality human resources to face Indonesia’s demographic dividend. The theoretical framework in this study can be seen in Figure 1 below:

Figure 1. Theoretical Framework

HYPOTHESIS DEVELOPMENT

The Effect of Student’s Behavior on Student’s Quality

Student’s behaviors play an important role in student’s achievement, it is include learning habit, intention, and skill possessed by the student. Good behavior will help in achieving good academic achievement. Tokan and Imakulata (2019), found that the more often a student shows positive learning behavior, the better their academic achievement. According to Hanifah and Abdullah (2001), student’s behavior can be explained by a) The habit of taking part in lessons, b) The habit of reading textbooks, c) Visits the library, and d) Examination habits. Thus, the following hypothesis is proposed:

H₁: Student behavior has a significant effect on student’s quality.

The Effect of Lecturer’s Competency on Student’s Quality

The lecturer’s competency is important in improving the quality of students. Mastery of material by lecturers greatly affects the level of student achievement, and lecturers need to develop strong
teaching technical competencies to deliver quality material (Metzler and Woessmann, 2010), Hanushek et al. (2019), in their research in 31 countries also found that teacher cognitive skills across countries are strongly related to student performance. According to Indonesia law (Undang-Undang No 14 Tahun 2005 tentang Guru dan Dosen, 2005), the competency of lecturers consists of 1.) Pedagogic competency, namely the ability to manage student learning, 2.) Personality competency, namely the ability of a solid personality, noble character, wisdom, and dignity as well as being a role model student, 3.) Professional competency, namely the ability to master subject matter broadly and deeply, 4.) Social competency, namely the ability to communicate and interact effectively and efficiently with students, fellow teachers, parents/guardians of students, and the surrounding community (Undang-Undang No 14 Tahun 2005 tentang Guru dan Dosen, 2005).

Based on this, the proposed hypothesis is:

H₂: Lecturer’s competency has a significant effect on student’s quality.

The Effect of School’s Facilities on Student’s Quality

The school’s facilities are one of the factors that can encourage higher achievement in higher education. Furniture, educational equipment, educational media, books, electronic books, information and communication technology facilities, sports facilities, classrooms, libraries, laboratories, lecturers’ rooms, leadership rooms are some examples of school facilities required by Indonesia law (Permenristekdikti, 2015). In line with this law, Arshad et al. (2019), found that there is a significant influence of school facilities on student’s academic performance. Research conducted by Ashraf and Subri (2017), showed that eight factors can be improved in higher education facilities to improve academic abilities, namely: building age, facilities conditions, temperature factors, lighting, sound, interior color, class size, and school size. Hence, the proposed hypothesis is:

H₃: School facilities have a significant effect on student’s quality.

The Effect of Student’s Behavior, Lecturer’s Competency, and School’s Facilities on Student’s Quality

Good quality students are expected by every university. Qualified students will be able to contribute to the world of work and be able to offer appropriate solutions for society’s problems. Students’ quality is affected by behavior (Tokan and Imakulata, 2019), lecturer’s competency (Hanushek et al., 2019), school facilities (Arshad et al., 2019). Meanwhile, Indonesia Law, Permenristekdikti, (2015) stated that student’s quality is affected by the learning process, learning assessment, the specifications of lecturers, and higher education facilities and infrastructure. Therefore, the proposed hypothesis is:

H₄: Student’s behavior, lecturer’s competency, and school facilities have a significant effect on student’s quality.

METHOD

This research is descriptive research with a quantitative approach. The population in this study are undergraduate students at STMIK Mikroskil and STIE Mikroskil, amounting to 3,493 students, the sample used in this study amounted to 360 students who were obtained using the Slovin formula from the entire population, the sampling technique was stratified random sampling technique in each study program with a sampling fraction of 360 / 3,493 = 0.103 multiplied by the population of each study program as shown on Table 1.

The respondents respond to the questionnaire which was designed using a Likert scale with five scales which are Strongly Agree (5), Agree (4), Neither Agree Nor Disagree (3), Disagree (2), and Strongly Disagree (1). Descriptive statistical analysis is used to analyze data by describing or describing the collected data as is without intending to make generalized conclusions or generalizations. (Ghozali, 2013).

Validity and reliability tests will be applied to the questionnaire data. Then the data will be tested toward multiple regression analysis assumptions, which are: 1) Normality Test, 2) Multicollinearity
Test, and 3) Heteroscedasticity Test. After passing the assumptions, the data will be analyzed by using multiple regression analysis to determine the effect of student’s behavior (X₁), lecturer’s competency (X₂), and school’s facilities (X₃) on student’s quality (Y). The regression formula can be formulated with the following formulations:

\[ Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e \] ................................ (1)

Where:
- \( Y \) = Student’s quality;
- \( a \) = Constant;
- \( X_1 \) = Student’s behavior;
- \( X_2 \) = Lecturer’s competency;
- \( X_3 \) = School’s facilities;
- \( b_1, b_2, b_3 \) = Regression Coefficient;
- \( e \) = Standard Error.

The next stage is the hypothesis test which consists of a partial test (t-test) and a simultaneous test (F-test) to determine the partial and simultaneous effect of the independent variable on the dependent variable. After that, it is continued with the test of the coefficient of determination (R²) to measure how far the model’s ability to explain the variation in the dependent variable.

RESULTS

Respondent Description

The results of the questionnaire showed that 286 respondents (79.4%) were high school graduates while 74 respondents (20.6%) were SMK graduates. Based on the majors while in high school, 211 respondents (58.6%) came from the Science major, 73 respondents (20.3%) from the Social Sciences major, and 38 respondents (10.6%) from the Computer and Network Engineering major. Furthermore, the parent’s occupation of 209 respondents (58.1%) is self-employed, 46 respondents (12.8%) are private employees, 34 respondents (9.4%) are Government officers, 10 respondents (2.8%) are teachers, 10 respondents (2.8%) are housewives, and there are 5 respondents (1.4%) who are unemployed.

Descriptive Statistics

An overview of the research variables i.e. student’s quality, student’s behavior, lecturer’s competency, and school’s facilities are presented in descriptive statistics as follows.

Student’s Quality (Y)

The student’s quality was measured by using 9 questions with a minimum value of 1 and the maximum value of 5. The lowest mean was 3.84 which was gained by the 4th question which was about mastering the concept, theory, and method of the field of study through the learning process, meanwhile, the 2nd question got the highest mean score which was 4.63 which was about appreciating the diversity. Most of the students strongly agree with the statements about morals, ethics, religion, law-abiding, and responsibility which are shown by their mode.

Student’s Behavior (X₁)

The student’s behavior was measured by using 15 questions with a minimum value of 1 and a maximum...
Factors Affecting Student’s Quality in Higher Education

Lecturer’s Competency ($X_2$)

The lecturer’s competency was measured by using 16 questions with a minimum value of 1 and the maximum value of 5. The lowest mean was 3.88 which was gained by the 13th question which was about how well the lecturer knew their students, meanwhile, the 8th question got the highest mean score which was 4.45 which was about how well the lecturer behaved. Students strongly agree, the lecturers are mastering the use of learning media and technology, appreciate students’ answers or ideas, having a polite attitude, treat all students fairly, and have a tolerance for student’s diversity.

School’s Facilities ($X_3$)

The school’s facilities were measured by using 19 questions with a minimum value of 1 and the maximum value of 5. The lowest mean was 3.53 which was gained by the 17th question which was about whether the school has a large area, meanwhile, the 2nd question got the highest mean score which was 4.51 which was about how building renovation affects student’s enthusiasm for studying. Overall, most of the students strongly agree with most of the questionnaire’s questions, there are only 3 questions got 4 as mode value, namely: the toilet availability and the size of the school.

Instrument Test

To conduct an instrument testing, a reliability and validity test was being used. Reliability test for both consistency and stability of all items in questionnaire correlated to one another which is stated by Cronbach’s Alpha. The closer Cronbach’s alpha to 1, the higher the internal consistency reliability (Sekaran and Bougie, 2016). The Cronbach’s alpha values for $Y$, $X_1$, $X_2$, and $X_3$ respectively were 0.892, 0.909, 0.951, and 0.927. These values mean all the questionnaires are consistent and stable. Whilst validity test measures the validity of the questionnaire which means the questionnaire describes well what is measured. The Pearson correlation is used to determine the questionnaires’ item validity. The questionnaire r value must be bigger than the r value in Pearson’s correlation table. Since the r value in Pearson’s correlation table with a degree of freedom (df) = 360-2 = 358 and confidence interval 95% is 0.113, then all items in the questionnaire are considered valid (Ghozali, 2013).

Multiple Regression Analysis Assumptions

3 assumptions need to be met before conclusions about a population based on the sample used for the regression can be drawn. A multiple regression analysis should satisfy the following assumptions: a) Normality, b) No multicollinearity, c) No Heteroscedasticity (Ghozali, 2013). Table 2 shows the result of Kolmogorov-Smirnov with test statistic 0.46 and significant 0.065 which are larger than 0.05 which means the residuals are normally distributed.

Secondly, multicollinearity was checked by using tolerance and variance inflation factor (VIF). Table 2 shows all tolerance values are above 0.1 and VIF values are below 10 which means the data are free of any multicollinearity. Lastly, heteroscedasticity was checked by using Rank Spearman. Table 2 shows the Spearman Correlation value for all the variables with residuals and all the significant values are larger than 0.05 which means the data is free from heteroscedasticity.

Hypothesis Test

Hypothesis testing determines accurately if the null hypothesis can be rejected in favor of the alternate hypothesis. The null hypothesis can be rejected (therefore accept the alternate hypothesis) with a certain degree of confidence based on the sample data (Sekaran and Bougie, 2016). Figure 5 shows all $t_{count} > 1.984$ and the significant values $< 0.05,$
which means we reject $H_0$ and student’s behavior, lecturer’s competency, and school’s facilities are partially affect student’s quality positively and significantly. The F-Test shows the F value is $91.329 > F_{table} (3,356,0.05) = 2.605$ and the significant value < 0.05, which means all independent variables simultaneously affect student’s quality positively and significantly. The coefficient of determination of the model ($R^2$) is 0.435% which means all-independent variables of this research can explain the student’s quality by 43.5%. Therefore, based on Figure 5 the regression model for this research is:

$$Y = 1.642 + 0.387X_1 + 0.68X_2 + 0.103X_3 + e$$ \hfill (2)

Where: $Y$ = Student’s quality; $X_3$ = School’s facilities; $X_1$ = Student’s behavior; $X_2$ = Lecturer’s competency; $e$ = Standar Error.

**Table 2. Multiple Regression Analysis Assumptions Test**

<table>
<thead>
<tr>
<th>Test</th>
<th>Variable</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kolmogorov-Smirnov Test</td>
<td>-</td>
<td>Test Statistic = 0.046</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Significant = 0.065</td>
</tr>
<tr>
<td>Collinearity Statistics</td>
<td>Student’s behavior</td>
<td>VIF = 1.466 Tolerance = 0.682</td>
</tr>
<tr>
<td></td>
<td>Lecturer’s competency</td>
<td>VIF = 2.219 Tolerance = 0.451</td>
</tr>
<tr>
<td></td>
<td>School’s facilities</td>
<td>VIF = 1.956 Tolerance = 0.511</td>
</tr>
<tr>
<td>Rank Spearman Correlation</td>
<td>Student’s behavior</td>
<td>0.635</td>
</tr>
<tr>
<td></td>
<td>Lecturer’s competency</td>
<td>0.559</td>
</tr>
<tr>
<td></td>
<td>School’s facilities</td>
<td>0.944</td>
</tr>
</tbody>
</table>

**Table 2. Multiple Linear Regression Analysis**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Tolerance</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.642</td>
<td>.168</td>
<td></td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td>Student’s Behavior</td>
<td>.387</td>
<td>.041</td>
<td>.460</td>
<td>9.545</td>
<td>.682</td>
</tr>
<tr>
<td>Lecturer’s Competency</td>
<td>.168</td>
<td>.053</td>
<td>.189</td>
<td>3.184</td>
<td>.451</td>
</tr>
<tr>
<td>School’s Facilities</td>
<td>.103</td>
<td>.050</td>
<td>.114</td>
<td>2.038</td>
<td>.551</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Student’s Quality
DISCUSSION

The Effect of Student’s Behavior on Student’s Quality

The results showed that partially student’s behavior variables had a significant effect on student’s quality, this is in line with the research conducted by Tokan and Imakulata (2019) and Hanifah and Abdullah (2001). Based on the questionnaire obtained, students were able to focus their attention on learning materials, ask lecturers for explanations regarding the material they did not understand, catch up with material lags, students also always discuss together with other students regarding learning materials, prepare materials before lecturing by downloading e-books from e-learning platforms or other platforms used by lecturers who teach courses. Students are also able to focus on the material being read, mark important parts, and make notes on learning material regularly. Students always study regularly, well, and discipline, practice doing questions, and are confident in facing exams.

However, students only depend on the material provided by the lecturer so that they rarely read other textbooks that support learning material. Students have not taken advantage of their spare time to regularly visit the library and students also feel uncomfortable reading in the library. Because this study, shows the influence of student’s behavior on student’s quality, it is necessary to motivate students to visit the library so that they can take advantage of existing learning resources in the library to improve student’s quality.

The Effect of Lecturer’s Competency on Student’s Quality

The results show that partially the lecturer’s competency variable has a significant effect on the quality of students, this is in line with the research of Isnaini et al. (2015) and Hanushek et al. (2019). Students thought that lecturers have a polite attitude in words and actions and have tolerance for diversity. Lecturers can master the use of media and learning technology, listen to and appreciate student answers and ideas, have the authority as a lecturer, and can treat students fairly. The lecturers are also able to maintain order and order in the administration of lectures, can guide students, not let students give up when facing difficult material, can explain the interests of the areas of expertise being taught in the context of life, master the latest issues in the field being taught, and want to know the reason for choosing the answer to each question asked.

Lecturers are expected to be able to increase the use of creative ways in increasing student understanding of the topic, increasing student involvement in research/study/development/engineering activities carried out by lecturers, and getting to know students who are taking their classes so that students can feel cared for and in the end be able to encourage the improvement of student’s quality.

The Effect of School’s Facilities on Student’s Quality

The results showed that partially the variable of school’s facilities had a significant effect on the quality of students, this is in line with the research of Arshad et al. (2019), Ashrof and Subri (2017), and Riyani (2012). Based on the questionnaire, students thought that the campus building was still suitable for use and that renovation of the campus building had increased students’ enthusiasm for studying. The facilities provided are complete and adequate to support the learning process. The temperature, light, noise, and interior color in the room have been able to provide comfort and increase the enthusiasm for learning. The large class size can provide flexibility for students to interact with fellow students and also with lecturers.

Although the toilets are always clean and tidy, the number of toilets needs to be increased so that students can use them more comfortably. The size of the campus also needs to be increased so that it can add spaces to better support lecture activities and be able to improve the quality of students.

The Effect of Student’s Behavior, Lecturer’s Competency, and School’s Facilities on Student’s Quality

The results showed that simultaneously the variable student’s behavior, lecturer’s competency, and school’s facilities had a significant effect on student’s quality. This is in line with research by
Tokan and Imakulata (2019), which stated that learning achievement was influenced by learning behavior. This study also confirmed the competency of lecturers which includes pedagogical, personal, professional, and social competencies that influence the quality of students (Undang-Undang No 14 Tahun 2005 tentang Guru dan Dosen, 2005) and research conducted by Hanushek et al. (2019). This study also accepted research by Arshad et al. (2019) and Ashrof and Subri (2017), the results showed that the school’s facilities were able to affect the quality of students. This study also strengthens the enforcement of learning facilities and infrastructure standards on national higher education standards in improving the quality of students (Permenristekdikti, 2015). Because the three independent variables in this study, namely student’s behavior, lecturer’s competency, higher education facilities have a significant effect on the quality of students to be taken into consideration in the student’s quality improvement program, the three independent variables need further attention to achieve quality graduates.

CONCLUSIONS

Based on the results of research and discussion of the influence of student’s behavior, lecturer’s competency, and school’s facilities on the quality of students, it was concluded that student’s behavior, lecturer’s competency, and school’s facilities have a positive and significant effect on the quality of students at STMIK Mikroskil and STIE Mikroskil either partially or simultaneously. Therefore, the students need to be encouraged to enrich themselves by accessing other sources of knowledge to support learning materials. Lecturers also need to actively develop creativity to encourage student understanding. At last, The campus capacity needs to be increased so that it can increase learning support space.

RECOMMENDATIONS

The quality of students is an important thing to pay attention to in the management of higher education. All higher education management activities are aimed at improving the quality of students. Having good knowledge of the things that affect the quality of students will be an important key in formulating higher education management strategies. This study is limited to analyzing student’s behavior, lecturer’s competency, and school facilities on student’s quality. In further research, research can be carried out on the process and management of learning in improving the quality of students as required by the national higher education standards (Permenristekdikti, 2015).

ACKNOWLEDGE

Thanks to the Directorate of Research and Community Service, Directorate General of Strengthening of Research and Development, Ministry of Research and Technology / National Research and Innovation Agency of the Republic of Indonesia for funding this research following the Research Contract for the 2020 fiscal year, so that this research can be carried out. Thanks also to STMIK Mikroskil and STIE Mikroskil which provided support in completing this research.

REFERENCES


Factors Affecting Student’s Quality in Higher Education


Metzler, J. and Woessmann, L. 2010. *The Impact of Teacher Subject Knowledge on Student Achievement: Evidence from Within-Teacher Within-Student Variation The Impact of Teacher Subject Knowledge on Student Achievement: Evidence from Within-Teacher Within-Student Variation Abstract*. Inst. Study Labor 36.


