

## Analysis of Student Satisfaction in Academic Services as Part of Quality Insurance in University

Nurul Fitriyah Sulaeman\*, Atin Nuryadin, Zeni Haryanto, Astrid Alifkalaila, and Iyar Anjas Oktaba

Physics Education/Faculty of Education and Teacher Training/Mulawarman University, Indonesia

\*[nurul.fitriyah@fkip.unmul.ac.id](mailto:nurul.fitriyah@fkip.unmul.ac.id)

**Abstract.** In the context of university quality insurance, student satisfaction became one of the main indicators of service success given by the institution. Measurement of student satisfaction became an invaluable input for the institution to determine the direction of urgent improvement. This study aimed to describe student satisfaction with academic services and analyzed the quality of academic services to produce measurable improvement suggestions. This research involved students in the Department of Mathematics and Natural Sciences Education, Faculty of Education and Teacher Training, Mulawarman University, as the respondents, which are 165 students, representing 6 study programs selected by Stratified Random Sampling technique with the stratum length of study, which fill the online questionnaire. The instrument used is an adaptation of the Student Satisfaction Survey (SSI). The analysis results showed that the academic services in Faculty of Teacher Training and Education Mulawarman University still need to be improved because 50.9% of respondents stated satisfied, but 49.1% stated not satisfied. The level of student satisfaction by gender tends to be the same, i.e. 2.51 for male students and 2.53 for women, while based on study period and GPA tends to increase with the duration of the study period and the increasing GPA. According to Importance-Satisfaction Matrix, the quality of academic services put all dimensions in the second quadrant, which means that the dimensions of satisfaction had been quite good.

**Keywords:** Academic Service; Quality; Student Satisfaction; University


© 2021 Vidya Karya

DOI : <https://doi.org/10.20527/jvk.v35i1.2854>

Received : 11 March 2021

Accepted : 24 October 2021

Published : 7 November 2021

Artikel ini di bawah lisensi CC-BY-SA 

**How to cite:** Sulaeman, N. F., Nuryadin, A., Haryanto, Z., Alifkalaila, A., Oktaba, I. A. (2021). Analysis of student satisfaction in academic services as part of quality insurance in university. *Vidya Karya*, 36(2), 84-91.

### INTRODUCTION

Recently, many universities have become increasingly aware of the importance of student satisfaction with the services provided because this satisfaction will affect the smoothness of student studies, their decision to continue studying at the college or advise new

students to continue higher education in the same place (Lowe & Cook, 2003).

Measurement of student satisfaction becomes an invaluable input for institutions to clarify existing advantages and determine the direction of urgent improvement. The level of satisfaction has a much broader focus than just a lecture course (Kromydas, 2017).

According to the Regulation of Ministry of Research, Technology, and Higher Education Number 44 of 2015 concerning National Standards for Higher Education in Article 3 on states that learning in study programs, research, and community service organized by universities in all jurisdictions of the Republic of Indonesia achieve the appropriate qualifications with the criteria set out in the National Standards for Higher Education (Ministry of Research and Higher Education, 2015). This regulation encourages every educational institution at the university level, faculty, departments, and programs to continue providing quality assurance to its customers.

Faculty of Teacher Training and Education, Mulawaran University, is one of the institutions of education providers with the most significant number of students in Mulawarman University. As an institution engaged in education, the faculty must improve the quality of service to students as the users. The effort to give satisfaction in the academic service for the students is also reflected in the Vision of Faculty of Education and Teacher Training, Mulawarman University, which puts the excellent service as one of the vital factors to be achieved.

The level of student satisfaction will provide a clear description of quality assurance in college. According to O'Neill & Palmer (2004), the quality of services in higher education is defined as the difference between student expectations and what they get from institutions. The quality of academic services can be seen from the amount of difference (gap) between the level of importance (importance) and the level of satisfaction (satisfaction). Although this issue is essential, the exploration of student's satisfaction in education faculty is rarely found. The results of this study will describe student satisfaction of academic services that will describe the

quality of academic services received and advise the direction of improvement of academic services in the future.

## **METHOD**

This research was quantitative descriptive research conducted to describe the students' satisfaction toward academic service. Previous research has shown that higher education institutions in developed countries like the United States use Student Satisfaction Inventory (SSI) instruments to measure student satisfaction with their academic services (Wrekman, 2013; Carabajal, 2012). Therefore, this study used SSI instruments to measure student satisfaction with academic services. SSI instruments required some adjustments to be made for students residing in Indonesia, such as adjustments with the Regulation of Ministry of Research, Technology, and Higher Education Number 44 of 2015 concerning National Standards of Higher Education and academic regulation of the Faculty of Teacher Training and Education, Mulawarman University (Team, 2016) so that the re-development of SSI instruments with some adaptation. The instrument development began by forming a grid of students' satisfaction questionnaires in the academic service has 11 dimensions and is split into 44 items. The developed instrument grid was validated and then revised. The revised instrument was then developed into an online form that made it easy to be filled out by student respondents.

The level of students' satisfaction in academic services measured by the students' responding to the online questionnaire that have been developed. The respondents who filled out the questionnaires were selected using the Stratified Random Sampling method because the population had different strata of the classes. The population of this research are all students in the Department of Mathematics and Natural

Science Education, Faculty of Education and Teacher Training, Mulawarman University, which consists of 6 Study Programs which are Mathematics Education, Physics Education, Chemistry Education, Biology Education, Geography Education and Computer Science Education that consisting of 4-year level, which is first, second, third and fourth-year students. The total population is 1680 students (Data of Accreditation Form IIB Faculty of Education and Teacher Training Mulawarman University). The sample of respondents is 165 students (106 males and 44 females), representing 6 study programs and a four-year level as described earlier.

The quantitative analysis was then done from the result of tabulation of student response data collected. The calculation was done in several stages by the percentage rate of student satisfaction in overall academic services, the level of student satisfaction in academic services based on gender, force and student's GPA with each dimension of service satisfaction academic and Matrix Analysis Importance-Satisfaction Matrix.

## RESULTS AND DISCUSSION

### Measurement of Student Satisfaction

Students' satisfaction instruments in academic service provided four satisfaction scales for each statement in a dimension that is not satisfied, less satisfied, satisfied and very satisfied. The scale was converted to 1 for not satisfied, 2 for less satisfied, 3 for satisfied and 4 for very satisfied. A full description will be obtained from the analysis by considering the gender, length of study and GPA, students' satisfaction per dimension analysis and Importance-Satisfaction Matrix. The following results from student satisfaction levels can be seen in Figure 1.

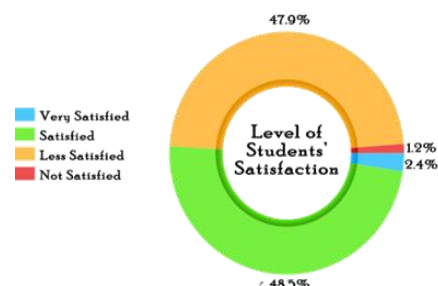


Figure 1 Level of Students' Satisfaction

Figure 1 shows the analysis results on the responses given by students on the services provided by the Faculty of Teacher Training and Education at Mulawarman University. It showed that about half of the respondents were satisfied with the services, even 2.4% stated very satisfied. Nevertheless, there are 47.9% of others feel less satisfied. Furthermore, 1.2% of respondents feel dissatisfied with the services provided. Results indicated that improvements in the academic service sector in the future become imperative that the Vision of the Faculty of Teacher Training and Education to provide excellent service can be achieved. The following levels of student satisfaction based on gender can be seen in Figure 2.

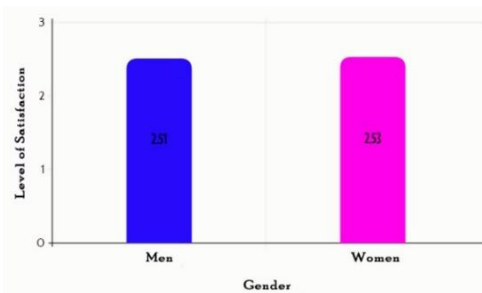


Figure 2 Level of Students' Satisfaction Based on Gender

Moreover, gender is a factor that influences the tendency of students to learn (Getie, 2020) and student engagement (Sulaeman, Putra, Mineta, Hakamada, Takahashi, Ide, & Kumano, 2021). Therefore, descriptive analysis based on gender is needed. Based on the graph in Figure 2, the analysis showed

that there was no significant difference between the response of male students and female students to the academic service. Both groups of students showed a similar satisfaction score of 2.51 for male students and 2.53 for female students. The following levels of student satisfaction based on length of study can be seen in Figure 3.

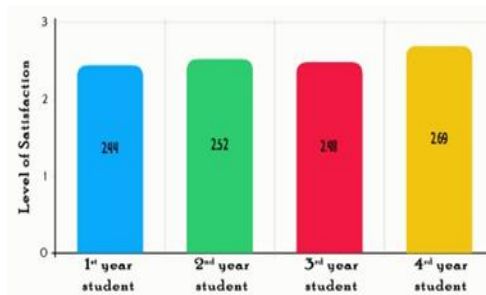


Figure 3 Level of Students' Satisfaction Based on Length of Study

The analysis result shown in Figure 3 describes that the students' response tends to rise along with the increase of study period undertaken in the Faculty of Teacher Training and Education. The satisfaction level of first-year students to fourth-year students increases from 2.44 to 2.69. This shows that the longer the students receive academic service, and the students can feel better service. One of the factors that can be more attention is the first-year students who become the sample of this research is the first semester students who have not even six months of academic service to not have a GPA. The new admissions system helps students fill out Study Plan Card through the Student Assistance so that the first semester students have no experience in matters related to academic supervision. This policy can be revised in the future so that first-year students can feel the academic service of the academic supervisor. The following levels of student satisfaction based on gender and grade can be seen in Figure 4.

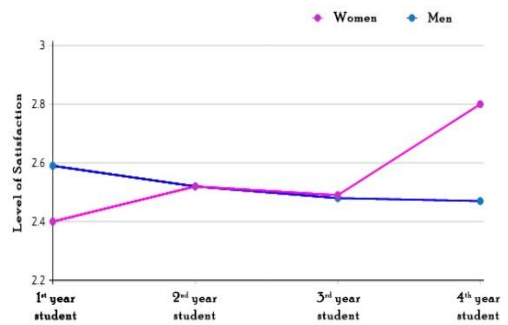


Figure 4 Level of Satisfaction Based on Gender and Grade

Based on Figure 4, in the first year, it can be seen that there is a significant difference between male and female students' satisfaction, which are 2.59 and 2.40, respectively. However, in line with the length of the study, male students tend to decrease satisfaction with academic services while, on the other hand, female students show an increased level of satisfaction. The majority of male respondents in the fourth year showed the lowest score on the campus support services dimension of 1.9, indicating most were dissatisfied, while in the first year, the score was 3.00. The majority of female respondents in the fourth year showed a high level of satisfaction on the dimensions of Registration Effectiveness up to 3.10 compared to the first year, which has only reached 2.30. The following levels of student satisfaction based on GPA can be seen in Figure 5.

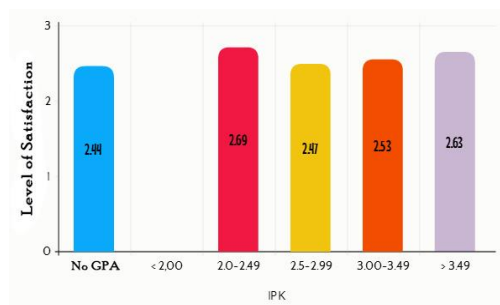


Figure 5 Level of Satisfaction Based on GPA

Based on GPA, students are categorized into six categories, from students who do not have a GPA because they have not completed the first semester to the students who have a very high GPA of more than 3.49, as shown in Fig.5. No respondent has a GPA < 2.00, so the data in this category is empty. The higher the students GPAs tend to have a high level of satisfaction, except in category 3, the group of students with a GPA of 2.00-2.49. These results can be explained more deeply from Mihanović, Batinić, & Pavičić (2016) that students' satisfaction will have an effect on the academic performance, or in this case, the GPA achieved. Therefore, one of the drivers of the increase in GPA of graduates produced cannot be separated from the improvement of academic services organized by an institution of higher education.

Figure 6 shows the level of satisfaction for each dimension of satisfaction. Analysis performed on each dimension shows that the level of satisfaction still ranges from 2 to 3 (maximum scale 4). This shows that no dimension responded very satisfactory by students' respondents. The highest score is in the Students' Centeredness dimension, which is 2.74. This shows that service to students as individuals is

good and can be improved until most students feel satisfied with this service. The lowest score is on the Safety and Security dimension of 2.05. The Faculty of Teacher Training and Education, Mulawarman University, is quite extensive with only 6 security officers, causing a lack of student's satisfaction with the security dimension. This dimension should become the attention of faculty managers to be improved.

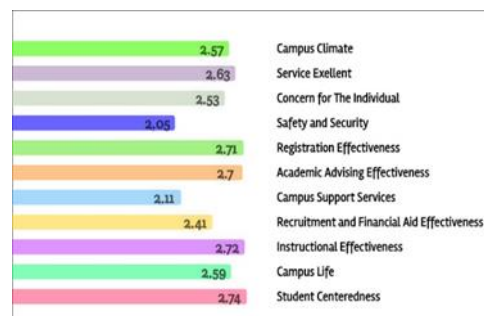


Figure 6 Level of Satisfaction per Dimension

The issues of campus facility include safety became factors that dissatisfied mainly by the students. This result is also in line with the previous research in a larger scale of study in Iran (Motefakker, 2016). A similar factor that influences students' satisfaction showed the need to improve the quality of campus facilities.

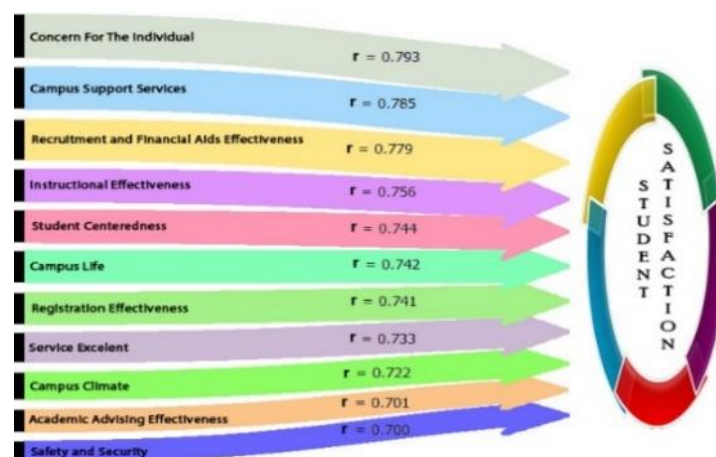


Figure 7 Correlation Each Dimension with Student's Satisfaction

Based on Figure 7, each dimension of students' satisfaction strongly correlates with students' satisfaction with a correlation value of more than 0.7. The dimension with the largest correlation value is Concern for Individual, with a correlation coefficient of 0.793. This means that this dimension has the strongest relative relationship to students' satisfaction over the other ten dimensions. However, given that the correlation coefficient value of all dimensions is strong, the 11 dimensions contribute to each other to form the level of students' satisfaction with academic services.

**Quality Insurance at University**

As shown in Table 1, the analysis results show a fairly diverse gap for each dimension. The Safety and Security dimension is measured as the dimension with the highest gap of 1.73. This shows that the quality of service in this dimension is the lowest compared to other dimensions. This result is in line with the results shown in Figure 6, indicating this dimension has the lowest satisfaction level. In comparison, the measured Instructional Effectiveness dimension has the smallest gap of 0.72, which shows that this dimension has the best service quality.

Table 1 Performance Gap

Dimension	Importance Level	Satisfaction Level	Performance Gap
Student Centeredness	3.50	2.74	0.76
Campus Life	3.48	2.59	0.89
Instructional Effectiveness	3.44	2.72	0.72
Recruitment and Financial Aid Effectiveness	3.70	2.41	1.29
Campus Support Services	3.78	2.11	1.67
Academic Advising Effectiveness	3.66	2.7	0.96
Registration Effectiveness	3.74	2.71	1.03
Safety and Security	3.78	2.05	1.73
Concern for The Individual	3.57	2.53	1.04
Service Excellent	3.63	2.63	1.00
Campus Climate	3.45	2.57	0.88

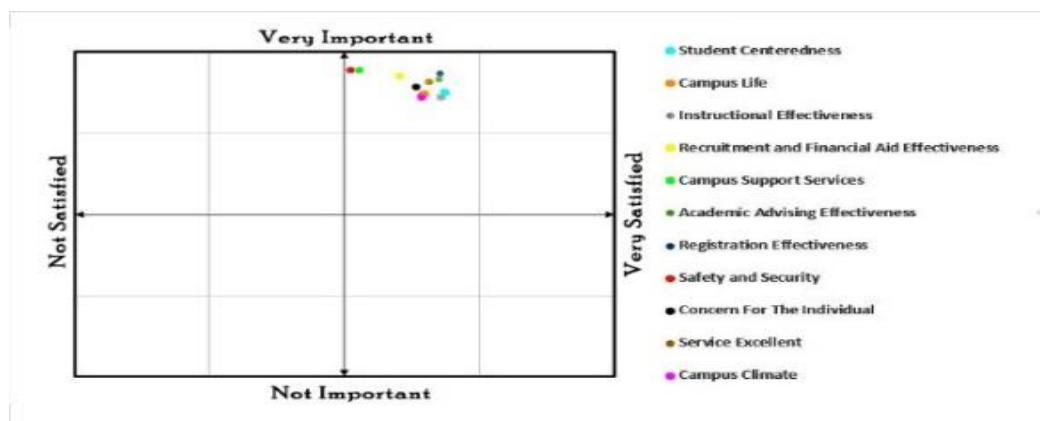


Figure 8 Importance-Satisfaction Matrix

The results show that the eleven dimensions are in Quadrant II (Keep up the Good Work), as shown in Figure 8. There are two dimensions close to the

boundary between satisfied and dissatisfied: Campus Support Services and Safety and Security. Both dimensions are considered important by

students' respondents but have a low level of satisfaction. Improvements in aspects of Campus Support Services can be made by improving the physical facilities in classrooms, laboratories and libraries. Safety and Security improvements can be made by increasing the number of security personnel and security posts in the campus area Faculty of Education and Teacher Training, Mulawarman University, and designing a tidier and more maintained parking area. The organization and management issues are also essential factors that build students' satisfaction (Sofroniou, Premnath, & Poutos, 2020).

### CONCLUSION

Based on the student satisfaction level, it can be concluded that academic services in the Faculty of Teacher Training and Education still need improvement because 50.9% of the respondents said satisfied, but 49.1% said not satisfied. The level of student's satisfaction in the academic services based on gender tends to be the same, i.e. 2.51 for male students and 2.53 for female while based length of study and GPA, this level has a tendency to increase with the duration of the study period and increasing of GPA. In the 11 dimensions of students' academic service, satisfaction scores vary between 2.05 (Safety and Security dimensions) to 2.74 (Student Centeredness dimensi females, the correlation coefficient more than 0.7. The quality of academic services according to Importance Satisfaction Matrto increased dimensions in quadrant II, which means that satisfaction dimensions have been running well, but need to be improved, especially in the dimensions of Campus Support Service and Safety and Security because it has the biggest gap of 1.67 and 1.73 respectively.

The level of satisfaction in academic services is closely related to the quality of the Faculty of Teacher Training and

Education of Mulawarman University so that continuous improvement becomes imperative. Among the 11 dimensions of satisfaction in academic services, the Campus Support Service and Safety and Security dimensions need to be improved immediately.

### REFERENCE

- Carabajal, K. (2012). *Noel-levitz student satisfaction inventory report*. California: Lassen Community College.
- Ministry of Research and Higher Education. (2015). *Permenristekdikti No 44 of 2015 on National Standards of Higher Education*. Jakarta: Kemenristekdikti.
- Getie, A. S. (2020). Factors affecting the attitudes of students towards learning English as a foreign language. *Cogent Education*, 7(1), 1738184. <https://doi.org/10.32832/tadibuna.v9i2.3558>
- Kromydas, T. (2017). Rethinking higher education and its relationship with social inequalities: Past knowledge, present state and future potential. *Palgrave Communications*, 3(1), 1–11.
- Lowe, L., & Cook, C. (2003). Mind the Gap: Are students prepared for higher education? *Journal of Further and Higher Education*, 27(1), 53–57.
- Mihanović, Z., Batinić, A. B., & Pavičić, J. (2016). The link between students' satisfaction with faculty, overall students' satisfaction with student life and student performances. *Review of Innovation and Competitiveness*, 2(1), 37–60.
- Motefakker, N. (2016). The study of the level of satisfaction of the students of the Faculty of Social Sciences with welfare services of Imam Khomeini International University of Qazvin. *Procedia Economics and Finance*, 36, 399–407.
- O'Neill, M. A., & Palmer, A. (2004). Importance-performance analysis: A

- useful tool for directing continuous quality improvement in higher education. *Quality Assurance in Education*, 12(1), 39–52.
- Sofroniou, A., Premnath, B., & Poutos, K. (2020). Capturing student satisfaction: A case study on the national student survey results to identify the needs of students in stem related courses for a better learning experience. *Education Sciences*, 10(12), 1–22.
- Sulaeman, N. F., Putra, P. D. A., Mineta, I., Hakamada, H., Takahashi, M., Ide, Y., & Kumano, Y. (2021). Exploring student engagement in STEM education through the engineering design process. *Jurnal Penelitian dan Pembelajaran IPA*, 7(1), 1–16.
- Team, D. (2016). *Guidelines for writing proposal of development of research program and community service based on result of improved quality of education and appropriate technology*. *Journal of Chemical Education*. Samarinda: Mulawarman University.  
<https://doi.org/10.1088/1742-6596/1503/1/012010>
- Wrekman, J. (2013). *Noel-levitz student satisfaction inventory and berea-specific student satisfaction survey structured items report*. Madison Country: Berea College.