Analysis of Student Satisfaction in the UNNES MBKM Program in Support of the Learning Environment Through the Service Quality

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ABSTRACT

The Ministry of Education, Culture, Research, and Technology promotes the independent study-campus program (MBKM) to help students acquire various skills necessary to enter the workforce. This program provides ample opportunities for students to enhance their real-world knowledge and abilities based on their potential, talents, interests, spirit, and ideals. Students should feel satisfied with the MBKM program as long as there is a good learning environment that provides adequate quality of service. This research aims to analyze 1) The impact of the learning environment on the quality of service in the MBKM program, 2) The influence of the study environment on student satisfaction, 3) The effect of the educational environment on students' satisfaction through quality of services.

This research study uses a quantitative approach and a causality model. The study includes a total of 6,720 UNNES students who participated in MBKM. The researchers used the Isaac and Michael tables to select a sample of 409 students through random sampling techniques. They collected data using a Likert scale questionnaire on Google Forms. The validity of the questionnaire was assessed using the Kaiser-Mayer-Olkin measure in SPSS, where a value greater than 0.05 indicated that the questionnaire was valid. Additionally, the researchers used confirmatory factor analysis in Lisrel 8.80 to assess the validity of the questionnaire and the reliability of the instrument was tested using Cronbach's alpha in SPSS. Finally, the data was analyzed using IBM SPSS Statistics 24 and Amos.

According to the study results : 1) positive learning environment can improve the quality of service, 2) A positive study environment is likely to increase student satisfaction 3) An excellent educational environment can enhance students' satisfaction through the quality of services provided.

Keywords: *MBKM, access to information, learning environment, program quality, quality of service, student satisfaction.*

1. INTRODUCTION

The Ministry of Education, Culture, Research, and Technology promotes the independent study-campus program (MBKM) to help students master various disciplines and prepare for their future careers. Through this program, students have the opportunity to enhance their real-world insights and skills based on their individual potential, talents, interests, spirit, and ideals. This policy offers students a wide range of opportunities to enrich and improve their competencies.

The MBKM activities have been applied within UNNES. However, there is a need to enhance both the policy and implementation guidelines. The policies and study programs at the college level require complete and comprehensive improvements, along with clear and straightforward guidelines on the implementation process. This is crucial because the MBKM activities have not yet reached their maximum potential due to an unequal understanding of MBKM implementation in the field.

The MBKM policy is beneficial and should be included in operational guidelines to help everyone on campus understand it better The MBKM program

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requires adjustments from students, teachers, and institutions. Students who participate in the MBKM program will experience lectures at other campuses and be taught by new teachers. Currently, student exchange for the MBKM program is limited to online organizers. Through the MBKM program, students can learn about the services provided by UNNES and partner universities.

The learning environment for students in the MBKM program includes both physical and non-physical support systems. There are various forms of support available, such as campus, school, residential, community, and village environments. However, some students may face obstacles such as slow internet access or uncomfortable physical surroundings, which can hinder their learning experience. The quality of the learning environment can impact the success of students participating in the MBKM program at UNNES.

Oliver [1] proposed that consumers base their purchasing decisions on their expectations of the quality of the goods or services. These expectations serve as a standard to evaluate the actual quality of the product or service after it has been used. Satisfaction or dissatisfaction is determined by the difference between the expected quality and the actual quality. For example, students of the MBKM program will feel satisfied if they perceive that the quality of the program and the service provided exceed their expectations.

Student satisfaction is impacted by the environment they are in. Gazali [2] the environment encompasses all physical objects, events, and societal conditions that surround them, especially in the educational setting and daily interactions. Lengetti et al. [3] conducted research on how the learning environment affects student satisfaction and found that incorporating technology can enhance their level of contentment.

Service quality is defined as the expected level of quality in services offered [4]. Consumer satisfaction or dissatisfaction is largely determined by the quality of service provided. On the other hand, Kardoyo et al. [5] conducted research on service quality and consumer satisfaction. The findings revealed that academic service quality does not have an impact on student satisfaction. However, the quality of non-academic services has a positive and significant impact on student satisfaction. Students are more satisfied with means of support for learning compared to teaching methods used by .

The research aims to investigate the following topics: 1) the connection between the learning environment and service quality, 2) the relationship between the educational environment and satisfaction, 3) the impact of service quality on student satisfaction, and 4) how the learning environment influences student satisfaction through service quality.

2. METHODS

The model used in this study is a causality model, as it aims to test the relationship between the variables present in a model, whether it is between the indicator with its construction or between its construction [6]. In this study, to know the impact of the variable learning environment on the quality of service directly, the influence of the Variable Learning environment on student satisfaction directly. The approach used in this study is a quantitative approach used to find detailed factual information that investigates and identifies problems or to obtain justifications for circumstances and activities in progress.

This study involved UNNES students who participated in MBKM, totaling 6,720 individuals according to data from MBKM UNNES. The sample size of 409 students was determined using Isaac and Michael tables, with a 5% error rate and a minimum requirement of 332 students based on the population size of 6,720 [7]. Random sampling techniques were employed to select the sample from the population.

This study's endogenous variable is service quality and student satisfaction. The exogenous variable in this study is the learning environment. The mediator variable is the intermediary between the exogenous and endogenous variables. The mediator variable in this study is the quality of service.

To gather information on the learning environment, service quality, and student satisfaction in the MBKM program at UNNES, a survey questionnaire was used. The participants were selected to represent the study's sample, and the data collection tool was structured as a questionnaire with closed-answer options. The survey was administered through Google Forms for the convenience of the respondents.

To test the validity of the questionnaire, there are two types of tests: item validity and factor validity. The item validity is calculated using the Kaiser-Mayer-Olkin Measure of Sampling Adequacy (KMO-MSA) in the SPSS program. Anti-Image Correlation is used to determine whether an item will be used, and if the value obtained is >0.05, the element is considered valid. CFA (Confirmatory Factor Analysis) is used for factor analysis with Lisrel 8.80. The instrument's reliability is tested using SPSS (Alpha Cronbach). The hypotheses proposed are tested using Structural Equation Modeling (SEM) with Amos.

3. RESULTS AND DISCUSSION

After analyzing 409 samples with IBM SPSS Statistics 24, we found that the Kaiser-Mayer-Olkin Measure of Sampling Adequacy (KMO-MSA) and Bartlett's Test were both successful. The KMO-MSA value is 0.939, which is above the minimum threshold of 0.50, and the p-value (Sig.) is 0.000, which is below the acceptable level of 0.05. Therefore, all variable indicators are suitable for further analysis via factor analysis.

The values obtained from the Confirmatory Factor Analysis for all variable indicators of the learning environment (Learning environment-1, Learning environment-2, Learning environment-3, Learning environment-4, and Learning environment-5) met the criteria with a value of ≥0.5 on each indicator, making them all valid. The same goes for the variable indicators of service quality (service quality-1, service quality-2, service quality-3, service quality-4, and service quality-5) and student satisfaction (student satisfaction-1, student satisfaction-2, student satisfaction-3, students satisfaction-4, and student satisfaction-5), which also met the criteria with a value of ≥0.5 on each indicator and are considered valid. The reliability test based on the Cronbach Alpha value shows that each variable met the criteria with a Cronbach alpha value of ≥0.7.

According to the Output Model Fit from IBM SPSS Amos 26 Graphics, the current values have passed the criteria for each model fit test requirement. This includes a P value of 0.168, CMIN/DF of 1.905, GFI of 0.998, AGFI of 0.972, CFI of 0.0999, and RMSEA of 0.047.

The Amos structural model corresponds to the proposed theoretical framework. The values of the track coefficient and the significance test according to Amos 26 Graphics are as follows in Figure 1:

Hypothesis	Relationship of Variable	Estimate	S.E.	C.R.	P	Description
H_1	Environmental Learning → Service Quality	.310	.051	6.053	***	significant
H_2	Service Quality → Student Satisfaction	.507	.046	10.959	***	significant
H_3	Environmental Learning → Student Satisfaction	.196	.048	4.129	***	significant

Figure 1. Path Coefficient and Amos Significance Test.

To determine the level of influence that one variable has on another, you can refer to the standardized direct effects output in IBM SPSS Amos 26 Graphics. These values indicate the estimated coefficient value from one variable to another, and can be found in Figure 2.

	Environmental learning	Service Quality
Service Quality	.330	.000
Student satisfaction	.160	.389

Figure 2. Standardized Direct Effects.

According the Figure 2 shows that the quality of services is affected by the learning environment, and that satisfaction is influenced by service quality and learning environment. These relationships are statistically significant, as indicated by the critical ratio (C.R.) values above 1.96. Specifically, the learning environment has a positive impact on service quality in the MBKM program, with a standardized direct effect of 0.330. This means that a one-unit increase in the learning environment results in a 33.0% increase in service quality for the MBKM program.

According to recent research conducted by Maryam et al. [8] there is a clear and positive link between the quality of student services and the learning environment. Specifically, the study found that physical, collaborative, academic, presentation, and environmental motivational factors are all closely related to tangible aspects of service quality. According study by Munir [9] these findings are further supported by another study conducted which surveyed 86 male and 572 female students and found a strong and positive relationship between the quality of the learning environment and the quality of student services. Overall, these studies suggest that a conducive learning environment can significantly enhance the quality of services provided to students.

The second study examines how the learning environment affects student satisfaction. The results show that the learning environment does indeed have an impact on student satisfaction, with a CR value of 4.129 indicating that the hypothesis is accepted. Specifically, the variable for learning environment has a positive effect on student satisfaction in the MBKM program, with a standardized direct effect of 0.160. This means that if the learning environment improves by one unit, student satisfaction in the MBKM program will increase by 16%. The non-physical aspects of the learning environment, such as student relationships on and off campus, also play a role in student satisfaction, as does the physical environment, including facilities, the Internet network, and libraries.

Research conducted by Ryan (Hons) et al. [10] supports the idea that virtual learning environments (VLE) play a significant role in educating students about student satisfaction. As virtual environments, like the one used in radiotherapy, have shown to increase student satisfaction, engagement, and memory, it is

necessary to incorporate technological advancements into nursing health education.

A recent study by Lengetti et al. [11] found that utilizing technology in the learning environment can improve student satisfaction. Another study by Gray & DiLoreto [12] showed that the course structure, student interaction, and presence of instructors also play a significant role in impacting student learning and satisfaction. Overall, these studies suggest that a positive learning environment can greatly enhance student satisfaction.

In the third study, it was found that the quality of service has a direct impact on the satisfaction of students in the MBKM program. The use of IBM SPSS Amos 26 Graphics to calculate SEM showed a CR value of 10.959, which indicates that the hypothesis is accepted as its value is ≥1.96. The variable of service quality positively affects student satisfaction, with a standardized direct effects value of 0.389. This means that if the quality of service increases by one unit, then the satisfaction of students in the MBKM program increases by 38.9%. Previous research, such as Pakurar's, supports this finding and suggests that access, financial aspects, and staff competence are all crucial parts of the service quality dimension that can improve customer satisfaction in the banking sector. By using the modified Servqual service model, customer satisfaction in the service sector can be effectively addressed.

In a study by Annamdevula [13] the relationship between service quality and satisfaction was explored, and it was found that the quality of service plays a crucial role in student satisfaction. Another surveyed 4,004 students from University X in Lebanon using an online questionnaire adapted from the modified Higher Education Performance-only (HEDPERF) [14]. The results showed that service quality greatly impacts student satisfaction, with reputation being the strongest predictor and academic aspects being the weakest. Overall, this study emphasizes how important it is for services to meet student expectations in order to ensure their satisfaction.

The quality of service provided to students in the MBKM program, responsiveness to student problems, availability of program guarantees, and attention given to students all impact their satisfaction with the program. A service organizer who is dedicated to providing excellent service will lead to high satisfaction levels.

In addition, we utilized ZSobel analysis to verify our hypothesis regarding the indirect relationships between variables. The results of the ZSobel calculations for these relationships are presented in Figure 3.

Hypothesis	Relationship of Variabels	Z_{Sobel}	S.E.	p-value	Description
H_{10}	Environmental Learning → Service Quality → Student Satisfaction	5.322655	.0295	1e-7	significant

Figure 3. Calculated $Z_{Sobel.}$

According to ZSobel's calculation on figure 3, the indirect relationship between the values of ZSobel has a ZSOBEL value greater than 1.96 and all p-values are less than 0.05. This indicates that the influence of the relationship is significant.

To find out how much influence one variable has on one other variable indirectly can be known from the magnitude of the standardized indirect effects output IBM SPSS Amos 26 Graphics. These values describe the size of the estimated coefficient value from one variable to another. Standardized direct effects values are as in Figure 4:

	Environmental learning	Information Acces	Program Quality	Service Quality
Student Satisfaction	.512	.126	.114	.000

Figure 4. Standardized Indirect Effects.

On table 4 we can saw that the quality of service in the learning environment has an impact on student satisfaction. According to Sobel's calculation, a ZSobel value of 5.32265519 indicates that if this value is equal to or greater than 1.96, then the hypothesis (H10) is accepted. The program's quality directly affects student satisfaction with the MBKM program through service quality. The standardized indirect effects value is 0.512, which means that if the program quality increases by one unit, the student satisfaction with the program increases by 51.2% with service quality as a mediator. The learning environment's influence on student satisfaction through the quality of MBKM services is positive, indicating that the study environment plays a substantial role in student satisfaction. When service quality acts as a mediator, the learning environment's influence on student satisfaction is relatively large, at 51.2%.

According to two recent studies Handayani et al. [15] and Pangesti et al. [16] the work environment has a significant impact on employee satisfaction. Handayani et al. found that employee performance, interpersonal communication, and the physical work environment indirectly affect public satisfaction through the quality of service. Similarly, Pangesti et al. found that communication, library facilities, and the physical work environment have a positive and significant impact on librarian

satisfaction through the quality of services. Overall, these studies suggest that creating a positive work environment can greatly enhance satisfaction and the quality of service.

Studies have found that when the learning environment is the variable in question, satisfaction is linked to the quality of service provided. This is due to the fact that MBKM students anticipate receiving more information from UNNES than from the KemendikbudRistek website. As a result, the manager's role in student services is mainly focused on the MBKM program, as service quality has a significant impact on student satisfaction.

4. CONCLUSION

Based on the study, it is concluded that :

4.1 A positive learning environment will lead to better quality of service

4.2 Providing good quality service will enhance student satisfaction.

4.3 Positive learning environment will increase student satisfaction.

4.4 A positive learning environment can enhance student satisfaction by improving the quality of service provided.

REFERENCES

[1] R. L. Oliver, Cognitive, Affective and Attribute Bases of the Satisfaction Response, *Journal of Customer Research*, *20,* 1993. https://doi.org/https://doi.org/10.1086/209358

[2] M. Gazali, Hakikat Pendidikan Pesantren: Studi atas Falsafah, Idealisme dan Manajemen Pendidikan Pondok Pesantren Al-Islam Kemuja Mendobarat Bangka, *Jurnal Al Ta'dib*, *6*(1), 2014, pp. 126–136. https://ejournal.iainkendari.ac.id/index.php/al-tadib/article/view/295

[3] E. Lengetti, M. A. Cantrell, N. DellaCroce, L. Diewald, J. L. Mensinger and R. Shenkman, Learning environment and evidence among professionals and students satisfaction (LEAPS), experienced during the COVID-19 pandemic, *Teaching and Learning in Nursing*, *16*(4), 2021, pp. 342–346. https://doi.org/10.1016/j.teln.2021.07.004

[4] Boone and Kurtz, *International Consumer Behavior*, Quorum Books, 1995.

[5] Pitaloka, L. Kurnia and B. B. Hapsoro, Analyzing Universities Service Quality to Student Satisfaction; Academic and Non-Academic Analyses, International journal of higher education 9.1, 2020 pp.126-132. https://doi.org/10.5430/ijhe.v9n1p126

[6] S. Singgih, Statistik Multivariat, Jakarta: PT Gramedia, 2010.

[7] Sugiyono, Metode Penelitian Pendidikan-Pendekatan Kuantitatif, Kualitatif dan R&D, Bandung: Alfabeta, 2010.

[8] M. Maryam, M. A. Shabbir, S. S. Tahira, S. Yaqub, A. Iqbal, Relationship between Learning Environment and Quality of Service at University Level, Ilkogretim Online - Elementary Education Online, Vol 20 (Issue 3), 2021, pp. 2220-2230. http://ilkogretim-online.org.

[9] M. Maryam, M. A. Shabbir, S. S. Tahira, S. Yaqub, A. Iqbal, Relationship between Learning Environment and Quality of Service at University Level. Ilkogretim Online - Elementary Education Online, Vol 20 (Issue 3), 2021, pp. 2220-2230. http://ilkogretim-online.org

[10] E. Ryan and C. Poole, Impact of virtual learning environment on students' satisfaction, engagement, recall, and retention, Journal of medical imaging and radiation sciences, 50(3), 2019, pp. 408-415.

[11] E. Lengetti, M. A. Cantrell, N. DellaCroce, L. Diewald, J. L. Mensinger and R. Shenkman, Learning environment and evidence among professionals and students satisfaction (LEAPS), experienced during the COVID-19 pandemic. *Teaching and Learning in Nursing*, *16*(4), 2021, pp. 342–346. https://doi.org/10.1016/j.teln.2021.07.004

[12] J. A. Gray and M. DiLoreto, The Effects of Student Engagement, Student Satisfaction, and Perceived Learning in Online Learning Environments This, NCPEA International Journal of Educational Leadership Preparation, 11(1) 2016, pp. 98–119.. https://files.eric.ed.gov/fulltext/EJ1103654.pdf

[13] S. Annamdevula and R. S. Bellamkonda, The effects of service quality on student loyalty: the mediating role of student satisfaction, *Journal of Modelling in Management*, 11(2), 2016, pp. 446-462.

[14] A. H. El Ahmad and A. M. Kawtharani, Service Quality and Students' Satisfaction in Private Lebanese Higher Education Institutions: The Case of X University, *Journal of Higher Education Policy And Leadership Studies*, *2*(3), 2021, pp. 100–118. https://doi.org/10.52547/johepal.2.3.100

[15] H. Lin Cheng, The Effects of Product Quality on Customer Satisfaction and Loyalty : Evidence from Malaysian Engineering Industry. 3(1), 2018. https://doi.org/10.5296/ijim.v3i1.13959

[16] D. Ambarwati and W. D. Pangesti, Pelatihan Teknik Komunikasi Sebagai Upaya Pencegahan Dan Penatalaksanaan HIV/AIDS, *Jurnal Pengabdian Masyarakat Berkemajuan*, *4*(1), 2020.