Analysis of Factors Affecting Student Satisfaction with the Implementation of Hybrid Learning in the Faculty of Economics and Business, UNJ

Divania Risqi Adelia[1*], Marsofiyati[2], Eka Dewi Utari[3]

[1]Department of Office Administration Education, Faculty of Economics and Business, Universitas Negeri Jakarta, Jakarta, Indonesia.
[2]Department of Office Administration Education, Faculty of Economics and Business, Universitas Negeri Jakarta, Jakarta, Indonesia.
[3]Department of Office Administration Education, Faculty of Economics and Business, Universitas Negeri Jakarta, Jakarta, Indonesia.

*Email: divania.risqi.adelia@mhs.unj.ac.id, marsofiyati@unj.ac.id, ekadewiutari@unj.ac.id

Abstract. This study investigates the determinants of student satisfaction in the implementation of hybrid learning at the Faculty of Economics and Business, Universitas Negeri Jakarta (FEB UNJ). Using a quantitative approach, data were gathered from 80 undergraduate students who participated in hybrid learning. The study employed descriptive statistics, validity and reliability testing, classical assumption testing, and multiple linear regression analysis with SPSS. The findings reveal that service quality, ease of technology use, and learning effectiveness significantly affect student satisfaction, with learning effectiveness emerging as the most dominant factor. These results highlight the need for balanced integration between technological accessibility, quality academic services, and pedagogical effectiveness to optimize hybrid learning outcomes in higher education.

Keywords: Hybrid learning, Student satisfaction, Service quality, Technology usability, Learning effectiveness

Introduction

In the 21st century, the development of education is closely aligned with the objectives of the Sustainable Development Goals (SDGs), particularly Goal 4, which emphasizes the importance of inclusive and quality education for all. With the rapid advancement of digitalization, hybrid learning has become a strategic model in higher education to enhance accessibility, quality, and flexibility in the learning process.

Hybrid learning is a combination of online and face-to-face learning designed to optimize learning outcomes by leveraging technological advancements. This model offers students the flexibility to access learning materials, interact with lecturers, and adapt their learning schedules to their individual needs. According to Garrison and Vaughan (2008), hybrid learning can enhance academic effectiveness by integrating the strengths of both online and offline approaches into a sustainable system.

At the Faculty of Economics and Business, Universitas Negeri Jakarta (FEB UNJ), hybrid learning has been implemented over the past few semesters as part of efforts to address post-pandemic educational needs and respond to technological developments in higher education. However, its implementation still faces several challenges, such as uneven internet access among students, readiness of digital infrastructure, lecturers' effectiveness in managing hybrid classes, and students' adaptability to this model.

Previous studies have explored the relationship between hybrid learning and student satisfaction. Utaminingsih et al. (2022) found that hybrid learning management and learning facilities positively impact student satisfaction. Similarly, Andriani et al. (2022) concluded that satisfaction with hybrid learning is influenced by instructional design and access to technology. Nevertheless, there

remains a lack of specific studies investigating the dominant factors affecting student satisfaction with hybrid learning in the context of FEB UNJ.

Therefore, this study aims to analyze the key factors that influence student satisfaction with the implementation of hybrid learning at FEB UNJ. The novelty of this research lies in identifying the dominant factors by testing multiple variables simultaneously within a single analytical model. The findings are expected to contribute academically and provide practical insights for the institution in improving the design and implementation of more effective and adaptive hybrid learning strategies.

Methods

This study employed a quantitative approach with an explanatory survey method. It aimed to examine the influence of three independent variables—service quality, ease of technology use, and learning effectiveness—on the dependent variable, namely student satisfaction with the implementation of hybrid learning at the Faculty of Economics and Business, Universitas Negeri Jakarta (FEB UNJ). The target population consisted of active undergraduate students at FEB UNJ who had experienced hybrid learning for at least one semester. The sample was selected using a purposive sampling technique, and 80 students participated in the study. The characteristics of respondents in this study were based on several aspects, namely gender, study program, and semester of study.

The research instrument was a structured questionnaire developed based on relevant theories and previous studies. It consisted of items representing four main variables:

- Service Quality (X1): clarity of information, lecturer responsiveness, material preparedness, and technical support.
- Ease of Technology Use (X2): ease of access, user-friendliness of the platform, and system stability.
- Learning Effectiveness (X3): material comprehension, achievement of learning objectives, and student engagement.
- Student Satisfaction (Y): satisfaction with lecturers, media, interaction, and overall learning outcomes.

Each item was measured using a 5-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree. Data were collected online using Google Forms, distributed through student WhatsApp groups. Respondents were instructed to answer the questionnaire based on their personal experience during hybrid learning. The collected data were analyzed using SPSS software with several stages: (1) descriptive statistical analysis to describe respondent characteristics and variable tendencies; (2) validity test using Pearson Product Moment correlation; (3) reliability test using Cronbach's Alpha; (4) classical assumption tests including normality (Kolmogorov-Smirnov), multicollinearity (VIF and tolerance), and heteroscedasticity (Glejser test); and (5) multiple linear regression analysis to test the research hypotheses and determine the dominant influencing factors.

Result and Discussion

The results of this study reveal that all variables service quality, ease of technology use, and learning effectiveness have a positive and significant influence on student satisfaction in hybrid learning.

Tabel 1: Descriptive Statistical Test Results

	N	Minimum	Maximum	Mean	Std. Deviation
Student Satisfaction	80	9.00	25.00	209.000	2.71703
Service Quality	80	5.00	25.00	204.875	3.08115
Ease of Technology Use	80	5.00	25.00	204.750	3.20985
Learning Effectiveness	80	5.00	25.00	212.750	3.06047

Valid N (listwise)	80				

The descriptive statistical analysis reveals that among the four variables examined, learning effectiveness has the highest mean score (M = 21.28), indicating that students perceive it as the most influential factor in shaping their satisfaction with hybrid learning. This is followed closely by service quality (M = 20.49), ease of technology use (M = 20.48), and student satisfaction itself (M = 20.90), all of which show relatively high mean values and moderate standard deviations, suggesting a generally positive and consistent perception among respondents. The data indicate that students tend to agree on the quality of hybrid learning implementation at FEB UNJ, particularly valuing the effectiveness of the learning process, while also appreciating the accessibility of technology and the quality of service provided.

Tabel 2: Reliability Statistic

Cronbach's Alpha	N of Items
.939	20

Validity and reliability tests confirmed that the research instrument is both valid and highly reliable, with a Cronbach's Alpha value of 0.939. This indicates that all questionnaire items used in this study fall into the "very reliable" category. According to Sugiyono (2013), a Cronbach's Alpha value above 0.90 signifies excellent internal consistency, meaning that the items consistently measure the intended constructs.

Tabel 3: Results of Classical Assumption Tests

Test Type	Result/Value	Conclusion
Normality	Sig. = 0.200	Normal
Multicollinearity	VIF = 2.853	No Multicollinearity
Heteroskedasticity	Random Distribution	No Heteroskedasticity

The normality test using the Kolmogorov-Smirnov method yielded a significance value of 0.200, which is greater than the 0.05 threshold, indicating that the data are normally distributed and suitable for further parametric analysis. Additionally, the Glejser test showed no significant pattern in the residuals, suggesting the absence of heteroscedasticity and confirming that the residual variance remains constant across observations. The multicollinearity test, assessed using tolerance and Variance Inflation Factor (VIF) values, confirmed that there is no multicollinearity among the independent variables. All VIF values 2.853 were below the threshold of 10, and tolerance values exceeded 0.10, meeting the criteria for a robust regression model. These results validate the suitability of the data for multiple linear regression analysis.

Tabel 4: T Statistic Test Results

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	.682	1.524		.447	.656
	Service Quality	.221	.102	.231	2.166	.033
	Ease of Technology Use	.240	.112	.238	2.137	.036
	Learning Effectiveness	.487	.145	.429	3.359	.001

The t-test results indicate that all three independent variables significantly affect student satisfaction. Service quality (p = 0.033, t = 2.166), ease of technology (p = 0.036, t = 2.137), and learning effectiveness (p = 0.001, t = 3.359) each show significance levels below 0.05, with their respective t-values exceeding the critical value of 1.9805. This confirms that all three variables positively and significantly influence student satisfaction with hybrid learning. Furthermore, the F-test demonstrates that these variables collectively have a significant simultaneous effect on student satisfaction, indicating a strong overall model.

Tabel 7: F Statistic Test Results

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	523.400	3		58.518	,000b
	Residual	226.588	76	174.467		
	Total	749.988	79	2.981		

The F-test results indicate that service quality, ease of technology, and learning effectiveness collectively have a significant effect on student satisfaction. The calculated F value of 58.518 exceeds the F table value of 2.73, with a significance level of 0.000, which is below the threshold of 0.05. This confirms that the regression model is statistically significant and appropriate for explaining the relationship between the independent variables and student satisfaction in the context of hybrid learning.

The findings of this study indicate that the three independent variables—service quality, ease of technology, and learning effectiveness—significantly influence student satisfaction with hybrid learning at the Faculty of Economics and Business, Universitas Negeri Jakarta (FEB UNJ). Among the three, learning effectiveness emerged as the most dominant factor, supported by the highest mean score and t-value. This strengthens the conclusions of Garrison and Vaughan (2008) and Hrastinski (2019), which highlight the importance of meaningful and interactive learning experiences in increasing engagement and satisfaction in the hybrid model. Student responses also reflect positive perceptions of the ease of technology, indicating that the platform used in hybrid learning at FEB UNJ is generally easy to access, stable, and easy to operate. This is in line with Davis' Technology Acceptance Model (1989), which suggests that ease of use directly influences user acceptance and satisfaction with a technology system.

In addition, service quality was found to have a significant positive impact on student satisfaction. This finding is consistent with the SERVQUAL model by Parasuraman et al. (1988), which emphasizes the role of reliability, responsiveness, and assurance in shaping user perceptions of service. At FEB UNJ, students value clear information delivery, responsive communication from lecturers, and technical support, all of which contribute positively to their overall learning experience. These findings indicate that FEB UNJ has successfully implemented a hybrid learning system that integrates pedagogical quality, technological convenience, and supportive academic services. However, to further enhance student satisfaction, it is important for the faculty to continue to strengthen these three pillars in a balanced manner. Maintaining this integration is essential to ensure the effectiveness and long-term sustainability of the hybrid learning program within the faculty.

When compared with previous research, these findings strengthen the conclusions of Utaminingsih et al. (2022), who identified learning management and facility adequacy as crucial factors, and Andriani et al. (2022), who emphasized instructional design and access to technology. Furthermore, Dewi (2022) reinforced that student satisfaction with hybrid learning is affected by hybrid model management and infrastructure. Dewi's study found that satisfaction levels were higher in hybrid offline settings compared to online, due to more reliable access to infrastructure. Meanwhile, Krisna (2022) confirmed that hybrid learning was preferred over fully online models by students at INSTIKI

Bali. These consistent findings emphasize the importance of technological infrastructure and effective learning management.

From a practical perspective, the implications of this study suggest that FEB UNJ should formulate clear policies regarding the continuous development of hybrid learning. These include improving technical support, providing training for lecturers on hybrid pedagogy, and enhancing access to stable digital infrastructure for students. Implementation of these recommendations could contribute significantly to increasing satisfaction and learning outcomes.

Limitations: This study is limited by the scope of respondents from a single faculty and the reliance on quantitative analysis. Future research should incorporate a wider institutional scope and consider qualitative methods such as interviews or focus group discussions (FGDs) to gain deeper insights into student experiences with hybrid learning.

Conclusion

This study concludes that student satisfaction with hybrid learning at the Faculty of Economics and Business, Universitas Negeri Jakarta (FEB UNJ) is significantly influenced by three key factors: learning effectiveness, ease of technology use, and service quality. Among these, learning effectiveness is identified as the most dominant factor, indicating that engaging and meaningful learning experiences play a central role in shaping student satisfaction. The findings highlight that successful implementation of hybrid learning requires a balanced integration of pedagogical effectiveness, user-friendly technology, and high-quality academic services. Institutions such as FEB UNJ are encouraged to continuously invest in these areas to enhance student experiences and optimize learning outcomes in hybrid learning environments.

References

Andriani, D. S., Saputra, A., Husin, A., & Waty, E. R. K. (2022). Survei Kepuasan Mahasiswa Program Studi Pendidikan Masyarakat Universitas Sriwijaya terhadap Pelaksanaan Hybrid Learning Pasca Covid 19. *Sustainable Jurnal Kajian Mutu Pendidikan*, *5*(2), 374–384. https://doi.org/10.32923/kjmp.v5i2.2796

Ashadi, F. (2022). Critical factor pembelajaran hybrid pada masa pandemi COVID-19. JP (Jurnal Pendidikan): Teori dan Praktik, 7(1), 66-75.

Biswas, S. S., Ahad, M. A., Nafis, M. T., Alam, M. A., & Biswas, R. (2021). Introducing "α-Sustainable Development" for transforming our world: A proposal for the 2030 agenda. *Journal of Cleaner Production*, *321*, 129030.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. MIS Quarterly, 13(3), 319–340. https://doi.org/10.2307/249008

Garrison, D. R., & Vaughan, N. D. (2008). *Blended learning in higher education: Framework, principles, and guidelines*. John Wiley & Sons.

Gultom, A., Simanjuntak, P., & Sihombing, M. (2022). Transformasi peran dosen dalam pembelajaran hybrid di pendidikan tinggi. Jurnal Teknologi dan Pendidikan, 14(1), 33–45.

Hrastinski, S. (2019). What do we mean by blended learning?. TechTrends, 63(5), 564–569. https://doi.org/10.1007/s11528-019-00375-5

Nugroho, J. A. (2023). Implementation of hybrid learning in higher education. HUMANIS (Humanities, Management and Science Proceedings).

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1988). SERVQUAL: A multi-item scale for measuring consumer perceptions of service quality. Journal of Retailing, 64(1), 12–40.

Rahman, M. H., Hidayat, A., & Setialaksana, W. (2023). Persepsi Mahasiswa mengenai Pengalaman Perkuliahan dengan Moda Blended di Masa Post-Pandemic. *Jurnal Pendidikan Terapan*, 37-43.

Sudarsana, I. K. (2021). Pengaruh kualitas layanan akademik terhadap kepuasan mahasiswa pada pembelajaran daring. Jurnal Pendidikan Indonesia, 10(1), 13–22.

Sugiyono. (2013). Metode penelitian pendidikan: Pendekatan kuantitatif, kualitatif, dan R & D (Cetakan ke-25). Bandung: Alfabeta.

Utaminingsih, R., Winarsih, I., & Pramono, R. (2022). Manajemen hybrid learning dan fasilitas belajar dalam meningkatkan kepuasan mahasiswa. Jurnal Pendidikan, 15(1), 75–83.