



# Undergraduate Students' Perceptions of Online Learning Post Pandemic Covid-19

Maman Suherman<sup>1\*</sup>, Cece Hidayat<sup>2</sup>, Lilis Suwandari<sup>3</sup>, Emay Mastiani<sup>4</sup>, Agus Ruswandi<sup>5</sup> 

<sup>1,3,4,5</sup> Universitas Islam Nusantara, Bandung, Indonesia

<sup>2</sup> STAI Sabili Bandung, Bandung, Indonesia

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## ABSTRAK

Setelah pandemi COVID-19, pembelajaran berbasis jaringan telah menjadi kebutuhan dan kebiasaan bagi banyak universitas di Indonesia. Penelitian ini berfokus pada masalah kurangnya partisipasi mahasiswa dalam pembelajaran online melalui pertemuan virtual. Tujuan penelitian ini adalah untuk menganalisis persepsi mahasiswa program sarjana terhadap perkuliahan online. Penelitian ini menggunakan pendekatan kuantitatif dengan metode survei, melibatkan 233 mahasiswa dari Fakultas Keguruan dan Ilmu Pendidikan sebagai responden. Metode pengumpulan data yang digunakan adalah kuesioner dengan instrumen berupa lembar kuesioner. Setelah data dikumpulkan kemudian dianalisis menggunakan metode analisis statistik deskriptif. Berdasarkan temuan penelitian ini, persepsi mahasiswa terhadap pembelajaran online secara keseluruhan berada pada tingkat tinggi, terutama pada aspek fleksibilitas yang dinilai sangat positif. Namun, terdapat beberapa aspek yang memerlukan perhatian lebih, khususnya terkait efektivitas pembelajaran daring dalam meningkatkan prestasi akademik dan mengurangi kebosanan. Sehingga dapat disimpulkan bahwa meskipun mahasiswa mengapresiasi fleksibilitas dan kenyamanan dari pembelajaran online, terdapat kebutuhan untuk meningkatkan kualitas proses belajar agar lebih efektif dan bermakna bagi para mahasiswa. Implikasinya adalah universitas perlu mengembangkan strategi pembelajaran online yang lebih interaktif, bermakna, dan menarik agar partisipasi mahasiswa dapat meningkat. Selain itu, jenis tugas yang lebih variatif dan penggunaan teknologi yang lebih mendukung kolaborasi untuk meningkatkan efektivitas dan kepuasan pembelajaran daring di masa mendatang.

## ABSTRACT

After the COVID-19 pandemic, network-based learning has become a necessity and habit for many universities in Indonesia. This research focuses on the problem of student's lack of participation in online learning through virtual meetings. The purpose of this study is to analyze undergraduate students' perceptions of online lectures. This study used a quantitative approach with a survey method, involving 233 students from the Faculty of Teacher Training and Education as respondents. The data collection method used was a questionnaire with an instrument in the form of a questionnaire sheet. After the data was collected, it was analyzed using the descriptive statistical analysis method. Based on the findings of this study, students' perceptions of online learning overall are at a high level, especially on the aspect of flexibility, which is rated very positively. However, some aspects need more attention, primarily related to the effectiveness of online learning in improving academic achievement and reducing boredom. It can be concluded that while students appreciate the flexibility and convenience of online learning, there is a need to improve the quality of the learning process to make it more effective and meaningful for students. The implication is that universities need to develop more interactive, meaningful and engaging online learning strategies to increase student participation. In addition, more varied types of assignments and the use of technology that supports more collaboration will increase the effectiveness and satisfaction of online learning in the future.

\*Corresponding author.

E-mail addresses: [maman.suherman0604@gmail.com](mailto:maman.suherman0604@gmail.com) (Maman Suherman)

## 1. INTRODUCTION

In the post-COVID-19 era, higher education necessitates the use of adequate information technology tools. Over the past decade, technology has significantly shaped educational experiences, with the advancement of educational technology profoundly influencing teaching in higher education institutions (Al-Ahdal, 2020; Liu, 2023). In response to the COVID-19 pandemic, numerous universities have integrated network-based learning media and various applications such as Zoom, Google Meet, Google Classroom, and YouTube channels. E-learning stands out as one of the most remarkable advancements in educational technology, utilizing communication networks and technology to facilitate classroom teaching and learning (Almahasees et al., 2021; Mortaza Mardiha et al., 2023). E-learning is defined as the use of online platforms and the Internet to enhance learning and provide users with access to online services (Al-Ahdal, 2020; Ehlers et al., 2006). Many higher education institutions have developed e-learning as the primary method to sustain their educational practices, adopting it as an alternative learning approach and recommending blended learning strategies (Balogun et al., 2023; Pavla et al., 2015).

Online learning encompasses three primary approaches: enhanced learning, blended learning, and the online approach. Enhanced learning involves the extensive use of technology to facilitate innovative and interactive teaching. Blended learning combines both face-to-face and online educational methods. Online learning offers several advantages, including being a valuable tool for education due to its cost-effectiveness, flexibility, and its potential to deliver high-quality, world-class education (de la Varre et al., 2011; Stec et al., 2020). Despite the benefits of online learning, it can sometimes be uncomfortable for participants, especially concerning technology-related issues. With technological advancements, students can easily access educational content worldwide within their available time (Gnawali et al., 2022; Redmond et al., 2014).

Despite the various advantages of online learning, one would expect students to be more motivated and actively engaged in lectures. With online learning, students should be able to manage their time effectively, attend lectures punctually, and complete assignments promptly. However, preliminary studies conducted among students at the Faculty of Education, Universitas Islam Nusantara, reveal a contrasting reality. The preliminary findings indicate that during virtual meetings, approximately 20-40% of students disable their cameras, 10-20% engage in other activities, and over 50% fail to complete assignments on time. Consequently, the research gap highlighted here is that despite the diverse benefits of online learning, it does not necessarily translate into increased student engagement. This disparity could potentially be attributed to students' perceptions of online learning.

Students' perceptions of online learning are critically important. If students perceive online learning negatively, it can lead to a loss of motivation and diligence. Research by Abbasi indicates that students had a negative attitude toward e-learning during the COVID-19 pandemic (Abbasi et al., 2020; Kaufmann & Servatius, 2020). Furthermore, the success of e-learning systems heavily depends on students' willingness and readiness to accept them as a learning tool. Lack of student acceptance and utilization of e-learning systems can hinder their effectiveness and lead to wastage of funds and resources for institutions. There is substantial educational research interest in evaluating the benefits of virtual education implemented during the COVID-19 pandemic for university programs (Almaiah et al., 2020; Bazán-Ramírez et al., 2023).

As previously mentioned, the benefits of online learning include effectiveness, time efficiency, and convenience from home. Distance learning facilitates participation for both teachers and learners from anywhere. Learners can access learning materials for review wherever they are. Online learning saves time by eliminating the need to gather in a physical classroom. Studies conducted by Perez have shown that blended learning has a positive effect and improves exam scores. However, preliminary studies at Universitas Islam Nusantara indicate that student engagement during learning activities is still suboptimal. This could potentially be influenced by students' perceptions of blended learning. In various developed countries, online learning has expanded widely due to its accessibility factors (de Oliveira et al., 2018; López-Pérez et al., 2011; Palvia et al., 2018). Therefore, the objective of this research is to describe students' perceptions of online learning regarding aspects of meaningfulness, flexibility, academic achievement, learning comfort, and motivation.

The novelty of this research lies in producing measurements of students' perceptions towards online lectures within the Faculty of Education, focusing on aspects of usefulness, flexibility, and comfort. The objective of this study is to gauge students' perceptions of online learning at Universitas Islam Nusantara. The research outcomes are expected to serve as a reference for campus policies regarding the implementation of online learning post-COVID-19 pandemic. This consideration is based on the fact that online learning has become a necessity and widely accepted in several educational institutions (Ali, 2020; Pei & Wu, 2019).

## 2. METHOD

This research use a quantitative approach with a survey research method. Surveys are used to gather opinions or attitudes from respondents. The study population comprises 700 students from the Faculty of Education at Universitas Islam Nusantara. Simple random sampling with a significance level of 5%. resulting in a sample size of 233 respondents (Asmadi. 2004; Fraenkel et al.. 2012). The number of respondents in this study is detailed in Table 1.

**Table 1. Respondent Characteristics (n =233)**

Respondent Characteristics	Category	Frequency	Percentage
Gender	Female	178	76.40
	Male	55	23.60
Semester	I	79	33.91
	III	41	17.60
	V	68	29.18
	VII	45	19.31

The data collection method used was a questionnaire with an instrument in the form of a questionnaire sheet regarding student perceptions of online learning after the COVID-19 pandemic.. A questionnaire was chosen as the instrument due to its ease of use in gathering data from a sufficiently large sample. To measure students' perceptions of online learning, a Likert scale questionnaire was employed with the options: "Strongly Agree" (SA). "Agree" (A). "Undecided" (U). "Disagree" (D). and "Strongly DisagreeA (SD). Indicators to measure student perceptions are based on a measurement scale and the indicators are presented in Table 2.

**Table 2. Indicators and Measurement of Perceptions**

Indicator	Multiple Choice	Score	
		Positive Question	Negative Question
Meaningfulness	Strongly Agree (SA)	5	1
Student Achievement	Agree (A)	4	2
Flexibilities and Efektivities	Undecided (U)	3	3
Comportable and Motivation	Disagree (D)	2	4
Boredom dan Satisfaction	Strongly Disagree (SD)	1	5

The questionnaire data were tested for normality with a significance value (Asymptotic Significance. 2-tailed) of 0.94. which is greater than 0.05. Therefore. the data in this study are normally distributed. Data analysis was performed using descriptive statistics through the Statistical Package for Social Sciences (SPSS). This study specifically employed the mean to analyze students' perceptions and address the research questions (Gibson & Hua. 2016; Lovrić et al.. 2020; Muijs. 2004).

## 3. RESULT AND DISCUSSION

### Result

To understand students' perceptions of online learning, the first question posed to respondents is about the signficance and benefits of online learning for them. Based on the survey results, the data obtained are as shown in Table 3.

**Table 3. Usefulness of Online Learning**

Respondent Categories	SA		A		U		DA		SD		Mean
	F	%	F	%	F	%	F	%	F	%	
Male	24	10.30	19	8.15	5	2.15	5	2.15	1	0.43	3.71
Female	30	12.88	82	35.19	35	15.02	27	11.59	5	2.15	
I	19	8.15	38	16.31	15	6.44	8	3.43	1	0.43	
III	9	3.86	17	7.30	7	3.00	8	3.43	0	0.00	
V	13	5.58	28	12.02	14	6.01	10	4.29	3	1.29	
VII	13	5.58	18	7.73	4	1.72	6	2.58	2	0.86	
<b>Total</b>	<b>54</b>	<b>23.18</b>	<b>101</b>	<b>43.35</b>	<b>40</b>	<b>17.17</b>	<b>32</b>	<b>13.73</b>	<b>6</b>	<b>2.58</b>	

Based on the [Table 3](#), it can be observed that only 23.18% of respondents strongly agree that online learning is beneficial and meaningful for them during their studies. Based on gender, there is not a significant difference between males and females. Meanwhile, the majority of respondents (43.34%) agree that online learning is more meaningful and beneficial, with a notable difference between males and females at 27.04%. Additionally, 17.17% of respondents are undecided, with a difference of 12.88% between males and females. Based on academic semester level, students' perceptions of the benefits and meaningfulness of online learning show some differences, though not significantly. The mean score for this perception indicator is 3.71, indicating that students' perceptions of online learning regarding its benefits and meaningfulness are at a "High" level. Student Achievement is an important aspect of online learning outcomes. In the second question, respondents were asked whether online learning can enhance students' academic achievement compared to face-to-face learning. Based on the survey results, the data obtained are as shown in [Table 4](#).

**Table 4. Student Achievement in Online Learning**

Respondent Categories	SA		A		U		DA		SD		Mean
	F	%	F	%	F	%	F	%	F	%	
Male	16	6.87	15	6.44	12	5.15	9	3.86	2	0.86	3.26
Female	16	6.87	57	24.46	51	21.89	48	20.60	7	3.00	
I	11	4.72	34	14.59	19	8.15	15	6.44	2	0.86	
III	3	1.29	12	5.15	6	2.58	20	8.58	0	0.00	
V	7	3.00	16	6.87	26	11.16	16	6.87	3	1.29	
VII	11	4.72	10	4.29	12	5.15	6	2.58	4	1.72	
<b>Total</b>	<b>32</b>	<b>13.73</b>	<b>72</b>	<b>30.90</b>	<b>63</b>	<b>27.04</b>	<b>57</b>	<b>24.46</b>	<b>9</b>	<b>3.86</b>	

Based on the [Table 4](#), it can be observed that only 13.73% of respondents strongly agree that online learning enhances academic achievement compared to face-to-face learning. Based on gender, there is not much difference in students' perceptions in this aspect between males and females. Meanwhile, the majority of respondents (30.90%) agree that online learning improves student academic performance, with a significant difference between males and females. Based on academic semester level, students' perceptions of online learning's ability to enhance academic achievement show some differences, although not significantly. The mean score for this perception indicator is 3.26, indicating that students' perceptions of online learning regarding its ability to enhance academic achievement are at a "High" level.

Among the advantages of online learning is its flexibility in terms of time and place for learning. Respondents were asked to respond regarding their perceptions of the flexibility of online learning. Based on the survey results, the data obtained are as shown in [Table 5](#).

**Table 5. Online Learning Flexibility**

Respondent Categories	SA		A		U		DA		SD		Mean
	F	%	F	%	F	%	F	%	F	%	
Male	28	12.02	18	7.73	6	2.58	2	0.86	0	0.00	4.01
Female	52	22.32	82	35.19	27	11.59	13	5.58	5	2.15	
I	26	11.16	34	14.59	16	6.87	5	2.15	0	0.00	
III	13	5.58	18	7.73	5	2.15	5	2.15	0	0.00	
V	20	8.58	33	14.16	9	3.86	4	1.72	2	0.86	
VII	21	9.01	15	6.44	3	1.29	1	0.43	3	1.29	
<b>Total</b>	<b>80</b>	<b>34.33</b>	<b>100</b>	<b>42.92</b>	<b>33</b>	<b>14.16</b>	<b>15</b>	<b>6.44</b>	<b>5</b>	<b>2.15</b>	

Based on [Table 5](#) above, it can be seen that 34.33% of respondents strongly agree that online learning is flexible for students. The majority of respondents (42.92%) agree, while 14.16% are undecided, 6.44% disagree, and 2.15% strongly disagree that online learning is flexible for the learning process of students. Based on gender, there is a significant difference in students' perceptions in this aspect between males and females. Based on academic semester level, students' perceptions of the flexibility of online learning show some differences, although not significantly. The mean score for this perception indicator is 4.01, indicating that students' perceptions of the flexibility of online learning are at a "High" level.

Among the indicators that need to be studied is the effectiveness of online learning in student education. The question in this indicator uses a negative statement. Respondents were asked whether they agree that online learning is less effective for the learning process. The results are as shown in [Table 6](#).

**Table 6. Ineffectiveness of Online Learning**

Respondent Categories	SA		A		U		DA		SD		Mean
	F	%	F	%	F	%	F	%	F	%	
Male	8	3.43	12	5.15	17	7.30	10	4.29	7	3.00	3.13
Female	21	9.01	47	20.17	54	23.18	52	22.32	5	2.15	
I	8	3.43	17	7.30	29	12.45	24	10.30	3	1.29	
III	5	2.15	16	6.87	5	2.15	12	5.15	3	1.29	
V	8	3.43	19	8.15	24	10.30	14	6.01	3	1.29	
VII	8	3.43	7	3.00	13	5.58	12	5.15	3	1.29	
<b>Total</b>	<b>29</b>	<b>12.45</b>	<b>59</b>	<b>25.32</b>	<b>71</b>	<b>30.47</b>	<b>62</b>	<b>26.61</b>	<b>12</b>	<b>5.15</b>	

Based on Table 6 above, the data reveals that 12.45% of respondents strongly agree that online learning renders the learning process ineffective. 25.32% agree. 30.47% are undecided. 26.61% disagree, and 5.15% strongly disagree with the assertion that online learning is ineffective. The mean score for this perception indicator is 3.13. This figure indicates that students' perception of the ineffectiveness of online learning is at a "High" level. In the learning process, students need to have skills during online learning with virtual meetings. The lift results show the level of comfort and motivation of students in conducting virtual meetings as shown in Table 7.

**Table 7. Learning Comfortable and Motivation**

Respondent Categories	SA		A		U		DA		SD		Mean
	F	%	F	%	F	%	F	%	F	%	
Male	19	8.15	24	10.30	5	2.15	6	2.58	0	0.00	3.52
Female	23	9.87	68	29.18	48	20.60	31	13.30	9	3.86	
I	16	6.87	33	14.16	21	9.01	11	4.72	0	0.00	
III	4	1.72	17	7.30	8	3.43	11	4.72	1	0.43	
V	10	4.29	27	11.59	16	6.87	11	4.72	4	1.72	
VII	12	5.15	15	6.44	8	3.43	4	1.72	4	1.72	
<b>Total</b>	<b>42</b>	<b>18.03</b>	<b>92</b>	<b>39.48</b>	<b>53</b>	<b>22.75</b>	<b>37</b>	<b>15.88</b>	<b>9</b>	<b>3.86</b>	

Based on Table 7 above, it can be observed that 18.03% of respondents strongly agree that online learning is more convenient and motivates them more. 39.48% agree. 22.75% are neutral. 15.88% disagree, and 3.86% strongly disagree with the notion that online learning is more comfortable and motivating. The mean score for this perception indicator is 3.52. These figures indicate that students' perception of the convenience and motivation of learning with online learning is at the "High" level.

Online learning that is done continuously can result in students getting bored and full of virtual meetings. Therefore, it is necessary to investigate whether students are experiencing saturation of virtual meeting or feel comfortable with virtual meeting. The elevation results show the level of saturation of students in conducting virtual meetings as shown in Table 8.

**Table 8. Student Saturated and Boring of Online Learning**

Respondent Categories	SA		A		U		DA		SD		Mean
	F	%	F	%	F	%	F	%	F	%	
Male	10	4.29	14	6.01	9	3.86	17	7.30	4	1.72	3.29
Female	32	13.73	53	22.75	39	16.74	52	22.32	3	1.29	
I	7	3.00	24	10.30	18	7.73	30	12.88	2	0.86	
III	6	2.58	14	6.01	7	3.00	13	5.58	1	0.43	
V	12	5.15	21	9.01	16	6.87	18	7.73	1	0.43	
VII	17	7.30	8	3.43	7	3.00	8	3.43	3	1.29	
<b>Total</b>	<b>42</b>	<b>18.03</b>	<b>67</b>	<b>28.76</b>	<b>48</b>	<b>20.60</b>	<b>69</b>	<b>29.61</b>	<b>7</b>	<b>3.00</b>	

Based on Table 8 above, it can be seen that 18.03% of respondents Strongly Agree that online learning makes studying boring. 28.76% agree. 20.60% are undecided. 29.61% disagree, and 3% strongly disagree that online learning makes students bored and uninterested in learning. The mean score for this perception indicator is 3.29. This number indicates that students' perception of boredom with online learning is at a "High" level.

Students' Learning Satisfaction (SLS) in online lectures is the result of a complex interaction between various factors. one of which is the model of the lectures used. Whether students feel satisfied with online class policy or not. The elevation results show the level of student satisfaction in conducting online lectures as shown in [Table 9](#).

**Table 9.** Students' Learning Satisfaction

Responden t Categories	SA		A		U		DA		SD		Mea n
	F	%	F	%	F	%	F	%	F	%	
Male	21	9.01	15	6.44	9	3.86	7	3.00	2	0.86	3.53
Female	27	11.59	59	25.32	68	29.18	15	6.44	10	4.29	
I	16	6.87	27	11.59	26	11.16	9	3.86	3	1.29	
III	8	3.43	12	5.15	15	6.44	4	1.72	2	0.86	
V	11	4.72	24	10.30	25	10.73	3	1.29	4	1.72	
VII	12	5.15	11	4.72	11	4.72	6	2.58	3	1.29	
<b>Total</b>	<b>48</b>	<b>20.60</b>	<b>74</b>	<b>31.76</b>	<b>77</b>	<b>33.05</b>	<b>22</b>	<b>9.44</b>	<b>12</b>	<b>5.15</b>	

**Discussion**

The COVID-19 pandemic and the accompanying uncertainty have adversely affected the mental health of the population. resulting in heightened symptoms of anxiety. depression. post-traumatic stress. psychological pressure. and stress ([Ozamiz-Etxebarria et al. 2020](#); [Xiong et al. 2020](#)). This impact has also been felt in the academic context. as both students and teachers had to swiftly transition from face-to-face teaching to online teaching. Despite the numerous advantages of online learning. it has also had negative effects on student participants. Various studies have shown that even before the pandemic. students spending extensive time in front of a computer could increase the risk of anxiety and depression ([Bird et al. 2022](#); [Bono et al. 2024](#); [Feng et al. 2014](#)). Online learning has been implemented for several years in various countries. However. with the onset of COVID-19. educators were compelled to adopt online teaching due to the necessity of adapting to technological advancements and requirements. Currently. online learning has become an extremely beneficial method of education due to its practicality in delivering curricula worldwide. However. with the increased risk of anxiety as described above. online learning may not be preferred by students. Since 2020. higher education institutions in Indonesia have begun using online learning. However. over time. online learning could potentially become monotonous and stressful for students ([Ahmed et al. 2020](#); [Hodges et al. 2020](#); [Lazarevic & Bentz. 2021](#); [Taha et al. 2020](#)).

Indicators of students' perceptions studied include the usefulness of online learning. The research findings indicate that students perceive online learning to be highly beneficial and meaningful. with a score of 3.71. and the majority of respondents agreeing that online learning is very beneficial and meaningful for students. These findings align with previous studies showing that online learning can be an effective and beneficial tool in education. However. the mental health risks associated with online learning need to be addressed seriously. Prolonged online learning can lead to boredom and stress among students. highlighting the need for a more holistic approach to supporting students' mental well-being ([Ahmed et al. 2020](#); [Lazarevic & Bentz. 2021](#); [Taha et al. 2020](#)). To mitigate these negative impacts. educational institutions need to provide adequate resources and support for students. such as mental counseling services and stress management strategies. Additionally. more interactive and engaging teaching approaches can help alleviate boredom and stress associated with online learning. These findings underscore the importance of adopting adaptive teaching strategies and providing ongoing mental support to ensure that online learning remains effective and sustainable in the future.

Online learning has several disadvantages compared to face-to-face or blended learning. Blended learning (BL) has been a significant way to drive educational reform and development. However. the effectiveness of BL in student learning is still questioned. The effectiveness of online learning is influenced by various inhibiting factors such as lack of direct interaction. academic ability. technical skills. student motivation. study time and support. and internet network quality. Additionally. the quality of multimedia used by instructors can hinder online learning and fail to engage students' interest in learning ([Mayer. 2002](#); [Muilenburg & Berge. 2005](#); [Qing Yu Kun Yu & Wang. 2023](#)). Considering these drawbacks. the research findings indicate that students' perceptions of achieving learning outcomes through online learning are at a "high" level with a score of 3.26. However. 27.04% of respondents expressed "undecided." and 24.46% expressed "disagree" that online learning can improve student learning outcomes.

Besides its disadvantages. online learning also has advantages. particularly in its flexibility. Distance learning has become a primary solution for continuing education amidst the COVID-19 pandemic.

The flexibility offered by this method provides numerous benefits for students, such as the ability to manage their study time according to their comfort, access to various learning resources from anywhere, and opportunities to interact with instructors and peers through digital platforms. This study found that the flexibility of online learning significantly enhances student satisfaction and learning outcomes. Students feel more capable of managing their time and balancing education, work, and personal responsibilities. A total of 42.92% of respondents "Agree" with the flexibility of online learning. Students' perception of flexibility is rated as "high" with a score of 4.01. These findings align with a study by Huang, which demonstrated that the flexibility of online learning enables students to study at times and places that best suit their needs, thereby enhancing engagement and learning outcomes. Although flexibility is a significant advantage of online learning, it is not without challenges. Some students may find it difficult to manage their time and maintain discipline, which can lead to procrastination and academic underperformance. Research by Kauffman indicates that while flexibility provides freedom, students with poor time management skills tend to struggle with completing tasks on time and staying motivated (Huang et al., 2020; Kauffman, 2015).

Regarding the effectiveness of online learning, this finding indicates that more than half of the respondents (37.77%) hold negative views on the effectiveness of online learning. This aligns with research by Jaggars (Jaggars, 2014) which found that students often feel less satisfied with online courses compared to face-to-face courses, especially in terms of interaction with instructors and fellow students. One of the main reasons for the ineffectiveness of online learning is the lack of direct interaction between students and professors. To address the limitations of online learning, one effective strategy is the implementation of blended learning, which includes five distinct types. One such type is face-to-face instructor-led learning, where students attend classes in person, and the teacher presents course materials while facilitating direct learning opportunities. Online instructor-led learning involves students engaging in real-time virtual classes conducted by instructors who facilitate the learning process and encourage interactive participation (Kamble et al., 2021; Lewohl, 2023). Collaborative face-to-face learning necessitates that students work together in person within a physical classroom setting to accomplish assigned tasks. Self-paced online learning enables students to access educational resources and materials through online platforms independently, allowing them to progress at their own speed (Haugland et al., 2022; Moore et al., 2011).

A good learning model should prioritize student comfort. One key factor that enhances comfort in online learning is the flexibility of time and location. This research concludes that 39.48% of respondents "agree" that online learning is more comfortable and motivates them to study. Students' perception on this aspect is at a "high" level with a score of 3.52. Students can schedule their study time according to their personal schedules, allowing them to balance between studies, work, and other responsibilities. This aligns with research by Broadbent & Poon, which shows that such flexibility can enhance student motivation and engagement in the learning process. Online learning enables students to access learning materials anytime and anywhere. This is particularly useful for students who may have geographic or logistical constraints. Garrison & Kanuka's study found that this accessibility is a major advantage of online learning, which can enhance comfort and learning effectiveness (Broadbent & Poon, 2015; Garrison & Kanuka, 2004).

This study also measured students' satisfaction with online learning. Based on the data obtained, the results show that the majority of students are "undecided" about online learning, scoring 3.53, which is at a "High" level. However, 9.44% of respondents are satisfied and 5.15% are dissatisfied with online learning. Factors influencing this satisfaction include the quality of learning materials, interaction with instructors and peers, and adequate technological support. The quality of online learning materials significantly impacts student satisfaction. Clear, structured, and easily accessible materials enhance student understanding and engagement. According to Alqurashi's study, instructional quality is a key factor influencing satisfaction in online learning. Effective interaction between instructors and students, as well as among peers, also contributes significantly to satisfaction. Students who feel supported and have opportunities for active interaction tend to be more satisfied with their learning experience. Research by Eom, Wen, & Ashill indicates that social interaction in online learning is crucial for enhancing satisfaction (Alqurashi, 2019; Eom et al., 2006).

Student satisfaction with online learning has not reached its maximum potential. For instance, research by Elshami reveals that student satisfaction only reaches 41.31%, with the highest satisfaction reported in the flexibility of online learning. Student satisfaction is closely related to their academic performance and achievements (Croxtton, 2014; Elshami et al., 2021; Meyer, 2014). Research findings suggest that academics prefer face-to-face collaborative activities to enhance student engagement and develop higher-order thinking skills, which students often find challenging. However, the effectiveness of this approach is contingent on manageable group sizes. For larger groups, online collaborative work can serve as a viable alternative, provided there is sufficient online resource support. To fully capitalize on the advantages of blended learning and enhance students' educational experiences, it is crucial to integrate a range of face-to-face and online components, making optimal use of each. Saunders and Werner highlight

the significance of combining various methods and approaches to achieve the intended learning outcomes (Alammary. 2024; Saunders. 2022).

This research makes an important contribution to understanding student satisfaction with online learning in the post-pandemic era. By identifying that the majority of students are “undecided” regarding their satisfaction with online learning, this study highlights the significant challenges in achieving the full potential of online learning. The finding that the quality of learning materials and social interactions between students, instructors and peers influence satisfaction provides insights for curriculum developers and learning platform providers to focus on improving quality and interactivity in online learning experiences. In addition, this study also confirms the importance of flexibility in online learning, which is one of the main factors valued by students. By linking online learning satisfaction with academic performance and student achievement, the results of this study offer guidance for improving the online learning experience through the development of more structured and accessible materials and better support for social interaction. Overall, this study contributes to the development of more effective and meaningful online learning strategies at the university level, and provides a basis for further research on how to maximize student satisfaction in the context of hybrid or blended learning.

This study has several limitations. First, the sample involved 233 students from the Faculty of Teacher Training and Education, Universitas Islam Nusantara, which may not fully represent the perceptions of students at other universities or different faculties. As a result, the findings may not be widely generalizable to the entire student population in Indonesia. Secondly, the quantitative approach and survey methods provide useful statistical data but not depth. This limitation means that qualitative aspects of student perceptions, such as personal experiences and more in-depth opinions, were not fully explored. Thirdly, this study focuses on students' perceptions of online learning, but does not evaluate the actual impact of online learning on academic achievement and concrete learning outcomes. This limits the understanding of the relationship between perceptions and actual academic outcomes.

#### 4. CONCLUSION

Students' perceptions of online courses are generally at the "High" level, indicating that most students have a favorable view of this learning method. Although there are variations in student perceptions, online courses are considered reasonably practical and well-received overall. Several similar studies also support this finding, showing that students respond positively to online learning. The aspects most valued by students are the flexibility and usability of online learning, which allows them to study more freely. However, the effectiveness of online learning in improving learning outcomes is still a concern for some students. To overcome these obstacles, implementing a blended learning strategy- which combines online learning with face-to-face learning- can be an effective solution to maximize learning outcomes and improve the overall learning experience.

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