Perceptions and reflections on online learning and implications for guidance and counseling

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Abstract

This study aims to explore students' perceptions and experiences of online learning and their implications for identifying student needs for guidance and counseling in tertiary institutions. This research uses quantitative methods. Purposive sampling technique was chosen to determine the sample. A sample of 1158 students participated in online learning at various universities in Indonesia by filling out an online survey. The results of the study show that different students have different perspectives about online education. Some thought that online education was significant while other thought it was unimportant. The education system in Indonesia has not developed a representative online education system. Online learning is something new, the availability of technological devices is inadequate and students are not ready for online lectures. Students have difficulty understanding the material, do not get adequate feedback and there is a lack of interaction between lecturers and students. Some students are of the opinion that online learning is quite effective. The implications of this research can be used to evaluate and identify the needs of students who are studying online. The results can be used as a basis for consideration in developing a comprehensive guidance and counseling service program. Online learning is followed by students effectively and efficiently.

Contents

Contribution of this paper to the literature

This study contributes to identifying students' perceptions of online learning in Indonesia. Research data can be used as evaluation material to improve the quality of online learning and guidance and counseling services in Indonesia and other countries that have the same data characteristics.

1. Introduction

The most effective method to continue learning during the COVID-19 pandemic was online learning because teachers and students could not carry out offline learning. Previously, teachers mostly taught and guided students directly but now they mostly serve as managers.

The online learning process cannot replace the offline learning process. However, due to conditions that do not allow offline meetings such as the current pandemic, it has great potential to be put into practice (Husin, Razak, Khairi, & Nazeri, 2022; Yu, Liu, Tang, & Wu, 2021). Online learning must be designed and experienced by the public to continue the education system during the pandemic.

During the COVID-19 pandemic, the educational situation changed as offline learning classes switched to online learning (Dewantari, Putra, & Bulantika, 2021; Olasile & Emrah, 2020; Pokhrel & Chhetri, 2021). The education system needs evaluation of the COVID-19 condition because it is very vulnerable to external hazards and the government needs to be concerned about it for better education sustainability (Bozkurt & Sharma, 2020).

Due to the many demands of the lectures and the course, students in higher education experience psychological disorders (Hasanah, Ludiana, Immawati, & Livana, 2020). Therefore, exciting learning methods are needed when the learning process is carried out virtually and students get new and interesting learning experiences that will form positive perceptions of online learning activities, increase motivation and reduce academic stress (Kim, 2013).

Positive effects on learning outcomes include satisfaction in the learning process and active discussion participants (Dai & Turgeon, 2008). Students' positive perceptions of the program will also affect a student's psychology when participating in the online learning process (Liu, Magjuka, Bonk, & Lee, 2007). Online learning activities expect educators to be able to ascertain whether students have a sense of involvement in the online learning process. Online learning using effective and efficient methods aims to achieve good learning outcomes (Frye, 2015).

Active and interesting learning methods need to be implemented by teachers to minimize boredom and fatigue in virtual learning activities (Park & Kim, 2021; Tlili, Burgos, Olivier, & Huang, 2022). Several things need to be considered in an effective online learning process: (a) the learning content is designed attractively, (b) the interaction between teachers and students is motivated, (c) the educators are ready to manage learning activities, (d) both teachers and students build a sense of online learning community and (e) they have adequate technology (Sun & Chen, 2016).

The education system in Indonesia was not prepared to deal with the effects of COVID-19 when it first emerged. The implementation of online learning lacks adequate infrastructure and human resources to cope with the digital era. The quality of the education system at the time of COVID-19 does not decrease and it is hoped that it can be implemented optimally through online learning because research on online learning has been carried out a lot before the pandemic and the results of their research can be used as a basis and evaluation in implementing online learning during COVID-19 (Sun & Chen, 2016).

Although most Indonesian universities generally had an e-learning system before COVID-19, the spread and use of e- learning were quite low. This factor caused a lack of skills among teachers and students in using e-learning when COVID-19 emerged. The condition of COVID -19 increased the use of e-learning in all educational institutions (Owusu-Fordjour, Koomson, & Hanson, 2020; Viner et al., 2020). For the effective use of e-learning, several factors influence its effectiveness: (a) the availability of adequate technology infrastructure, (b) the quality of the e-learning system used and (c) clear information on the use of e-learning (Aremu, Shahzad, Elhachemi, & Bagudur, 2022).

Teachers must develop online learning methods to keep online learning activities active. The learning process will be active if students feel involved in learning activities. The study's results revealed that having the chance to talk with peers , feeling appreciated and the learning process being challenging were some factors that led to engaged learners in the learning process (Frye, 2015).

The condition of students' anxiety in the online learning process is higher than in offline learning which is the result of many factors: the quality of students' understanding of the material discussed, demands on the availability of internet networks and other supporting infrastructure that are adequate to follow the learning process and the shorter allocated time to complete assignments than during offline learning (Dewantari et al., 2021).

Based on the above analysis, the purpose of this research is to investigate and explore students' experiences and perceptions of online learning. Some of the research questions posed to answer the research problems include:
1. How important is online learning according to students?
2. How are the practice and effectiveness of online learning perceived by students?

3. What are the advantages and disadvantages of online learning according to students?
4. What must be provided by the institution to run online learning programs well?
5. How is family social support for online learning?

2. Literature Review

2.1. Online Learning

Online learning is a program that encourages a lifelong learning process (Aljaraideh, 2019). The implementation of online learning has been mandated for the whole world (Wannapiroon, 2022). Online-based learning is a learning process that is generally used in the new normal era due to the impact of COVID-19 but actually online learning has long been implemented in several educational institutions (Seage & Türegün, 2020). Online learning has not been able to perform better than face-to-face learning but constantly evaluating the implementation of online learning will improve the quality of online learning.

Online learning or blended learning emerged as an alternative to carrying out the learning process after COVID-19. Increase student creativity and independence, increase teacher innovation in providing social or online media-based learning, be an alternative when face-to-face learning cannot be carried out and increase student skills in using technology within the scope of learning are some of the advantages of online-based learning (Andarwulan, Fajri, & Damayanti, 2021; Indrawati, 2021; Ramani, 2015).

The demands of the modern world prioritize human resources who are proficient in the use of technology so all facets of life now need technological assistance. Lulaj (2022) explains that online learning can also save education costs for many people or provide wider opportunities for many people to continue their education at tertiary institutions without cost, space or time barriers.

Technological learning aims to facilitate learning and improve the quality of learning (Hardianto, Budiningsih, Pratama, Syed Ali, & Karakauki, 2022). Therefore, it is necessary to implement various technology-based applications or media in education. Aspects that need to be considered by teachers in online learning activities are creating class groups, determining interesting topics or material and convenience, simplicity and speed in the appearance and operation of applications or media that are used together in the online learning process (Haryono & Hamzah, 2023; Mulyatiningsih, Palupi, Ekawatiningsih, Firdausa, & Nuryana, 2023).

2.2. Guidance and Counseling

Even though many students experience personal, academic, social and career problems, many of them do not seek professional guidance and counseling assistance to solve the problems they face (Glasheen, Shochet, & Campbell, 2016). Guidance and counseling are professional assistance to develop skills and help someone with problems so that they can independently go through life processes (Birichi & Rukunga, 2009; Clark, 2010; McLeod & McLeod, 2011; Salgong, Ngumi, & Chege, 2016).

A counselor must have professional skills in carrying out guidance and counseling services because students' current problems are very complex (Odaci, Değerli, & Bolat, 2017; Wambu & Fisher, 2015). Guidance and counseling must be integrated into school programs facilitated by professionals in the field of guidance and counseling and provided with the necessary supporting facilities so that guidance and counseling services can be carried out effectively (Ruttoh, 2015). In general, the community has a good perception of guidance and counseling services but it lacks knowledge about the types of services and their scope (Seyoum, 2011). Therefore, guidance and counseling services are always introduced to the community and develop instruments aimed at identifying individual personal, social, academic and career problems.

3. Method

3.1. Method

This study uses a quantitative approach to explore or identify perceptions of students' online learning experiences. The data was obtained from students at universities in Indonesia.

3.2. Participant

Participants in this study are 1158 students from Indonesian tertiary institutions spread on the islands of Sumatra and Java. Participants were asked to fill out instruments that had been shared through the Google Form.

Table 1. Items of student learning experiences during the pandemic.

Question
According to you, how important are online lectures during COVID-19?
How do you respond to the practicality of online lectures held today?
Do you think the online lectures are effective?
How is the support from the family for implementing online lectures today?
What are the media you often use to participate in online lectures?
What are some of the most frequently used applications or social networks in online lectures?
What are the obstacles that you often encounter when attending online lectures?
According to you, what are the advantages of lectures that are carried out online?
According to you, what are the disadvantages of conducting online lectures?
Do your parents give advice or reminders to make the most of their online learning time?
According to you, does this online lecture help the government prevent the spread of COVID-19?
Do you prefer to learn face-to-face in class rather than online, even though you are currently in the COVID-19 pandemic?

3.3. Instruments, Data Collection and Data Analysis

The research instrument was prepared based on the information needed to explore Indonesian students' perceptions and reflections regarding online learning during the pandemic. The question items used can be seen in

Table 1. The instrument items were discussed with three counseling and psychology experts. Data collection used the planetary survey application in coordination with several lecturers at all Indonesian tertiary institutions on the islands of Sumatra and Java to ask for help conveying to students that they need to fill out learning experience instruments during a pandemic. Data analysis uses quantitative data classification.

4. Findings

Based on the data obtained from the distribution of instruments exploring students' perceptions and reflections on online learning, the following explanation is given:

Table 2. The importance of online learning for college students (n=1158).

Question	Answer choices	f	%
According to you, how important are online lectures under the current conditions of COVID-19?	Very important	451	38.95
	Important	431	37.22
	Quite important	234	20.21
	Not important	42	3.63

Table 3. The online learning practicality levels (n=1158).

Question	Answer choices	f	%
How do you respond to the practicality of online lectures held today?	Very practical and easy for students to learn.	47	4.06
	Practical and helps students in learning.	181	15.63
	Quite practical but need to improve the systematic implementation.	633	54.66
	Impractical and not recommended to be applied to the next lecture process.	297	25.65

Table 2 explains that the majority of respondents stated that online lectures were very important (38.95%) and important (37.22%) which indicates that they were quite important (20.21%). 3.63% respondents consider online learning unimportant. Table 3 describes the practicality of online lectures held in Indonesia. The majority (54.66%) state that online learning is quite practical but it requires improvement. Then 25.65% stated that online learning was impractical and not recommended for the next lecture process. A few respondents (19.69%) stated that practical learning was used and made learning easier for students. Most students stated that online learning was necessary because the Indonesian education system had not yet prepared a distance education system. Therefore, the education system must be improved for the following educational process.

Table 4. The effectiveness of online learning (n=1158).

Question	Answer choices	f	%
Do you think the online lectures that are being conducted nowadays are effective?	Very effective and can be applied in the long-term lecture process.	31	2.68
	Effective and can be an option for organizing lectures in emergencies.	333	28.76
	Quite effective and quite helpful to students in achieving learning targets.	427	36.87
	Not effective and it is advised to stop.	367	31.69

Based on Table 4, some students (36.87%) said that online learning was quite effective and quite helpful for them in meeting their learning goals while others (31.69%) said that the process was ineffective and recommended that it be stopped. In addition, 28.76% of students said that the online learning process was effective when used in emergencies and a small percentage (2.68%) said it was very effective and recommended continuing it. Based on previous research, students do not enjoy their learning experiences when they are online.

When comparing the advantages of the online learning process to offline learning, it is more flexible (69.52%). The results of the learning process are more interesting (1.64%) and understanding of the material is better than in the offline learning process (0.60%) (see Table 5).

Table 5. The pros of online learning (n=1158).

Question	Answer choices	f	%
In your opinion, what are the advantages of online lectures?	It makes time more flexible.	106	9.15
	It saves operational costs.	93	8.03
	We can do it anywhere and anytime.	805	69.52
	It is more interesting than offline lectures.	19	1.64
	Understanding the material better than lectures with offline methods.	7	0.60
	Can be done anywhere and anytime.	128	11.05

Regarding the weaknesses of implementing the online learning process, there are three dominant weaknesses. First, it is difficult for students to understand the material. Second, the students did not get lecture feedback; third, interaction is not visible (see Table 6).

Table 7 data explains that most (53.28%) families support online learning activities. In addition, 21.76% of families did not provide support in the online learning process, 22.80% did not understand the online learning process and a small portion of 2.16% of families did not provide broad opportunities for students in the online learning process. Table 8 shows the classification of parents in giving advice or reminding students to make the most of online learning time in the categories always (28.24%), often (26.17%), sometimes (25.22%), never (10.28%) and rarely (10.10%).

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Table 6. The cons of online lectures (n=1158).

Question	Answer choices	f	%
In your opinion, what are the weaknesses of online lectures?	Time-consuming.	40	3.45
	Not cost-effective.	64	5.53
	Difficult to understand the material.	285	24.61
	Lack of control from the lecturer.	91	7.86
	Students have less motivation to learn.	91	7.86
	Lack of lecture feedback.	221	19.08
	Too many responses are not related to the lecture material.	47	4.06
	Unfocusing the material discussion.	107	9.24
	It's hard to get concrete examples.	43	3.71
	Used to be independent learning.	26	2.25
	Other (Invisible interaction, difficulty understanding calculated material, lack of lecturer control, too many application groups)	143	12.35

Table 7. Family support for online learning (n=1158).

Question	Answer choices	f	%
How is the support from the family for implementing online lectures at this time?	Provide broad opportunities to learn and participate in facilitating the online lecture process.	617	53.28
	Not giving ample opportunities to learn.	252	21.76
	Does not provide opportunities for online learning.	25	2.16
	Do not understand the online lecture process.	264	22.80

Table 8. Parents' attention to student online lectures (n=1158).

Question	Answer choices	f	%
Do your parents give advice or reminders to make the most of their online learning time?	Always	327	28.24
	Often	303	26.17
	Sometimes	292	25.22
	Seldom	117	10.10
	Never	119	10.28

Table 9. Popular media used during learning online (n=1158).

Question	Answer choices	f	%
What media do you often use to attend online lectures?	Smartphone	957	82.64
	Tablet	2	0.17
	Laptop or notebook	138	11.92
	Computer	5	0.43
	Other mobile devices	56	4.84

Table 10. Popular apps used in online learning (n=1158).

Question	Answer choices	f	%
What applications or social networks are most often used in online lectures?	WhatsApp	820	70.81
	Google classroom	255	22.02
	Zoom	32	2.76
	Edmodo	6	0.52
	Email	40	3.45
	Facebook	0	0.00
	Instagram	0	0.00
	YouTube	5	0.43

The media that are more dominantly used by students in online learning (Table 9) are smartphones (82.64%), laptops (11.92%), tablets, computers and other mobile devices. The intensity of the application used in the online learning process. If sorted from the most used application to the least used, it can be sorted as follows: (a) WhatsApp (70.81%), (b) Google Classroom (22.02%), (c) e-mail (3.45%), Zoom (2.76%) and lastly YouTube and Edmodo (see Table 10).

Table 11. Obstacles experienced by students in learning online (n=1158).

Question	Answer choices	f	%
What are the obstacles that you often encounter when taking online lectures?	There are no obstacles.	25	2.16
	Limited time.	85	7.34
	Lack of interaction between lecturers and students.	339	29.27
	Internet network.	372	32.12
	Large internet quota.	240	20.73
	Other (Limited Wi-Fi facilities, time, too many assignments, less interaction between lecturers and students).	97	8.38

The result shows that three significant barriers prevented students from succeeding in online learning: a poor internet connection (32.12), a lack of interaction between lecturers and students (29.27%) and high internet quota

requirements (20.73%). There were also a few other barriers related to time limitations and other circumstances (see Table 11).

Table 12. Effectiveness of online learning in preventing the spread of COVID-19 (n=1158).

Question	Answer choices	f	%
In your opinion, do lectures that are held online help the government prevent the spread of the COVID-19 virus?	Yes	963	83.16
	No	39	3.37
	Doubt	156	13.47

Table 13. The desire for the learning process according to students during the pandemic period (n=1158).

Question	Answer choices	f	%
I prefer to study offline in class rather than online although we are currently in the COVID-19 pandemic situation.	Strongly agree	412	35.58
	Less agree	431	37.22
	Disagree	181	15.63
	Strongly disagree	134	11.57

83.16% of respondents said that the online learning model could help the government reduce the spread of the COVID-19 virus (see Table 12). Table 13 explains that 37.22% of respondents said that they preferred face-to-face learning to online learning during a pandemic while other respondents chose to study online during a pandemic.

5. Discussion

The rapid development of technology and the expansion of the internet have made online learning a topic of discussion Discussion of online learning is increasing with the emergence of COVID-19 which demands maintaining distance in various activities including the educational process that must be carried out online (Zhou, Wu, Zhou, & Li, 2020).

In this study, students stated that the online learning process was very important (38.95% of respondents), important (37.22% of respondents) quite important (20.21% of respondents) and unimportant (3.63% of respondents). During a pandemic, it can help the government prevent the spread of COVID-19. Most students (64.42%) chose to study online during the pandemic.

The COVID-19 pandemic changed all activities that interact directly and turned to virtual activities. Since COVID-19, teachers and students have carried out the learning process online. Learning activities are carried out by communicating virtually in their respective places (Basilaia & Kvavadze, 2020; Park & Kim, 2021). For COVID-19 requirements, digital transformation has been developing for a long time (Leszczyński et al., 2018). Online learning is new for some users due to delays in following technological developments especially in the education system. Compared to universities that have implemented distance education such as Universitas Terbuka in Indonesia which is dominantly implementing a distance learning process (online), COVID-19 has not significantly impacted their learning process.

Regarding the practicality of online learning, 54.66% of students stated that it was quite practical. However, it was required to improve the systematic implementation, 25.65% of students stated that the online learning process was impractical and not recommended for the next lecture process and 15.63% of students stated that learning should be online which indicates that online learning is needed but the learning system needs to be improved so that it is practical to use. In terms of effectiveness, 31.69% of students said the learning process was ineffective and should be terminated, 36.87% said it was quite effective in accomplishing learning goals and 28.76% of students said it was carried out effectively in emergencies.

The condition of COVID-19 should not reduce the quality of learning if the government has prepared itself for the possibilities that will occur especially regarding the education system. Online learning is not a novel concept. Before COVID-19 appeared, online learning had developed worldwide along with technological developments and the presence of the internet (Abad-Segura, González-Zamar, Infante-Moro, & Ruipérez García, 2020; Kumar, Kumar, Palvia, & Verma, 2017). In terms of infrastructure, the education industry has prepared and facilitated the feasibility of online learning from a technological, economic and operational point of view (Palvia et al., 2018). Now, how can we use these facilities effectively and efficiently? Thus, higher education institutions need to prepare professional potential to face and provide solutions to the complex challenges of education (Bond, Marín, Dolch, Bedenlier, & Zawacki-Richter, 2018; Kaur & Kumar, 2022).

Regarding the benefits of online learning, 69.52% of respondents said that compared to offline learning, the online learning process allows for flexible lectures and can be completed wherever students are which are related to students' still-poor knowledge of the subject. Students are most affected by a number of weaknesses, including those that make it difficult for them to comprehend the material, the lecturer's lack of control and feedback, the lack of interaction, the difficulty in understanding material calculations and the excessive number of application groups. Nhan, Lan, Hien, Phuong, and Phi (2022) explain that the quality of online learning can increase, if it is carried out effectively.

There are many factors that teachers cannot consider when conducting online learning such as student attitudes, behavior and positions during the learning process. Creating a conducive virtual learning environment requires teachers to possess specialized skills. Sometimes, students do not take the learning process seriously and do not train or get ready for a schedule. The presence of numerous students during virtual class meetings in crowded locations as they engage in other activities demonstrates the students' lack of commitment to preparing themselves for the learning program. Therefore, student commitment is needed during virtual class meetings. Research by Lai, Au, and Low (2021) recommends universities provide counseling services, adaptation assistance and study techniques to optimize the quality of online learning.

The disadvantage of online learning activities needs to be solved with various learning methods developed by researchers to create good educational continuity during the COVID-19 pandemic (Biju, More, Armathlingam, Veluri, & Ismail, 2022). The six stages of learning with a feedback focus are part of the newly established learning method (Cai & Wang, 2020). Sathish, Sornaganesh, Sudha, and Chellama (2020) found that interactive learning

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methods are not only effective in offline learning but are also effectively used in online learning processes. Then the gamification learning method can reduce stress and increase concentration on online learning activities. This learning method provides a new learning experience (Fontana, 2020; Sailer & Homner, 2020; Saleem, Noori, & Ozdamli, 2022).

The research data found three dominant obstacles for students in the online learning process: an inadequate internet network, a lack of interaction between lecturers and students and the need for large internet quotas. Of course, the government must prepare a standardized distance education system, prepare professional human resources to face the challenges of developing educational patterns and facilitate educational institutions with adequate facilities and infrastructure to implement the designed education system.

The COVID-19 pandemic has created a sense of confusion and fear that will stop in the 2020 school year or may stop for a longer time. This fear will not occur if the government focuses on innovation and implements alternative education strategies during the COVID-19 pandemic (Pokhrel & Chhetri, 2021) and educators are enjoined to innovate.

In terms of family social support, 53.28% of students receive prevalent family support to facilitate their online learning activities, 21.76% of student families do not do so, 22.80% of families do not comprehend the nature of online learning and only 2.16% of families do not offer extensive opportunities for online student learning. In terms of the attention of parents in giving advice or reminding students to make the most of online learning time the categories are always (28.24%), often (26.17%), sometimes (25.22%), never (10.28%) and rarely (10.10%).

Family social support is needed to support student motivation to participate in the online learning process. Online learning can lead to negative psychological disturbances such as confusion, laziness, anxiety, etc. If this condition continues to be left unchecked, it will result in stress and depression. Unstable psychological conditions can affect learning outcomes because students feel confused and unable to focus during the learning process (Hasanah et al., 2020).

Online learning can increase stress due to transitions or changes in learning methods that change drastically (Moawad, 2020). Online learning also causes health problems and increases stress and anxiety due to prolonged exposure to bright smartphone screens (Toda, Ezoe, & Takeshita, 2014) or computers (Mheidly, Fares, & Fares, 2020). Olasile and Emrah (2020) explain that race, economy and resources influence academic performance in online learning and most educators' unpreparedness to carry out virtual learning. Therefore, family social support is needed to minimize the psychological conditions.

6. Conclusion

The process of online learning or blended learning is very important to implement or include in learning programs. Online learning is very effective when used in certain conditions that make it impossible to carry out face-to-face learning. Online learning has the advantage of being flexible in implementation but it also has disadvantages such as difficulties in conditioning students' focus and seriousness in online learning because there are many variables that cannot be controlled. To achieve effective and efficient online learning, the support of educational institutions is needed to facilitate the online learning process. This online learning exploratory data is used as the basis for making planning developing counseling guidance service programs that can have a positive impact and solve problems or obstacles experienced by students in online learning.

7. Implications

Online learning in this research has implications for assessing students' needs developing tutoring programs in particular and compiling comprehensive guidance and counseling programs in tertiary institutions. Therefore, the findings of this study are beneficial for lecturers and counselors in tertiary institutions in assessing student needs and overcoming student problems in online learning. Lecturers and counselors can better understand students' readiness for online learning and parents' socio-emotional support for their children. In order to support student success in tertiary institutions, the comprehensive guidance and counseling consultation program emphasizes assistance services that are planned and designed systematically based on student needs. This solution helps students develop as learners by obtaining the best services possible through guidance and counseling services in tertiary institutions.

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