



A survey study on student-related factors affecting successful online teaching in a higher education institution in Indonesia

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Abstract

This study was intended to explore online lecturers' perception of student-related affecting the successful implementation of online teaching at Musamus University. A research question probed in this study is "To what extent do online lecturers perceive student-related affecting successful implementation of online teaching at Musamus University? To answer the question, the study utilized a survey questionnaire to get data from surveyed online lecturers. Data were descriptively analyzed to provide insights into lecturers' perceptions of student-related affecting the successful implementation of online teaching at Musamus University. The main results showed the following: (a) access to appropriate technology tools has impacted significantly on online students and those students who lack access to an appropriate technology tool were not been able to join the online classes; (b) many students were still unfamiliar in using technology devices and that this unfamiliarity has caused some students frustrated and expressed difficulties to study in online classes; and (c) many students were difficult to stay up with assignments in the online situation and that these difficulties have caused many students dropping online classes and made personal excuses for not completing the assignments.

Keywords: Online Teaching; Online Lecturer; Perceptions; Student-Related Factors; Successful Implementation

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1. Introduction

The Covid-19 pandemic has a crucial impact on students, teachers, and educational institutions (Mailizar et al., 2020; Toquero, 2020; Crawford et al., 2020) and has generated a great change in the teaching and learning process in all levels of education" (Coman et al., 2020). The Indonesian Minister of Education and Culture has published a Circular Letter No. 3 the year 2020 to block the rapid transmission of the Covid-19 in educational institutions and to make various learning adjustments for teachers and students. Mandated by this Circular Letter No. 3 of 2020, many colleges and universities have decided to discontinue face-to-face classes and move to online classes to eliminate negative effects on students' learning opportunities (Dhawan, 2020; Habeahan et al., in print; Werang and Leba, 2021) and to keep lecturers and students protected from the rapidly multiplying of the Covid-19 (Adnan and Anwar, 2020; Tuscano, 2020).

Recent advancements in mobile computer technology have accelerated the development of online teaching platforms, and the convenience of this new way of teaching has established a new trend that is well accepted by students (Wang et al., 2022). Online teaching has its roots in the tradition of online education (U.S. Department of Education, 2010) that can be traced to over 100 years ago (Birnbaum, 2001; Hanson et al., 1997; Lowenthal and Moore, 2020; Mehrotra et al., 2001; Meyer, 2002) to the correspondence course delivered in Great Britain where the lecturers sent lessons and received students' fulfilled tasks by mail (Tom, 2017). Oblinger and Hawkins (2005) defined online teaching as a model of teaching in which all the interactions between instructors and students are virtual using personal technology devices and the internet. In a similar vein, the U.S. Department of Education (2010) defined online teaching as a model of teaching that takes place entirely over the internet. Meanwhile, Appana (2008) described online teaching as a formal learning activity that relies upon the internet and occurs when lecturers and students are separated by geographical distance. In comparison, other researchers (Allen and Seaman, 2011; Kentnor, 2015; Shelton and Saltsman, 2005) viewed online teaching as a form of teaching that relies upon computers and the internet as media to deliver course content because the instructors and students are geographically separated.

Successful implementation of online teaching has been a crucial issue during the Covid-19 outbreak, nationally and locally. Despite bearing the stigma of being lower quality than face-to-face classes (Hodges et al., 2020), online classes have been the fastest-growing type of distance education, and they have been valued at both traditional and modern colleges and universities (Appana, 2008). Srichanyachon (2014) and Gautam (2020) detailed the following five benefits of online teaching: (a) efficiency: online lecture has a variety of tools that the lecturers can use efficiently in delivering lectures materials to the students; (b) accessibility of time and place: online lectures allow students to attend classes from any place of their choice; (c) affordability: online lectures can reduce financial costs such as the cost of transportations and student meals; (d) improving student attendance: as the online lectures can be taken from home or place of choice, students have fewer chances to miss out the lessons; and (e) suits a variety of learning styles: online lectures offer students a different learning journey and a different learning style. In the same vein, Sadeghi (2019) outlined five advantages of online learning as the following: (a) in online classes, students are able to study from anywhere they have access to a computer and internet connection; (b) in online classes, students are able to save a significant amount of money; (c) in online classes students do not waste a lot of time and energy to commute in crowded local transportation, (d) in online classes students are given the flexibility to choose their course of learning, and (e) in online classes students are able to study without breaking their existing job.

Online teaching is not free from criticism. Gallick (1998) asserted that online classes might isolate students from peers and instructors and reduce the quality of education. Prior to Gallick's (1998) research findings, Brandt (1996) pointed out several barriers to online teaching as the following: (a) the changing nature of technology, (b) the complexity of network systems, (c) the lack of stability in an online teaching situation, and (d) the limited understanding of how much students and instructors need to know to participate in using technology devices and internet successfully. Edhec Business School (2021) outlined several barriers to online teaching as the following. First, online teaching is isolated. Online teaching does not offer the same level of connection and collaboration as traditional classroom teaching. In a classroom setting, students can communicate more spontaneously with their teachers, whereas communication is usually not a real-time process in online teaching.

The second issue is that online teaching entails a more significant amount of work. Online teachers are unable to oversee their students efficiently. Instead, they give students extra jobs and assignments. The third issue is that students may find it challenging to obtain comprehensive materials and support. When online teaching is remarkably static, all of the teaching materials are posted to a single server for free access by students, with no interaction with real people. This can be an issue for students who require life explanation, technical assistance, or real-time adjustments. The fourth issue is that online teaching necessitates a great deal of self-discipline. When students are in a classroom, they are expected to observe rules and regulations that establish discipline. Students can quickly lose attention in online teaching and do not commit the time required to complete assignments. In a similar vein, De Oliviera et al. (2018) discovered the following barriers to online teaching. The first is that excessive flexibility in online classes is a disadvantage for students who lack the discipline to complete the required activities without the presence of a teacher to guide and supervise them regularly. The second issue is that students in online classes do not have the opportunity to ask questions as they arise. The third issue is that students in online classes are unable to participate more actively in lesson preparations by sharing their experiences, questions, and considerations. The fourth issue is that teachers in online classes do not receive immediate feedback, so it takes them longer to determine whether or not their students are learning effectively.

While it offers obvious benefits for lecturers and students, online teaching remains challenging for many lecturers to adjust to online teaching and ensure that all the students, especially the disadvantaged ones, will stay engaged and take part in online classes. In Indonesia, Habeahan et al. (2022) asserted that many colleges and universities, especially those located in disadvantaged areas, were still facing major problems in implementing online teaching. Many students do not have access to both a personal technology device and the internet. Srichanyachon (2014) detailed the following two challenges for students to participate in online teaching actively: (a) issues related to the online system such as connection errors, systems difficulties, interaction attractiveness, and appropriateness; and (b) individual issues such as access to a personal computer and a lack of internet capabilities.

Dhanarajan (2001) reported that there had been failures in developing countries to expand education opportunities for all students due to a lack of investment in educational institutions. Dhanarajan (2001) further argued that if online lecturers are only teaching and teaching, this is only part of their task. Burns (2011) outlined a need for online lecturers to model high-quality teaching skills for student motivation and success. In their study during the Covid-19 pandemic, Gonzáles et al. (2020) reported that students' success in appreciating new learning practices has been positively affected by online learning due to that they are more

adapted to online games, social media, and internet usage habits, and that they use technical language as a native (Prensky, 2001). From this point of view, online lecturers' knowledge and skills in using technology devices and the internet should be high. Saavedra and Opfer (2012) viewed using technology to support learning as one of the 21st-century teaching skills that should be mastered by online lecturers. In line with the decision to discontinue face-to-face classes and move to online classes during the Covid-19 outbreak, the online lecturers who can use technology devices and the internet would have the more opportunity to teach analytical skills in a setting familiar to students than that of those who are not (Hilli, 2020; Lambert and Cuper, 2008). Hilli (2020) further argued that lecturers who face many difficulties in running online teaching seem less willing to do online teaching.

Though several current studies (Chen and Huang, 2017; Elumalai et al., 2020; Kira and Saade, 2006; Rapanta, 2020; Sangeeta and Tandon, 2020; Sagheb-Tehrani, 2009) have investigated the factors influencing the use and the successful implementation of online teaching and of online learning alike, we are still heartened to re-examine the topic due to that of none of the studies, to the best of our understanding, has empirically investigated student-related affecting the successful implementation of online teaching within an Indonesian higher education institution situated in a disadvantaged area. Thus, this study attempted to fill up the existing gap by examining the online lecturers' perceptions of student-related affecting the successful implementation of online teaching at Musamus University, Indonesia. In this study, we specifically probed the following research question: "To what extent the online lecturers perceive student-related affecting the successful implementation of online teaching at Musamus University, Indonesia?" A quantitative approach using a survey questionnaire was utilized to get data from the surveyed online lecturers to answer this research question.

2. Method

A quantitative approach using a survey questionnaire was employed as it was pursued to describe online lecturers' perceptions of student-related affecting the successful implementation of online teaching offered at Musamus University, Indonesia. A quantitative research approach can be defined as obtaining data in numerical form (Aliaga and Gunderson, 2002). These data are usually subjected to statistical treatment to confirm or exclude alternative research hypotheses (Leedy and Omrod, 2001; Williams, 2007). Creswell (2003) and Williams (2007) remarked that data in quantitative research are usually collected using experiments or surveys on prearranged instruments that produce numerical data. Based on this understanding, the study utilized a survey as the earlier studies (Asaloei et al., 2020; Wea et al., 2020; Werang et al., 2021; Wula et al., 2020; Wullur and Werang, 2020; Yunarti et al., 2020a; Yunarti et al., 2020b) shown several benefits of using the survey as the following: (a) data can be obtained within a short time, (b) relative low-spending, and (c) specified results.

The study employed a convenience sampling technique to draw participants from amongst lecturers at Musamus University, Indonesia. Convenience sampling is a type of non-random sampling where participants meet specific, realistic standards such as easy approachability, geographical closeness, data obtainability at a given time, or a personal willingness to participate in the study (Etikan et al., 2016; Schrum and Hong, 2002). In this study, the helpful participants are online lecturers in the researchers' institution. A validated construct of 21 items developed by Schrum and Hong (2002) was modified into eight positive items that were distributed over three dimensions as the following: (a) technology tools which comprised of 2 items, (b) technology

experience, which comprised of 3 items, and (c) learning habits which comprised of 3 items. This validated questionnaire was distributed to 125 online lecturers at Musamus University to have quantifiable data at hand. Of 125 online lecturers targeted, only 88 online lecturers consented to participate in this study. Online lecturers who did not want to participate in the study were stated not to respond by merely returning the survey unanswered. Detailed information of respondents is presented in Table 1 below.

Table 1. Detail Information of Respondents

Detail	Category	Frequency	%
Gender	Female	51	57.95
	Male	37	42.05
Age	26-30	40	45.45
	31-35	28	31.82
	36-40	9	10.23
	41-45	5	5.68
	46-50	4	4.55
	51 Above	2	2.27
Teaching Experience	0-5	48	54.54
	6-10	22	25
	11-15	15	17.05
	16-20	3	3.41
	21 Above	0	0

To keep the online lecturers' survey brief and easy to understand, survey items relating to online lecturers' perceptions of student-related affecting the successful implementation of online teaching were written in the Indonesian language. Samples of the English version of survey items as the following: "Some students have not been able to join an online class for lack of access to a personal tool," "Many students are unfamiliar with using technology devices and the internet," "Some students have become frustrated by the technological challenges to work online," "Students make personal excuses for not completing assignments," and "Students make personal reasons for dropping online classes." To test instruments' reliability, this study utilized the Cronbach's Alpha coefficient. The Cronbach's Alpha coefficient of this study is displayed in the following Table (Table 2).

Table 2. Reliability Test of the Instruments

Case Processing Summary			Reliability Statistics	
			Cronbach's	
			Alpha	N of Items
Cases	Valid	30	100.0	
	Excluded ^a	0	.0	
	Total	30	100.0	8

a. Listwise deletion based on all variables in the procedure.

Obtained data were analyzed statistically by merely calculating frequencies and percentages of online lecturers' responses by utilizing the SPSS Software Program version 21.

3. Results and discussion

Online education has become a prevalent feature of learning environments at all levels of education (Oliver, 1999). With colleges and universities being moderately closed and students being forced to isolate themselves at home during the Covid-19 outbreak, most lecturers and students are in need of technology devices to continue the teaching and learning process online. As aforementioned, this study focuses on revealing student-related affecting the successful implementation of online teaching offered at Musamus University, Indonesia. Online lecturers' perceptions of student-related affecting the successful implementation of online teaching were categorized under the three dimensions of the validated survey questionnaire as the following.

3.1. Perceptions related to technology devices and internet

The availability of personal technology devices, notebooks, tablets, smartphones, and internet access provides the best learning environment for students (Beatty, 2017). Despite the fact that it allows the student to learn in a more timely and efficient manner (Keep and Feltham, 2015), many students are from low-income households, however, are left behind due to the lack of access to technology devices and the internet. The following Table 3 displayed the online lecturers' perceptions of student access to technology devices and the internet during the online classes.

Data in Table 4 exposed that the majority of online lecturers at Musamus University agreed that access to appropriate technology tools had impacted significantly on their online students (88.63 %) and those students who lack access to an appropriate technology tool have not been able to join the online classes (84.09 %). Only one online lecturer (1.14 %) disagreed, and nine online lecturers (10.23 %) were neutral that access to appropriate technology tools has significantly impacted their online students. A similar response was also found when the online lecturers were asked to rate their perceptions on the item of the questionnaire: "Some students are not able to join the online classes due to the lack of access to a personal tool and internet". Of 88 respondents, only 12 online lecturers (13.64 %) disagreed, and two online lecturers (2.27%) were neutral that lack of access to a personal tool and the internet has caused some students to miss online classes.

Table 3. Students Access to Technology Devices

Aspect	Items of Questionnaire	Disagree		Neutral		Agree	
		Freq	%	Freq	%	Freq	%
Technology Tools and Internet	Access to appropriate technology tools has significantly impacted some of my online students	1	1.14	9	10.23	78	88.63
	Some students have not been able to join an online class for lack of access to a personal tool and internet	12	13.64	2	2.27	74	84.09

Table 4. Students' Technology Experience

Aspect	Items of Questionnaire	Disagree		Neutral		Agree	
		Freq	%	Freq	%	Freq	%
Technology Experience	Many students are unfamiliar in using technology devices and internet	4	4.55	7	7.95	77	87.50
	Some students have become frustrated by the technological challenges to work online	9	10.23	9	10.23	70	79.54
	Students have expressed difficulties with studying for the online classes	14	15.91	2	2.27	72	81.82

Modern technology has become increasingly crucial for the online learning and teaching process during the Covid-19 outbreak, and online students need to develop new skills to succeed (Lexia Company, 2021). The study revealed that not all students at Musamus University have equal access to technology devices and the internet. Socio-economic limitations facing the most disadvantaged students have become major barriers to implementing online teaching successfully. This finding is in line with ((Zelenika and Pearce, 2011; Ash-Brown, 2021; Nuffield Foundation, 2020) results that the most disadvantaged students are more likely to struggle with and less likely to be engaged in online classes due to family economic instability.

3.2. Perceptions Related to Technology Experience

In the present world, educational technology's role is crucial in the online teaching and learning process. The question is whether online students were ready to use technology and how they used it during the online

teaching offered at Musamus University? The following Table 4 displayed the online lecturers' perceptions of students' technology experience in online classes during the Covid-19 outbreak.

Data in Table 4 revealed that the majority of online lecturers agreed that many students are unfamiliar in using technology devices and the internet (87.50 %). The majority of online lecturers seemed to be aware that students' unfamiliarity in using technology devices and the internet have caused some students to be frustrated by the technology challenges (79.54 %) and expressed difficulties studying in online classes (81.82 %). Only four online lecturers (4.55 %) disagreed. Seven online lecturers (7.95 %) were neutral that many online students were unfamiliar with using technology devices and the internet. In comparison, nine online lecturers (10.23%) disagreed, and 9 (10.23 %) online lecturers were neutral that the students' unfamiliarity of using technology devices and the internet has caused some of them to be frustrated. A similar response was found when the online lecturers were asked to rate their perceptions on the item of the questionnaire: "Students have expressed difficulties with studying for the online classes." Of 88 respondents, only 14 online lecturers (15.91 %) disagreed, and two online lecturers (2.27%) were neutral that students found difficulties with studying during the online classes. The study revealed that so many students have a steeper learning curve in achieving digital literacy (Lexia Company, 2021). Regardless of the arguments supporting the use of online teaching during the Covid-19 outbreak, online teaching remains unfamiliar for many students, especially the most disadvantaged ones.

Since the online lecturers have a direct and crucial role in affecting students' experience, the challenge for the online lecturers during the Covid-19 outbreak is how to craft the experience of diverse students and thus engage them in genuine learning experiences within virtual learning that is habitually unfamiliar for them (Bloomberg, n/d) and how to deal with the problems of achieving interpersonal communications effectively (Rutherford, 2021). For the most disadvantaged students, using technology in the classroom can create an additional hurdle to learning if they are not already familiar with using technology at home. By helping the most disadvantaged students access the internet and technological devices, colleges and university leaders can help bridge the digital literacy gap among students (Lexia Company, 2021).

For online lecturers to successfully teach online, colleges and universities must have a keen infrastructure in place, where students are capacitated and skilled in the use of online tools. Besides, capacity building for online lecturers in using e-learning tools is also critical for transforming their instructional and assessment methods in order to meet students' needs and advance their didactic prospects (Evans and Robertson 2020).

3.3. Perceptions related to learning habits

Learning habits are the core of academic success (Tus et al., 2020) as it serves as the vehicle of learning (Yazdani and Godbole, 2014). Attending classes regularly, taking notes during the teaching and learning process, preparing and following an established timetable, staying up with assignments, and completing given assignments on time are some of the good learning habits that may lead to a better learning achievement (Siahi and Maiyo, 2015) whereas truancy, not taking notes, learning while listening music, and not completing given assignments are some of the bad learning habits that may lead to a worse learning achievement (Ebele and Olofu, 2017). The following Table 5 displays the online lecturers' perceptions of students' learning habits during the online classes offered at Musamus University.

Table 5. Students' Learning Habits

Aspect	Items of Questionnaire	Disagree		Neutral		Agree	
		Fre q.	%	Fre q.	%	Fre q.	%
Learning Habits	Many students have difficulty staying up with assignments in the online situation	6	6.82	4	4.55	78	88.63
	Students make personal excuses for not completing assignments	24	27.27	0	0	64	72.72
	Students make personal reasons for dropping my online classes	23	26.13	4	4.55	61	69.32

Data in Table 5 revealed that the majority of online lecturers agreed that many students were difficult to stay up with assignments in the online situation (87.50 %). The online lecturers seem to be aware that students' difficulties to stay up with assignments in the online situation have caused many students to make personal excuses for not completing the assignments (72.72 %), and many students were dropping online classes (69.32 %). Data in Table 5 also revealed that, of 88 respondents, only six online lecturers (6.82 %) disagreed, and four online lecturers (4.55 %) were neutral to the fact that many online students were difficult to stay up with assignments in the online situation, while 24 online lecturers (27.27 %) disagreed to the fact that many online students make personal excuses for not completing assignments. A similar response was found when the online lecturers were asked to rate their perceptions on the item of the questionnaire: "Students make personal reasons for dropping online classes". Of 88 respondents, there are 23 online lecturers (26.13 %) disagreed, and four online lecturers (4.55%) were neutral to the fact that 'students make personal reasons for dropping online classes.

The success or failure of a student academically depends on his/her learning habits. It infers that having good learning habits creates a more effective learning environment. The more students develop and practice good learning habits, the better learning achievement they get. Conversely, the lesser students develop and practice good learning habits, the worse learning achievement they get. This study is supported by Adeninyi's (2011) research finding that good learning habits lead students to learn independently and crave for a better educative profession and vice versa.

Despite the apparent failure of the implementation of online teaching and learning at Musamus University due to the aforementioned factors, this study has clearly demonstrated to online lecturers the importance of addressing student problems prior to implementing online teaching and learning. Since this study does not provide specific information on how students perceive online teaching and learning, it is proposed that survey questionnaire be administered to students enrolled in online classes to allow them to access and express their opinions on the quality of the process of online teaching and learning.

4. Conclusions and recommendations

This study explored the online lecturers' perceptions of student-related affecting the successful implementation of online teaching offered at Musamus University, Indonesia. The following are the conclusions reached as the result of this study: (a) the majority of online lecturers perceived that access to appropriate technology tools had impacted significantly on their online students, and those students who lack access to an appropriate technology tool have not been able to join the online classes; (b) the majority of online lecturers agreed that many students are still unfamiliar in using technology devices and that this unfamiliarity has caused some students frustrated and expressed difficulties to study in online classes, and (c) the majority of online lecturers agreed that many students were difficult to stay up with assignments in an online situation and that these difficulties have caused many students were dropping online classes and made personal excuses for not completing the assignments.

The result may practically recommend the need for the online lecturers at Musamus University to take seriously into mind students' access to and capability of using a personal technology device and the internet before conducting online classes in order that students' rights to access equal and quality education would be necessarily tackled. The challenges for the online lecturers are the following: (a) how to help the most disadvantaged students access to the technology devices and internet, (b) how to bridge the digital literacy gap among the most disadvantaged students, (c) how to engage the most disadvantaged students in authentic learning experiences within virtual learning that is typically unfamiliar for them, and then (d) how to deal with the problems of achieving interpersonal communications effectively. As none of the empirical studies investigated the online lecturers' perceptions of student-related affecting the successful implementation of online teaching in higher education institutions, the finding of this study may academically fill-up the existing gap of knowledge by exploring the topic within an Indonesian higher education institution situated in a disadvantaged area.

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