Online Learning During a Pandemic:

A Web Based Survey from Student Perspective

Diah Ayu Puspandari*
Department of Health Policy and Management
Universitas Gadjah Mada
Yogyakarta, Indonesia
*diah.ayu.puspandari@ugm.ac.id

Rahmah Zulaiha
Center for Assessment and learning, Research and
Development and Books Agency, MOEC
Jakarta Pusat, Indonesia
rahmahzulaiha@gmail.com

Firdaus Hafidz
Department of Health Policy and Management
Universitas Gadjah Mada
Yogyakarta, Indonesia
hafidz.firdaus@ugm.ac.id

Abstract—In responding to Covid 19 crisis which affect people with different ways, University as an education institution is trying to cope with the distance learning by letting student to access education from home. Since these interruptions will not just be a short time issue, it is important to study the existing problem due to an online base implementation. This study has been made to evaluate the existing online learning from the student perspectives. Several aspects in the study used as instrument including student perception on learning management system, learning time, application used, boredom and challenges. Data collection was managed by an online survey Google Form based. The result described Zoom platform was effective for synchronous learning (93.5%), the existing LMS is effective 959.1%), student satisfaction (76%), 48% felt boredom, 23.4% student felt stress. This study indicating several variables were connected with an online learning effectivity that needs to be considered for improvement in a more comprehensive way.

Keywords—online learning effectivity, Covid 19, pandemic, university, student perspective

I. INTRODUCTION

Globally Corona Virus 2019 (Covid 19) has affected widely in many sectors including education. Since World Health Organization (WHO) has declared Covid 19 to be a Pandemic on 12th of March 2020, governments are implementing regulations that limit direct contact of people in public places to reduce and interrupt the transmission [1]. Due to minimize Covid 19 massive spreading, United Nations Educational, Scientific and Cultural Organization (UNESCO) reported that more than 100 countries have implemented localized school closures. The impact of this policy should be affected 862 millions of learners, they will experience education disruption [2].

Government of Indonesia has enacted regulation as a form of response to the pandemic namely Presidential Decree No. 11 Year 2020 on Stipulation of Public Health Emergencies for Corona Virus Disease 2019 (Covid-19) [3]. Guideline on learning has been made as a joint decree of four Ministries No. 01/KB/2020 that stated the mandatory implementation of online learning during the pandemic [4]. Changes should be made due to safety protocol, and university as an education institution has adapted the way of delivering the knowledge. Higher education age population amounted to 21.5 million will be facing the challenge of this transformation to an online learning [5].

Covid 19 still remain uncertain, and it can cause stressful condition whenever system and all elements involved are not well prepared [6]. The urge needs of university to cope with the changes is a must, since the new method of online learning has been adopted shortly on a trial basis. Education institution has put an effort to facilitate the need by providing Learning Management System (LMS) as an online platform. Besides lecturers, students also have to adapt to the new way of learning. Learning objectives will be easily achieved if the lessons could be delivered effectively. A quick measurement is need to be done, and it becomes important to see the online learning through the eyes of student [7]. The success of an online based learning is generally associated within the user's satisfaction; it is needed to evaluate student satisfaction for developing a better learning system [8]. Educational institution across the globe has forced into the digital world through online learning, in which teaching professionals and students are facing the similar challenges.

According to a study finding, there are factors associate with the success in blended learning including student's cognitive strategies, self-directed learning, learner control, and test anxiety factors [9]. Another previous study on

undergraduate dental student has presented evidence that some challenges were found during the online learning, and it was agreed the student could adapt for a better efficiency of learning [10].

Web video conferencing as a distance learning method perceived has a positive impact on student satisfaction and teaching quality relied on teaching, cognitive, and social presence rather than technology. However, technology remains an important platform that supports teachers' educational activities [11]. Thus apart of technology, we need to understand what factors could encourage the success of distance learning.

An Angus Reid Poll in April 2020 reported that 30% of Canadians struggled with boredom. Other research places boredom as one of the biggest emotional challenges during quarantine and self-isolation, and a significant challenge to following the rules of physical distancing [12]. There was a moderate to high level of stress among students at the start of the COVID-19 outbreak. This study found a significant correlation between a high level of stress and female university students. The integration of online counselling and stress management programs would help mitigate the stress of students during distance learning [13].

At one side this pandemic pose a great challenge for education sector, but at the other side it can accelerate transformation to education 4.0. The Master Program of Public Health, Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada has been implemented online learning since the first semester of the year 2020. The learning system is done remotely by utilizing information technology [14]. With the increase in use of online modalities during COVID-19, it is necessary to evaluate its effectivity. This study is aiming on exploring the satisfaction and challenges from the student perspective with regard the type of application used, their experience in using LMS, the time to spent per day, their feelings and satisfactions. The findings will help identify the required changes on priority basis to make it more practical and worthwhile.

II. METHODOLOGY

The key purpose of this study was to find out the general attitude of Master Program of Public Health students towards compulsory online learning courses amid Coronavirus (COVID-19) and its challenges from their perspective. The sample of the study included 154 higher education students with 109 female and 45 male participants. All the students participated in the survey were currently attending online courses at the first semester in 2020.

This study was carried out on October 2020 by using online survey tools or web-based survey for data collection within a month in duration. Google form has been chosen as it has advantages such as free access, survey answers and data are automatically collected in Google Spreadsheets [15]. Questionnaire was developed to explore the student satisfactions and feeling, including the type of application they used, their experience in using LMS, and the time to spent per day. The Google Form was disseminated through email and social media. Once the respondent data was completely filled, it was recorded by the system in Google Form spreadsheet and available in the format suitable for further analysis.

III. RESULTS

Of the total 154 Master Program student, 48 % were between the age range of 30 and less than 30, whereas 35 % were between the age range of 31-40, and 17 % were between the age range of more than 40. As shown in Table 1. mostly mentioned that the existing LMS was user friendly, even though 3.9 % stated that there were some obstacles found such as student need time to adjust with the new method, the platform was not simple, complicated with too much attributes.

Cisco WebEx is the application that has been set for each lecturer to facilitate the online learning. Student prefer to use Zoom instead of Cisco WebEx due to a more comfortable to operate. Mostly student reported that Zoom application was more compatible with their device and it was found less complicated to engage with the synchronous way of learning. For an asynchronous method of teaching, the result has shown 59.1 % of student perceived that the existing LMS was perform effectively and it has met with the student need. While 4.5 % student still found difficulties in accessing the LMS. When exploring on the student opinion on the problem they faced during online learning, we asked question to explore the duration of time that they spent per week. Mostly spent 5-7 hours per day, while some of them accessing from their office especially for those who are studying while working.

Table 1 displays a variation of result for the students feeling on studying from home. It indicates 54.5 % student felt enthusiasm, on the other hand 48.1 % student reported boredom and 23.4 % student felt stress. Further question on exploring what factors were involved, they mentioned factors such as too many assignments, being disrupted by the family matters. Overall the result showed 76 % of the student satisfy with the implementation of online learning. We still have 24 % student unsatisfied due to several reasons including problem with internet connection, having a physical problem due to a longer time accessing computer screen and sitting in a long period of time.

TABLE I. ONLINE LEARNING FROM STUDENT PERSPECTIVE

Student perspective		N (%)
Learning platform is user friendly	Agree	148 (96.1)
	Disagree	6 (3.9)
Application for synchronous that perceived user friendly	Zoom	144 (93.5)
	Google meet	4 (2.6)
	WhatsApp	3 (1.9)
	Cisco Webex	2 (1.5)
	Webinar	1 (0.6)
Effectivity of LMS for asynchronous learning	High	91 (59.1)
	Moderate	56 (36.4)
	Low	7 (4.5)
Learning time (hours per week)	Less than 5	77 (50)
	More than 5	77 (50)
Student feeling on studying from home	Enthusiastic	84 (54.5)
	Stress	36 (23.4)
	Boredome	74 (48.1)
Satisfaction with the online learning process	Satisfy	117 (76)
	Unsatisfy	37 (24)

IV. DISCUSSION

The sudden shift from traditional classrooms and face-to-face learning to online learning has resulted in a completely different learning experience for students. Apart from the satisfaction, the study pointed out that 24% students still remain had problem in pursuing online learning. Sudden change posed both educator and student in a condition that need to adapt swiftly. The pandemic has created large disruption of education system, on the other hand it stimulated many higher education institutions move forward with their innovation [16]. Since the innovation has implemented in a trial basis, these were led to many challenges arose.

Online learning solution was developed to response this challenge, the inevitable change in method will helps students to continue learning. LMS as a web-based technology developed to improve the learning process through its proper planning, application, and evaluation in educational institutions. LMS could assist student during the online learning. Using LMS in the learning process helps facilitate e-learning as it provides educational material without the constraint of time or place. While finding from previous study stated that students are not satisfied with the assistance of LMS as they consider it difficult to take online classes with poor internet connectivity. LMS itself could not solely as an enabler to an effective online learning. Technology acceptance of an individual to adopt the use of technology for facilitating task performance should be taking into consideration [17].

Since pandemic will last not just in a short term, student are now looking at over a year of learning from home. Understanding student perception in regard to online learning can facilitate better course design for the future [18]. Completely online learning pushed student to sit still and look at the computer screen in a longer time than before. The study mentioned several psychological and physical problem due to this issue. Feeling fatigue, stress, and boredom were stated by the student with regards to their experience of being enrolled to an online learning on regular based. These problems known as Zoom fatigue is defined as a state of weariness, fatigue, and boredom that a user can feel from attending multiple meetings, classes, or online events during the day. The symptoms of Zoom fatigue can be detrimental to a teaching environment, mainly if they occur frequently [19]. It is essentials for higher education institution to mitigate the potential problem in a wider perspective. Potential intrapersonal psychological and emotional consequences is part of a broader, overlooked issue on faculty mental health and wellness [20].

There is a need to train faculty on the use of online modalities and developing lesson plan with reduced cognitive load and increased interactivities [21]. Various type of application could be use full in assisting the learning process. The effective application that can be utilized in explaining the subject and as the virtual tool to replace face to face meeting is Zoom application, while to share and submit the assignment the students preferred Google classroom and WhatsApp [22].

Helping student to overcome challenges is need to be carried out during an online learning such as stimulate motivation to learn [23]. Few steps should be accounted in the wake of this pandemic, to develop proper curriculum that reflects the perceptible change in the content knowledge and learning experience of students as well as enable them to think critically [24]. While the pandemic could last in a longer period, the perspective of student will help educator to fit the learning process with the need effectively.

This study used web based survey for data collection, it may have limitation through the questionnaire design. Appropriateness of questionnaires will have a major impact on response and completion rates and on reliability of data [25]. Even though this method has a solution in conducting survey during pandemic.

V. CONCLUSION

During the COVID 19 pandemic, online learning seems to be the forthcoming trend. Recently it has been extending widespread including Indonesia. Due to the impact on changing the way of learning., it is important to design a proper online learning through the eyes of student. To find improvement solution, a web based survey was an alternative tool in conducting a successful survey to capture psychological and physical problem due to a longer time attachment.

ACKNOWLEDGMENT

REFERENCES

[1] R.M. Viner, S.J. Russell, H. Croker, J. Packer, J. Ward, C. Stansfield, O. Mytton, C. Bonell, and R. Booy, "School closure and management practices during coronavirus outbreaks including COVID-19: a rapid

systematic review," Lancet Child Adolesc. Heal., vol. 4, no. 5, pp. 397–404, 2020.

[2] U. UNESCO, "COVID-19 educational disruption and response," UNESCO, 2020.

[3] Perpres No. 11 Tahun 2020, tentang Stimulasi Keadaan Darurat Kesehatan Masyarakat untuk Penyakit Virus Corona 2019 (Covid-19). .

[4] "Keputusan bersama empat Kementerian No. 01 / KB / 2020 tentang Pedoman Pembelajaran selama Pandemi Covid 19."

[5] Badan Riset dan Inovasi Nasional, Kementerian Riset dan Teknologi, "No Title," 2020. ttps://international.ristekbrin.go.id/statistics/.

[6] World Health Organization, "Communicating and Managing Uncertainty in the COVID-19 Pandemic: A quick guide," 2020. https://www.who.int/docs/default-source/searo/whe/coronavirus19/managing-uncertainty-in-covid-19-a-quick-guide.pdf?sfvrsn=270e4ac8_4.

[7] M. Adnan and K. Anwar, "Online learning amid the COVID-19 pandemic: Students' perspectives," J. Pedagog. Sociol. Psychol., vol. 2, no. 1, pp. 2–8, 2020.

[8] S. Bauk, S. Šćepanović, and M. Kopp, "Estimating students' satisfaction with web based learning system in blended learning environment," Educ. Res. Int., vol. 2014, 2014.

[9] S. Keskin and H. Yurdugül, "Factors affecting students' preferences for online and blended learning: Motivational vs. cognitive," Eur. J. Open, Distance E-Learning, vol. 22, no. 2, pp. 72–86, 2020.

[10] L.R. Amir, I. Tanti, D.A. Maharani, Y.S. Wimardhani, V. Julia, B. Sulijaya, and R. Puspitawati, "Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia," BMC Med. Educ., vol. 20, no. 1, pp. 1–8, 2020.

[11] T.H. Fatani, "Student satisfaction with videoconferencing teaching quality during the COVID-19 pandemic," BMC Med. Educ., vol. 20, no. 1, pp. 1–8, 2020.

[12] J. Danckert and J. Eastwood, "Learning from Pandemic Boredom." https://www.psychologytoday.com/ca/blog/the-engaged-mind/202007/learning-pandemic-boredom.

[13] D.A. AlAteeq, S. Aljhani, and D. AlEesa, "Perceived stress among students in virtual classrooms during the COVID-19 outbreak in KSA," J. Taibah Univ. Med. Sci., vol. 15, no. 5, pp. 398–403, 2020.

[14] N. Adelayanti, "Revealing the Challenges of Online Learning During Covid-19 Pandemic." https://www.ugm.ac.id/en/news/19554-revealing-the-challenges-of-online-learning-during-covid-19-pandemic.

[15] N. Vasantha Raju and N.S. Harinarayana, "Online survey tools: A case study of Google Forms," 2016.

[16] World Health Organization Policy Brief, "Education during COVID-19 and Beyond," United Nations(Accessed 2020, https//www. un. org/development/desa/dspd/2020/04/socia l-impact-of-covid-19.), 2020.

[17] S.A. Raza, W. Qazi, K.A. Khan, and J. Salam, "Social Isolation and Acceptance of the Learning Management System (LMS) in the time of COVID-19 Pandemic: An Expansion of the UTAUT Model," J. Educ. Comput. Res., p. 0735633120960421, 2020.

[18] L. Rath, K. Olmstead, J. Zhang, and P. Beach, "University of West Georgia, Distance Education Center," Journal of Distance Learning Administration, 2019. .

[19] M. Carrió, E. Moyano, N. Pérez, G. Rodríguez, and R. Sánchez, "Edu bits."

[20] M. Cordaro, "Pouring from an Empty Cup: The Case for Compassion Fatigue in Higher Education," Build. Heal. Acad. Communities J., vol. 4, no. 2, pp. 17–28, 2020.

[21] K. Mukhtar, K. Javed, M. Arooj, and A. Sethi, "Advantages, Limitations and Recommendations for online learning during COVID-19 pandemic era," Pakistan J. Med. Sci., vol. 36, no. COVID19-S4, p. S27, 2020.

[22] A. Destianingsih and A. Satria, "Investigating Students' Needs for Effective English Online Learning During Covid-19 for Polbeng Students," ELT-Lectura, vol. 7, no. 2, pp. 147–153, 2020.

[23] OECD, "Policy Responses to Coronavirus (COVID-19), Strengthening online learning when schools are closed: The role of families and teachers in supporting students during the COVID-19 crisis." http://www.oecd.org/coronavirus/policy-responses/strengthening-online-learning-when-schools-are-closed-the-role-of-families-and-teachers-in-supporting-students-during-the-covid-19-crisis-c4ecba6c/.

[24] L. Mishra, T. Gupta, and A. Shree, "Online teaching-learning in higher education during lockdown period of COVID-19 pandemic," Int. J. Educ. Res. Open, vol. 1, p. 100012, 2020.

[25] M.M.H.J. Van Gelder, R.W. Bretveld, and N. Roeleveld, "Web-based questionnaires: the future in epidemiology?," Am. J. Epidemiol., vol. 172, no. 11, pp. 1292–1298, 2010.