Perception of Dental Students on Online Learning

Alifia Ummu Risya[1], Putu Hiroko Anindya[1], Muhammad Raidjffan Z.T[1], R. Devathara Ardhisatrya[1], Seno Fauzi Alyanugraha[1], Muhammad Zaydan[1], Nastiti Faradilla Ramadhani[2,3]

[1] Undergraduate Student, Faculty of Dental Medicine, Universitas Airlangga, Indonesia, [2]Graduate Student of Health Administration and Policy, Faculty of Public Health, Universitas Airlangga, Indonesia, [3]Staff of Dentomaxillofacial Radiology, Faculty of Dental Medicine, Universitas Airlangga, Indonesia

Abstract

Background: Online learning can overcome the shortage of teaching staff and has the potential to change the passive learning process into active learning which depends on the willingness of students through their views on the concept of online learning. **Purpose:** To know the perception of students of the Faculty of Dental Medicine, Universitas Airlangga, Surabaya, Indonesia on online learning. **Methods:** Perception was obtained using simple random sampling technique through distributing questionnaires in the form of google form containing 14 questions with a choice of answers; completely disagree, disagree, do not know, agree, and completely agree with the active students of the Faculty of Dental Medicine, Universitas Airlangga from the class of 2016, 2017, 2018 regarding the student's views on online learning. **Results:** it shows that almost all Dental Medicine students have a computer and access to the internet (75% completely agree, 25% agree) know how to open and open, modify and upload documents online (61% completely agree, 36.4% agree), and access internet with daily or weekly use (59% completely agree, 36.4% agree). **Conclusion:** Students' perceptions of the Faculty of Dental Medicine, Universitas Airlangga, Surabaya, Indonesia are ready to use online learning methods .

Keyword*: perception, dental student, concept, online learning*

Introduction

Traditional learning is tied to the willingness of lectures and students who require a lot of coordination and a place that can support the learning process. Whereas the online learning process can reduce costs, offer a variety of multimedia suitable for different learning styles, save time, allow students to study anywhere at any time, overcome the shortage of teaching staff, and have the potential to change the learning process from passive teacher-centered learning to student-centered active learning[1]. In assessing the performance of an online learning system in the use of online learning, which is characterized in terms of ease of access for students and teachers, student satisfaction and the availability of various online tools, student evaluation of online learning tools, values and evaluation of student attitudes is very important[2].

In order to minimize the temporal and spatial issues associated with conventional forms of education, online learning and training is gaining tremendous popularity worldwide[33,4]. The main factors behind the use of online learning are not only to expand access to education and training and to enhance the quality of learning, but also to reduce costs and increase the cost effectiveness of education[5]. Online platforms benefit from the ability to access materials at any time and anywhere, the ability to

Corresponding author:
Nastiti Faradilla Ramadhani,
Graduate Student of Health Administration and Policy, Faculty of Public Health, Universitas Airlangga and, Staff of Dentomaxillofacial Radiology Department, Faculty of Dental Medicine, Universitas Airlangga, Indonesia, address: Jl. Prof. Dr. Moestopo No. 47, phone numbers : (+6231) 5030255, 5020256, facsimile numbers : (+6231) 5020256, email: nastiti.faradilla@fkg.unair.ac.id

achieve greater mass at the same time, and the quality of content. With good outcomes, online learning and face-to-face learning have been successfully used in business and academia.

The ability to share views on the online learning process in general, as well as their individual courses, is something of importance to learners. To sustain a good learning program, it is vital to get continuous input from students. What stood out the most in their mind was the flexibility offered by the online environment. When it's convenient for them, they will work at home and at their own pace. They note that 'travel time and expenses are obsolete,' and students see that as a significant gain for online learning[6]. The comments of these students regularly appear in the evaluation of online courses across different subjects or courses.

Suggestions that could be provided to others by students and faculty[7] who are involved in this educational alternative usually concentrate on two key themes: technology issues concerns and learning process-related problems. Staying in communication with lectures is one way to tackle technology issues. For example, if the device is down or the connection has a problem, the teacher encounters the same condition and will work to fix it[1].

Students new to the online phase need to be highly motivated and able to build their own time to learn. A big impediment to successful online learning is procrastination. Stuff can pile up very quickly with flexible self-scheduling. The better plan is to provide access to courses every day for short periods of time instead of choosing broad but less frequent blocks of time[6].

One other suggestion is to keep a calendar on the board, which you can view every day, and clearly visible assignments or tests. Both faculty and students need to understand that their workload will not be less, just more flexible for online courses. In reality, many would find that more time is spent on their online courses than on traditional courses[8].

While there are several advantages of online learning such as increasing access to education and training, improving the quality of learning, reducing costs and increasing the cost-effectiveness of education, keeping students on such platforms is a major challenge with high levels of education. It is also noted that, unlike conventional classroom education, more self-discipline is expected by students in online education. It is difficult to keep users registered and active because the instructor's personal contact is non-existent or restricted[5].

Method

Research is an activity to find, write, formulate, and analyze scientific works. This research was designed using descriptive research methods[9]. Descriptive research method is a research method in the form of data collection to test the hypotheses made with the current situation. This research was a descriptive research because this study obtained the data from the mindset of students of the Faculty of Dental Universitas Airlangga by giving digital questionnaires, this research questionnaire used Google form.

Google form was used to fill out questionnaire statements. 14 questionnaire statements that function to measure knowledge and satisfaction of students in Faculty of Dental Medicine, Universitas Airlangga by selecting pre-clinic student samples in 3rd term (2018), 5th term (2017) and 7th term (2016). To find out students' knowledge skills about computers (questionnaires 1-3), the use of online learning (questionnaires 4-7), the quality of online tutorials (questionnaires 8-10) student learning options (questionnaires 11-14). With the calculation of the scores used, namely: Completely Disagree (1), Disagree (2), Do not know (3), Agree (4), Completely Agree (5). The distribution of questionnaires to students was done by sharing the google form questionnaire link to social media or student social media groups class of 2016 (VII), 2017 (V), 2018 (III).

Results

From the 44 students who filled in a questionnaire about the perception of dental students towards online learning, showed that almost all dental medicine students have computer and the internet use access (Table 1) (75% completely agree, 25% disagree , agree that they know how to open and open, modify and upload documents online (61% completely agree, 36.4% agree), and access the internet with daily or

weekly use (59% completely agree, 36.4% agree), and show an average of 4.52 and as much 32 students think that online courses are very helpful in their learning (38.6% agree, 13.6% completely agree), students also agree that the video procedural (47.7% disagree) and social media really help their learning (43.2% agree). (45.5% agree) that students feel comfortable exploring online tutorials and it's easy to find learning links (54.5% agree), 52.3% students completely agree that online tutorials need further improvement, while 47.7% percent of students disagree that procedural videos are more useful than direct experiment. 20.5% of students completely agree that online lectures / tutorials must be able to replace public lectures in order to have a positive impact on everything related to learning.

Table 1. Dental students responses towards questionnaire.

No	Frequency Distribution (%) and Frequency Responses	Completely disagree (1)	Disagree (2)	Do not know (3)	Agree (4)	Completely agree (5)	Mean	Total
1	Have internet access and a computer	0 (0%)	0 (0%)	0 (0%)	11 (25%)	33 (75%)	4.75	44
2	Understanding how to open, change and upload online documents	0 (0%)	0 (0%)	1 (2.3%)	16 (36.4%)	27 (61.4%)	4.59	44
3	I access the internet with daily and weekly usage	0 (0%)	1 (2.3%)	1 (2.3%)	16 (36.4%)	26 (59.1%)	4.52	44
4	Online learning is very helpful in my learning	0 (0%)	6 (13.6%)	15 (34.1%)	17 (38.6%)	6 (13.6%)	3.52	44
5	Procedural video is very helpful in my learning	0 (0%)	0 (0%)	6 (13.6%)	21 (47.7%)	17 (38.6%)	4.25	44
6	Social media helps my learning	1 (2.3%)	4 (9.1%)	11 (25%)	19 (43.2%)	9 (20.5%)	3.70	44
7	Google voice helps me communicate with other lectures and students	0 (0%)	6 (13.6%)	28 (63.6%)	8 (18.2%)	2 (4.5%)	3.14	44
8.	I feel comfortable exploring online tutorials	0 (0%)	5 (11.4%)	9 (20.5%)	20 (45.5%)	10 (22.7%)	3.80	44
9	I can easily find online tutorial links on the internet	0 (0%)	4 (9.1%)	6 (13.6%)	24 (54.5%)	10 (22.7%)	3.91	44
10	To support my learning, online tutorials require more development.	0 (0%)	1 (2.3%)	2 (4.5%)	18 (40.9%)	23 (52.3%)	4.43	44
11.	Online short lectures are more useful than Lectures or general teaching	1 (2.3%)	13 (31.8%)	21 (47.7%)	4 (9.1%)	4 (9.1%)	2.91	44
12.	Procedural videos during laboratory sessions are more beneficial than live experiments.	9 (20.5%)	21 (47.7%)	7 (15.9%)	5 (11.4%)	2 (4.5%)	2.32	44
13	Online tutorials should replace general lectures and hands-on experiments	6 (13.6%)	10 (22.7%)	13 (29.5%)	6 (13.6%)	9 (20.5%)	3.05	44
14.	I prefer a mix of general college education and online tutorials.	0 (0%)	1 (2.3%)	2 (4.5%)	20 (45.5%)	21 (47.7%)	4.39	44

Discussion

Online learning is an approach to learning through an internet-connected digital system, where learners attempt to access learning materials that suit their needs[10]. E-Learning is an internet program that can connect to an online learning room for lectures and students. Online learning, particularly in time and space, turns out to be about overcoming the limitations between lectures and students. Does not have to be in one dimension of time and space, meaning it can be at any time[11].

Whereas traditional learning provides the instructor with the opportunity to create interest in a subject and clarify confusion immediately[12]. The teacher can understand the psychology of students during learning[13]. Lectures can handle unexpected student questions, ideas and comments. In traditional learning, students place a passive role rather than an active role. Most one-way communication is possible because all students listen to the teacher[14]. Teachers are required to have effective writing and speaking skills. Teachers were mostly asked to solve student problems within a limited time frame[15].

It has been reported that online learning is not always easily achieved by students. The reason is the lack of time for students on distance learning courses because they are quite passive in asking questions and sharing ideas through online learning. They need to develop their learning, social and learning motivation mechanisms[16]. Because some students only want to participate in activities that may be considered "more useful". In Overall, the main factors that kept this group of students from participating in online discussions were: time availability, their preference for spending time reading, and the mutual effect on each other's involving. It should be noted about the specifics and short sentences that will be displayed because it affects students' interest in online learning. Because students will easily get bored and need time to read if there are lots of writings and words displayed on a computer or cellphone screen[17].

Obviously, high-level computer skills help students learn new systems and, accordingly, influence their perception of ease of use. Students who have internal locus of control report higher levels of satisfaction than those who have external locus of control. However, locus of control also influences the use of learning to be flexible, suggesting that it is related to the particular type of acceptance used. Students who have an internal locus of control may have found that flexible learning is more beneficial because it offers a variety of learning materials and options, which places the responsibility on students to use them as they are deemed suitable. Students make an effort to understand all the material and therefore become more aware of its benefits[15]. Our research shows that even as new technologies are implemented and students reach college with increasingly sophisticated uses and aspirations of technology in their campus life, this positive association continues. While this study does not clarify the precise nature of the technology-engagement relationship, it highlights the need for future studies to investigate the enduring nature of this positive correlation[13].

The facts of online learning include several benefits that can be generated by using e-learning media, namely: clarifying messages / information so that they are not too verbalistic; overcome the limitations of distance, space, and time; and can lead to a better enthusiasm for learning because students interact directly with learning resources. Apart from these advantages, the use of e-learning as an educational medium also has several weaknesses. These existing weaknesses are one of the reasons why the public's interest in e-learning media is still low. Some of these weaknesses include: e-learning media depends on computer technology, if the computer technology infrastructure is not good then the use of e-learning will also not run effectively; in addition to computers, e-learning media also require an internet connection, an inadequate internet connection speed will hinder the teaching and learning process through e-learning media; the use of e-learning as an educational medium also demands an adequate understanding of Information Technology. Therefore, basic competencies in the IT field are the main requirements for using e-learning media effectively[18].

Conclusion

The perception of students of the Faculty of Dental Medicine, Universitas Airlangga, Surabaya, Indonesia is ready to use the online learning method.

Conflicts of Interest: There are no conflicts of interest.

Source of Funding : Self-Funding

Ethical Clearance : Approved

References

1. Nawzad L, Rahim D, Said KW. The Effectiveness of Technology for Improving the Teaching of Natural Science Subjects. Indones J Curric Educ Technol Stud. 2018;6(1):15–21.
2. Rasheed RA, Kamsin A, Abdullah NA. Challenges in the online component of blended learning: A systematic review. Comput Educ. 2020;144(September 2019):103701.
3. Asiry MA. Dental students' perceptions of an online learning. Saudi Dent J. 2017;29(4):167–70.
4. Susilawati S, Monica G, Fadilah RPN, Bramantoro T, Setijanto D, Wening GRS, et al. Building team agreement on large population surveys through inter-rater reliability among oral health survey examiners. Dent J (Majalah Kedokt Gigi). 2018;51(1):42–6.
5. Panigrahi R, Srivastava PR, Sharma D. Online learning: Adoption, continuance, and learning outcome—A review of literature. Int J Inf Manage. 2018;43(July 2016):1–14.
6. Cantrell SW, O'Leary P, Ward KS. Strategies for Success in Online Learning. Nurs Clin North Am. 2008;43(4):547–55.
7. Mamun MA Al, Lawrie G, Wright T. Instructional design of scaffolded online learning modules for self-directed and inquiry-based learning environments. Comput Educ. 2020;144(December 2018):103695.
8. Jansen RS, Leeuwen A Van, Janssen J, Conijn R, Kester L. Supporting learners' self-regulated learning in Massive Open Online Courses. Comput Educ. 2019;103771.
9. Lubis HF, Laturiuw HP. Socioeconomic status and orthodontic treatment need based on the Dental Health Component. Dent J (Majalah Kedokt Gigi). 2018;51(3):119.
10. Huang H. Toward constructivism for adult learners in online learning environments. Br J Educ Technol. 2002;33(1):27–37.
11. Linjawi A. Present and Future Challenges for E-Learning in Dentistry. 2010;(July):1–373.
12. Kotłowski W. Scale-invariant unconstrained online learning. Theor Comput Sci. 2017;
13. Lin YC, Chung P, Yeh RC, Chen YC. An empirical study of college students' learning satisfaction and continuance intention to stick with a blended e-learning environment. Int J Emerg Technol Learn. 2016;11(2):63–6.
14. Chung H-H, Chen S-C, Kuo M-H. A Study of EFL College Students' Acceptance of Mobile Learning. Procedia - Soc Behav Sci. 2015;176:333–9.
15. Unrau N, Schlackman J. The Journal of Educational Research. J Educ Res. 2010;2(May 2012):37–41.
16. Lobo JL, Del Ser J, Bifet A, Kasabov N. Spiking Neural Networks and online learning: An overview and perspectives. Neural Networks. 2020;121:88–100.
17. Fung YYH. Collaborative online learning: Interaction patterns and limiting factors. Open Learn. 2004;19(2):135–49.
18. Kussa Laksana Utama P. E-Learning Sebagai Evolusi Proses Pembelajaran Di Era Masyarakat Informasi. J Penjaminan Mutu. 2017;3(1):1.