Psychological Status of Online Education among Dental College Students

I. Priyan a, A. Jothipriya b*# and R. Gayatri Devi b#

a Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences, Chennai, India.

b Department of Physiology, Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, India.

Authors’ contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/JPRI/2022/v34i29B36052

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://www.sdiarticle5.com/review-history/78823

ABSTRACT

E-learning has become an essential method and implemented by educational institutions across the world. Physiological change of online education among college students, based on a questionnaire or a Google form. Age among 21 to 25 where more knowledge about online education. Time spent for online classes per day is more than 6 hrs. The effectiveness of online classes varies among age groups. To make awareness about online education. A self structured questionnaire is being prepared and uploaded in Google forms. Increased implementation of technology will increase students’ comprehension of content and skill developed. Asynchronous delivery is threaded discussions, e-mail and telephone calls. Education institutions created to deliver knowledge have yet to adopt technology for this purpose. Learning comparison has now been introduced in school. Online education experience is typically asynchronous and also incorporates synchronous elements. Increased implementation of technology will increase students' comprehension of content and skill developed. The study showed that the people who are aged between 21 to 25 are more aware of online education. The p-value of this study is found to be 0.002, (p<0.05), hence statistically significant. The aim of the study is to rule out the physiological changes of online education among the college students.
1. INTRODUCTION

Online class was electronically supported. There are numerous benefits to online education, including improved time management, increased self-motivation, new technical skills, professional progress and interests, a flexible schedule, and a wider range of causes to choose from [1]. Even though it has advantages, some disadvantages also present like the direct interaction among students and teachers were reduced [2]. During COVID period online education was a backbone for schools and colleges [3]. Online education if used effectively allows students and teachers to mutually engage and collaborate. Technology acceptance model was based on cognitive theories that explain that process of adopting a behavior [4]. Online education helps students become independent, proficient members and researchers. The previous studies reveal the positive impact of the achievement and performance of students [5]. The transfer of knowledge becomes easy and convenient and also effective. The use of the internet allows students to find amazing convenience and other kinds of assisting material [6]. Teachers adapting to the new lifestyle must find methods of incorporation and utilize their new form of online education [7-15]. Classroom has the benefit of increased academic achievement [16]. Increased implementation of technology will increase students’ comprehension of content and skill developed. Students achieve online learning self efficacy based on previous experience with technology [17]. Online education is useful telecommunication technology to deliver the knowledge and fulfill the requirement for learning in modern society [16-18]. Online education has now been recognized to have eased our learning process. The general consensus on children are most easily distracted [16,18,19]. This research is needed to make the college student to be more aware about online education [20]. People wish to take online courses for their learning and certification. Online education acceptance model was based on cognitive theories that revealed the process of adopting a behaviour [20,21]. Education institutions created to deliver knowledge have yet to adopt technology for this purpose. Learning comparison has now been introduced in school [20]. It will be a more advanced level of learning. Asynchronous learning environments are described as an online world where work is supported through the use of digital platforms in such a way that participants are not required to be online at the same time [21]. Asynchronous delivery are threaded discussions, e-mail and telephone calls. This gives meaning to the anytime-anywhere appeal of online learning [22]. Advantage of asynchronous learning is the learner having more time to generate content related responses to the instructor and peer postings [23]. The aim of the study is to rule out the physiological changes of online education among the college students.

2. MATERIALS AND METHODS

A cross-sectional survey was conducted among the college students population with a sample size of 102. A self administered structured questionnaire was prepared based on visual pollution and consisted of 15 questions. It was circulated to participants through an online platform (google form). The statistics were done using SPSS software, chi-square test was used to check the association and P value of 0.05 was said to be statistically significant. The pros of the survey is that the College students of different lifestyles and cultures were surveyed. Simple random sampling method was the sampling method used to minimise the sampling bias. The inclusion criteria for the study is, studies published for the last 12 years, content directly relevant to dental students, cross sectional studies investigating changes over years. The exclusion criteria for the study includes, content relevant to other disciplines, not concerned with the field of dentistry, and reports of non original research.

3. RESULTS AND DISCUSSION

In our present study, 47.06% of participants responded that they were not able to sit for a long time on a laptop are the problems they faced during online classes (Fig. 1). 86.27% of participants responded that online class was helpful (Fig. 2). 61.76% of participants responded that traditional blackboard teaching is the best mode of education in future (Fig. 3). 50% of participants responded that overall online education was excellent (Fig. 4). 75.49% of participants responded that more than 6 hrs were spent on online classes per day (Fig. 5). 43.14% of male responded that online class was very good (Fig. 6). 62.75% of male responded online class was
helpful and 23.53% of females responded online class was helpful (Fig. 7). 33.33% of male responded that they were not able to sit for a long time on a laptop and 12.75% of females responded that they were not able to sit for a long time on laptop (Fig. 8).

• RESULTS AND DISCUSSION

![Pie chart showing the percentage distribution of problems faced during online classes among college students](image1)

**Fig. 1.** Pie chart showing the percentage distribution of problems faced during online classes among college students

Whereas, beige color represents not being able to sit for a long time on them laptop (47.06%), blue color represents not able to concentrate on a subject (27.45%), green color represents not able to listen to the lecture properly (25.49%)

![Pie chart showing the percentage distribution about online teaching and whether it is helpful or not](image2)

**Fig. 2.** Pie chart showing the percentage distribution about online teaching and whether it is helpful or not

Wherein, green represents yes(86.27%) and blue colour represents no (13.73%)
Fig. 3. Pie chart showing the percentage distribution about the best mode of education in the future
Whereas, beige colour represents traditional blackboard teaching (61.76%), blue colour represents digital based teaching (25.49%) and green colour represents online lecture (12.75%)

Fig. 4. Pie chart showing the percentage distribution about opinion about overall online education
Whereas blue represents excellent (50.00%), violet colour represents very good (29.41%), green colour represents good (12.75%) and beige colour represents poor (7.84%)
Fig. 5. Pie chart showing the percentage distribution about duration of online classes per day
Whereas, beige represents more than 6 hrs (75.49%), blue colour represents 2 to 4 hrs (13.73%) and green colour represents 4 to 6 hrs (10.78%)

Fig. 6. Bar graph showing association between opinion about overall online education and gender
X-axis represents gender and Y-axis represents opinion about overall online education. 43.14% of male responded excellently, 12.75% of females responded very well. Blue colour represents excellent, green colour represents good, violet colour represents very good, beige colour represents poor. Chi-square test was done and association was found to be statistically significant. chi square value: 20.861 and p-value: 0.002 (p<0.05); Hence statistically significant
Fig. 7. Bar graph showing association between gender and online teaching is helpful or not
X-axis represents gender and Y-axis represents whether online teaching is helpful or not. 62.75% of male responded yes and 23.53% of females responded yes. Green colour represents yes and blue colour represents no. Chi-square test was done and association was found to be statistically not significant. Chi square value: 7.141 and p-value: 0.028, (p>0.05); Hence statistically not significant.

Fig. 8. Bar graph showing association between gender and problems faced during online classes
The X-axis represents gender and Y-axis represents problems faced during online classes. 33.33% of male responded that they were not able to sit for a long time on a laptop and 12.75% of females responded not able to sit for a long time on laptop. beige colour represents not able to sit for long time on laptop, blue colour represents not able to concentrate on subject, green colour represents not able to listen to the lecture properly. A chi-square test was done and the association was found to be statistically not significant. Chi square value: 1.331 and p-value: 0.856, (p>0.05). Hence statistically not significant.
People who are aged among 21 to 25 (60%) are more aware of online education. Half (50%) of the people respond that overall feel about online education is excellent. More than 6 hrs (75%) responded that we spent for online class per day. Most of the people responded that traditional blackboard teaching (69%) will be more helpful in future. Most people responded that we feel stressed after online class (71%). Problems faced during online class (50%) responded to not being able to sit in front of the laptop for a long time. In previous research they found that regarding the attitude toward the learning delivery method, the quantitative and qualitative result showed that students prefer face to face interaction [5]. Research has indicated that a comparatively higher degree of students learning and effective teaching can be achieved when the use of technology [24]. Online education experience is typically asynchronous and also incorporates synchronous elements [22,23]. The majority of institutions utilize a Learning Management System for the administration of online courses [24-36]. The limitations of the survey study population is only among the college students. In future, larger samples among various students, professions or even the general public can be done.

4. CONCLUSION

This study examined college students’ perceptions of the physiological changes of online education. Electronic help was provided for the online class. Online education has a number of advantages, including improved time management, demonstrated self-motivation and new technical skills. Knowledge is transferred in a simple and effective manner. In a modern culture, online education is a valuable telecommunication technology for delivering knowledge and meeting the need for learning.

CONSENT

As per international standard or university standard, Participants’ written consent has been collected and preserved by the author(s).

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

22. Hansen AD. Pioneers of asynchronous online education at religion-based institutions of higher education: A multiple case study exploring the process of adoption of online education at three private Catholic colleges [Internet]. Available: http://dx.doi.org/10.30707/etd2014.hansen.a


© 2022 Priyan et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
https://www.sdiarticle5.com/review-history/78823