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# STUDENTS' OPINION SURVEY ON ONLINE DENTAL EDUCATION

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## ABSTRACT

The purpose of the present study is to examine the students' opinion regarding the conducted online education. Sociological methods: an anonymous Google forms survey was conducted including dental medicine students studying in the conditions of the COVID-19 pandemic, which led to the need to switch to an online form of education. It was conducted online on a voluntary basis in the month of March 2021. A total of 50 students from various years, studying Dental Medicine at the Medical University of Varna took part in the study. The provided survey consists of 20 questions. The majority of students categorically state that face-to-face study is preferable and that digital learning methods are motivating for them. Almost half of the students have a positive opinion regarding online lectures. Through them, they get more advice and guidance from the teachers and it is easier to participate in discussions. The participants in the survey shared that online training, as a result of the introduced anti-epidemic measures, was a good option for learning the theoretical study material.

**Keywords:** dental medicine, online education, students' opinion

## INTRODUCTION

Digitalization is developing rapidly in educational systems on a national and international level. In this day and age, digital technology is an indispensable part of dental education, whether it is in a traditional face-to-face form of education or online education (1, 2, 3). Thanks to the development of digital technologies, the successful implementation of online training is possible (4, 5).

## AIM

The aim of the present study is to examine the students' opinion regarding the conducted online education.

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**Received:** 2022

**Accepted:** 2022

## MATERIALS AND METHODS

Sociological methods: an anonymous Google forms survey was conducted including dental medicine students studying in the conditions of the COVID-19 pandemic, which led to the need to switch to an online form of education. The study was conducted online on a voluntary basis in the month of March 2021. The results of the survey are presented in table and graphic form and are accompanied by analyses and conclusions. A total of 50 students from various years, studying Dental Medicine at the Medical University of Varna took part in the study. The provided survey consists of 20 questions (Table 1), divided into 4 groups. The questions in the first group are related to information about the students. In the second, they answer questions about their computer skills. In the third and fourth, students' attitudes towards online learning are investigated.

## RESULTS

The study showed that the average age of participants was 21 years. The largest is the 21-year-old group (49%), followed by the 20-year-old group

Table 1. Questions included in the survey.

<b>I Group</b>	<b>Information about the students surveyed</b>	1. Age 2. Sex 3. Year of study
<b>II Group</b>	<b>Computer skills and competences</b>	4. I have a computer and daily access to the Internet. 5. I know how to open, format, and attach digital files and documents. 6. Online lectures are useful for my studies. 7. The online tutorials need further refinement.
<b>III Group</b>	<b>Expectation of students to online learning</b>	8. Online lessons should replace traditional lectures and live demonstration. 9. I prefer a combination of traditional teaching and online lessons. 10. In the current situation and the introduced anti-epidemic measures, online training is a good option for learning the theoretical part of the discipline. 11. I managed to prepare pretty well in advance for the online training. 12. I get more advice and guidance from the teachers during online learning. 13. The participation in online learning discussions is easier. 14. I don't think online training is useful and I would prefer face-to-face training. 15. I get good theoretical training through online education.
<b>IV Group</b>	<b>Attitudes of students to online learning</b>	16. Evaluation of students' satisfaction regarding the online connection during training. 17. Assessment of student satisfaction regarding planning of independent training. 18. Evaluation of student satisfaction regarding online learning materials with free access. 19. Assessment of student satisfaction regarding the effective management of the time allotted for seminar classes. 20. Using new digital learning methods is motivating.

(30.6%). In third place, we can point to the group of students who are 19 years old (12.2%), and the smallest share belongs to those 22 and 23 years of age (2% and 4.3%, respectively) (Fig. 1). Regarding the gender criterion, 18 (36.7 %) respondents were male and 31 (63.3 %)—female (Fig. 2). All participants answer positively about owning an electronic device, i.e., all students have access to the Internet with the help of mass communications. Almost all surveyed students (98%) confirmed that they have good computer literacy and can work with digital information and process files.

A third main group of questions and the graphical representation of their results show the attitude of the students regarding the usefulness of online lectures. From the research it is clear that almost half of the students have a positive opinion regarding online lectures. Of these, 40% are of the

opinion that lectures in a virtual environment are useful for them and 8% completely agree (Fig. 3). A total of 28% of those who took part in the survey are of the opposite opinion - 8% disagree, and 20%—strongly disagree. It is interesting to note that nearly a quarter of the respondents do not have an opinion on this issue. In relation to the question of the need for further improvement of the online lessons, 2/5 of those who gave an opinion share that the lessons need further improvement, and 1/5 do not express an opinion (Fig. 4). The following is the distribution of the extremes in the belief: 16% are the shares of those who strongly agree and strongly disagree about further refinement. Only 8% are of the opinion that online lessons do not need further improvement.

The question of replacing traditional lectures and demonstrations in real conditions with online lessons is of extreme importance. A large part (38%) of the respondents strongly disagree on this issue,

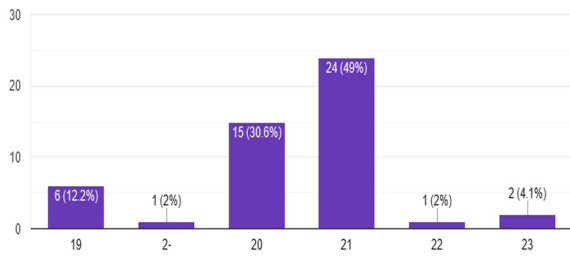


Fig. 1. Age of respondents.

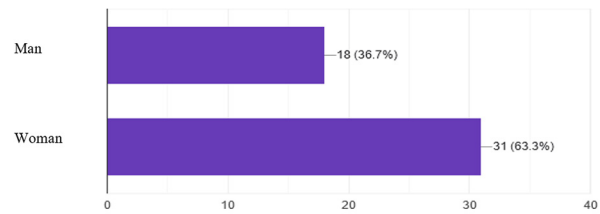


Fig. 2. Gender of the respondents.

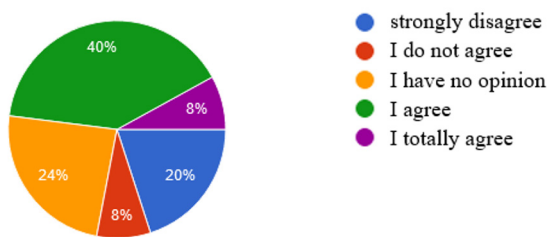


Fig. 3. Students' opinion about the usefulness of online lectures.

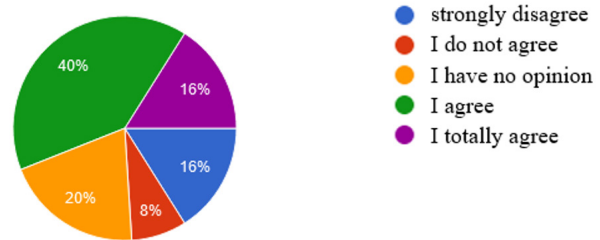


Fig. 4. Need for further improvement of online lessons.

34% of the respondents are moderate with this disagreement (Fig. 5). Very few of the respondents are on the opposite side—a total of 16%. On this issue, only 12% answered that they had no opinion and could not take a position. Similar are the results regarding the preference for combined traditional and virtual learning. Nearly 62% support blended learning, and 22% disagree or strongly disagree with this form of teaching (Fig. 6). Only 16% of respondents have no opinion on this issue. The participants in the survey share that online training, as a result of the introduced anti-epidemic measures, is a good option for learning the theoretical study material. A total of 32% agree and 42% of the respondents completely (Fig. 7). Only 14% disagree with the introduced teaching methods, and 12% have no opinion on this issue.

Of the students taking in the survey, 64% share that they have good preliminary preparation for online learning, 16% do not have an opinion on this issue, and 20% express relative or strong disagreement

that they do not manage to prepare adequately (Fig. 8). A large proportion of students (42% strongly agree and 14% agree) are of the opinion that more questions are asked in an online environment (Fig. 9). Disagreement is expressed by persons with a percentage ratio within 20%, with only 6% of respondents strongly disagreeing. Almost ¼ of the respondents answer that they have no opinion on this issue. When asked if they receive more advice and guidance from teachers during online learning, 64% respond positively (Fig. 10). Those who disagree are within 18%, with 1/3 of them strongly disagreeing. A total of 18% of the respondents have no opinion on this issue. With online learning, it is easier to participate in discussions. This opinion is supported by 68% and only 18% disagree.

Of interest are the respondents' responses to the choice between face-to-face and online learning. The majority strongly state that face-to-face training is preferable (44% strongly agree and 32% agree), 16%

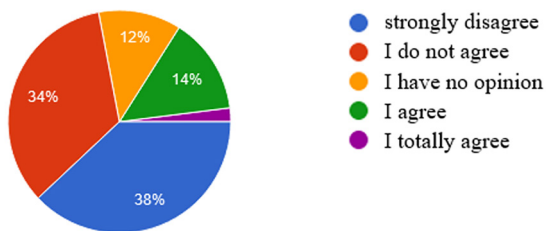


Fig. 5. Replacement of traditional live lectures and demonstrations with online ones.

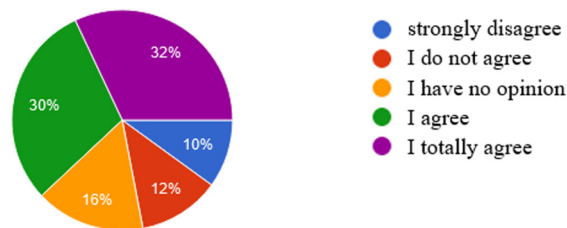


Fig. 6. Preferences for a combination of traditional form and online lessons.

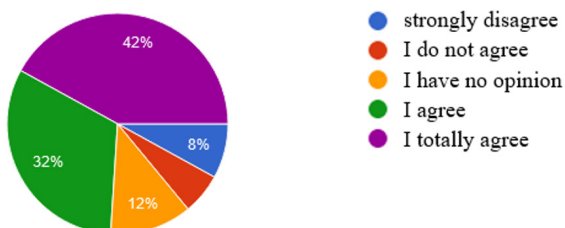


Fig. 7. In the current situation and the introduced anti-epidemic measures, online training was a good option for studying the theoretical part of the material.

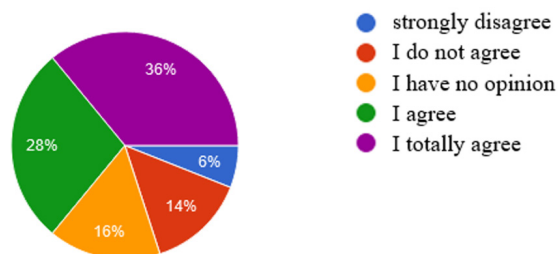


Fig. 8. I managed to prepare quite well in advance for the online training.

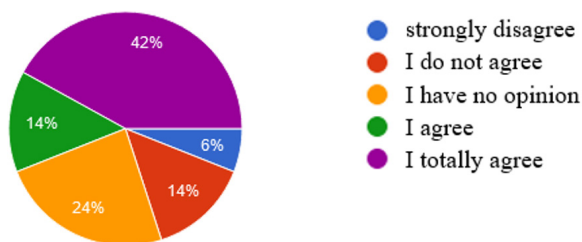


Fig. 9. During online training I ask more questions than during face-to-face training.

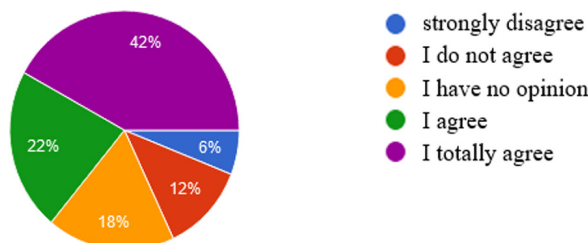


Fig. 10. Getting more advice and guidance from tutors during online learning.

have no opinion and only 8% disagree (Fig. 11). But on the other hand, 63.5% support the opinion that they receive good theoretical training through online learning (38.8% fully agree and 26.5% agree). Of all, 20.4% are non-supporters, and those who think they do not receive good theoretical training are a total of 15% (Fig. 12).

Most of the respondents (70%) express satisfaction with the online connection during training in a virtual environment. Only 14% express dissatisfaction on this issue and 16% have no opinion

on this issue. The assessment of students' satisfaction with learning in an online environment is highly rated: 48% are very satisfied, 22% are satisfied, and only 8% are dissatisfied (Fig. 13). Strong dissatisfaction is not shown by any of the respondents, and people without an opinion on the matter are 22%.

Regarding open access online learning materials, 86% express strong and relative satisfaction (Fig. 14). There are very few respondents with expressed dissatisfaction with the question—only 2%, and 12% have no opinion. Surveyed students with a

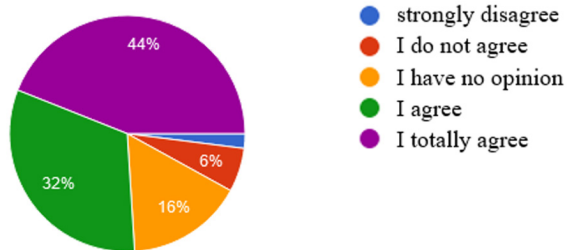


Fig. 11. Students' preference for face-to-face training over online training.

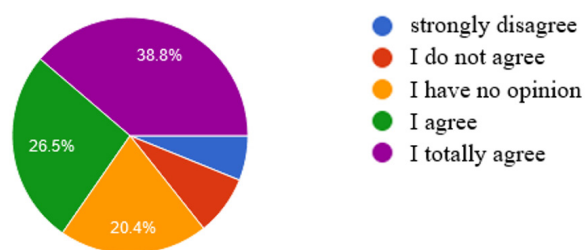


Fig. 12. I get good theoretical training through online training.

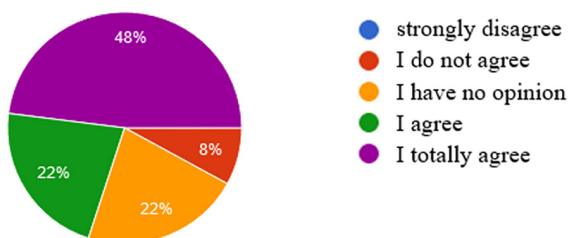


Fig. 13. Assessment of students' satisfaction regarding planning of independent training.

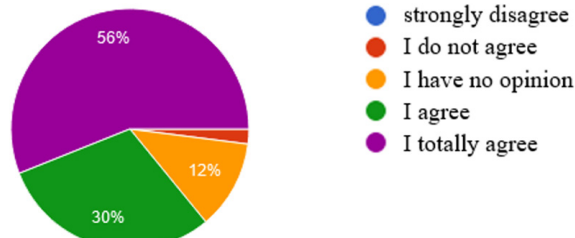


Fig. 14. Evaluation of students' satisfaction regarding online learning materials with open access.

share of 70% answer that digital learning methods are motivating for them (Fig. 15). The ratio of those who agree or strongly agree with this opinion is 30% to 40%. Only 14% disagree with the use of digital learning methods being motivating. Two percent more respondents have no opinion on this issue.

## CONCLUSION

The survey, conducted on the satisfaction of dental medicine students with online training during the COVID-19 pandemic has shown that the students prefer the traditional form of face-to-face training over online training. Almost half of the students have a positive opinion regarding online lectures. Through them, they get more advice and guidance from the teachers and it is easier to participate in discussions. Nearly half of those who gave an opinion share that the lessons need further improvement. The participants in the survey state that online training, as a result of the introduced anti-epidemic measures, is a good option for learning the theoretical study material and that digital learning methods are motivating for them. The presented

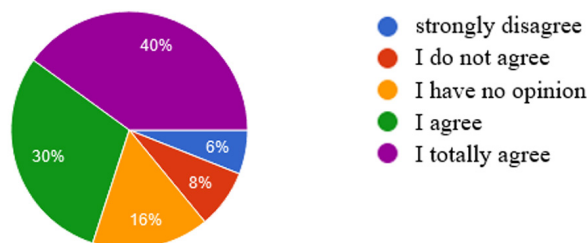


Fig. 15. The use of new digital learning methods is motivating.

survey has shown that online learning is a good alternative for the theoretical preparation of students in a pandemic situation, it allows the teaching of the planned learning material to continue and not stop with the learning process.

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