

Virtual online learning communities reducing dental student stress and anxiety

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1 | PROBLEM

During the coronavirus disease 2019 (COVID-19) pandemic, dental education has adapted to many changes in a short period of time. The suspension of clinical activities and the transition to online learning has proven to be a challenge for dental schools and stressful for dental students.¹ Students are facing anxiety about online learning, their dental education, and the future of the dental profession. The psychological consequences of stress and anxiety have shown a negative impact on education.² Dental students are also susceptible to a high rate of depression compared to the general population.³ How can we reduce dental students' anxiety during changing learning environments among the COVID-19 pandemic?

2 | SOLUTION

A virtual clinical engagement course was created to provide relevant virtual experiences and establish learning communities to engage dental students during the COVID 19 pandemic. Third- and fourth-year dental students were divided into small groups of 9 to 11 students and assigned a faculty mentor. Each week the faculty mentor and student groups met via Zoom to discuss treatment planning cases, COVID-19 related activities, virtual study club topics, and self-directed learning assignments. A synchronous large class huddle was held once a week to reinforce topics, review cases, and answer questions regarding the weekly activities. The aim of this model was to provide the students a connection to their school, faculty, and

classmates while distance learning. The small groups would foster a closer faculty mentor relationship, a safe space for dialogue, and a sense of community. The large group huddle would provide interaction and connection to others in the class as a whole.

3 | RESULTS

A survey was conducted with a response rate of 248 students. Thirty-nine percent of the participants reported stress and anxiety to a great extent about both the dental profession and about their dental education at the onset of the virtual clinical engagement model. Thirty-two percent of the students reported stress and anxiety to a great extent regarding online learning at that time (Figure 1). After 6 weeks of participation in the course, 26% of the students reported stress and anxiety to a great extent about the dental profession and their dental education. Eighteen percent of the students reported stress and anxiety to a great extent regarding online learning (Figure 2).

Students responded favorably to the small group interactions. Requiring the students to have their video on during small group sessions facilitated personal connections for open discussion, questions, and individualized feedback. Although there was a reported 13% reduction in stress and anxiety, 25% of students still felt stressed to a great extent about the dental profession and their education.

Dental schools are faced with a challenge to create innovative ways to virtually engage students that also support mental health. Considering that it has been shown that learning communities have been associated

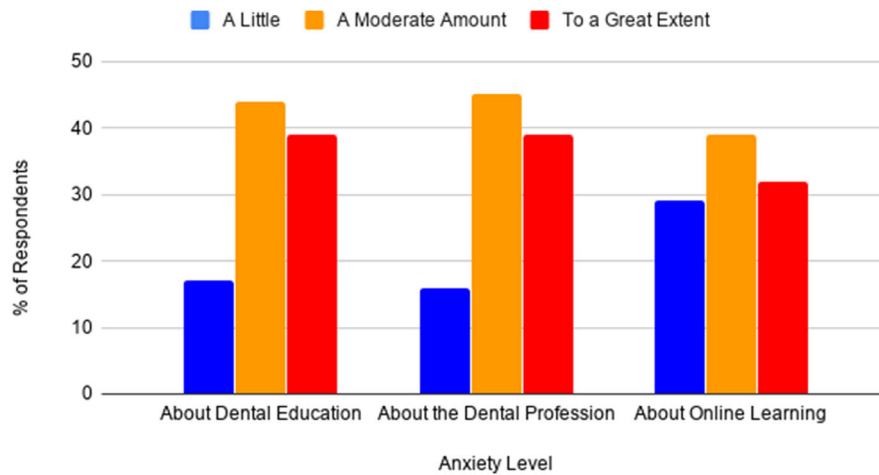


FIGURE 1 Reported stress and anxiety at the beginning of the course

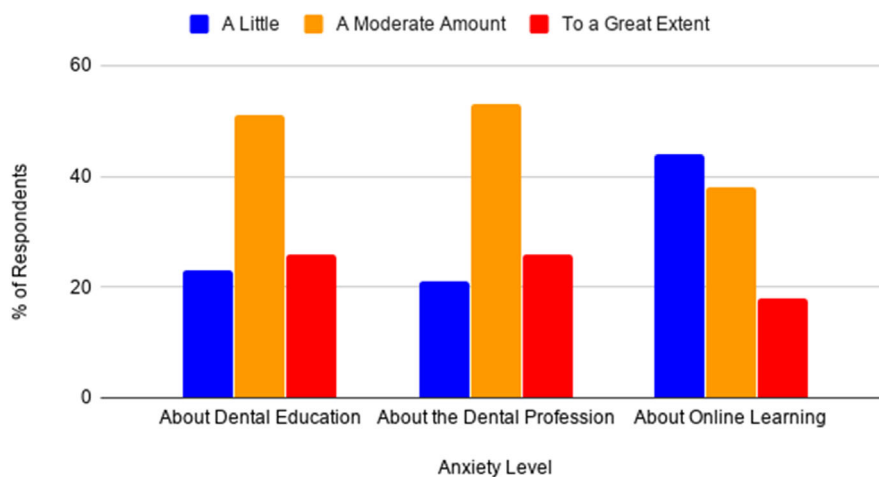


FIGURE 2 Reported stress and anxiety after 6 weeks of participation

with improved learning environments,⁴ dental schools should consider assigning faculty to virtually meet with small groups of dental students weekly to promote student engagement and a connection with their dental school. The findings of this study support that weekly small-group meetings effectively reduced anxiety in our student cohort.

CONFLICT OF INTEREST

The authors have no conflicts of interest to disclose.

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