Use of a mindfulness application to promote students’ mental well-being during COVID-19-era

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1 | PROBLEM

With the spread of COVID-19, the effect of lockdown on psychological well-being has been profound. All parts of the world, including educational institutions, have adopted strict isolation strategies. These situations posed a threat to the students’ mental health. Mental health is a social determinant that is often ignored and underestimated. Besides, dental students endure the pressures of an academically challenging degree combined with high contact hours, making them vulnerable to burnout.1

Many dental students at SEGi University expressed stress and anxiety, affecting their studies during the mentor-mentee sessions. The most common concern was isolation, the lockdown’s unpredictability, and its implications on their immediate future. To overcome the anxiety, we attempted to incorporate app-based meditation into the students’ learning time to improve their resilience and decrease stress toward unforeseeable circumstances.

2 | SOLUTION

Mindfulness meditation, through a conscious and deliberate focus on the breath, a bodily sensation, a sound, or a word, brings in greater awareness and clarity. Resilience is essential for helping dental students by adapting them positively to uncertainties, fostering effective coping strategies, improving well-being, and enhancing their professional growth.2 However, an essential component of well-being is the absence of psychological distress (Figure 1).3

Year 1–5 dental students (n = 218) consented to participate in this study. The mean age was 21.4 ± 1.8 years. 41.3% were males, and 58.7% were females. Medito is a free application that provides formal guided and unguided mindfulness meditation, including mindful breathing and meditation for various situations.4 All students were advised to download the application. The meditation session was incorporated into the timetable every week for a month. Before using any other functions, participants needed to complete a 10-min, 10-day introduction to mindfulness.

3 | RESULTS

We examined the number of sessions and the type of content they accessed for 1 month. Participants completed
online forms of the Five Facet Mindfulness Questionnaire-15, the Resilience Scale for Adults-33, and the Depression Anxiety Stress Scale-21 (Figure 2) at baseline and after 1 month post-intervention.⁵⁻⁷ Additionally, an open feedback was obtained from all via Zoom regarding their mental health status. Data revealed that 91.9% of participants were highly distressed at baseline, which negatively correlated significantly with mindfulness (p = 0.02) (Table 1). Interestingly, there was no significant difference between males and females at baseline in relation to stress, resilience, and mindfulness.

At 1 month, a significant negative correlation was seen between stress and mindfulness as well as resilience, and a significant positive correlation between resilience, its six facets, and mindfulness (p < 0.001) (Tables 1 and 2). Subsequently, the pre- and post-test data revealed a significant difference in students’ stress, resilience, and mindfulness before and post-meditation sessions after 1 month (Figure 3). Furthermore, there was a significant difference in females’ total resilience (p = 0.03). Students mentioned a heightened awareness of thought patterns, positive emotions, and reactivity levels.

The current generation is technology-friendly, and the same platform can be used to perform remote

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**TABLE 1** “Pearson’s” correlation (r) between mindfulness, stress, and resilience among students (n = 218) before and after using Medito

|                  | Stress | Resilience | Mindfulness |
|------------------|--------|------------|-------------|
| Before meditation|        |            |             |
| Stress           |        |            | −0.14*      |
| Resilience       |        |            |             |
| Mindfulness      |        |            |             |
| After meditation |        |            |             |
| Stress           | −0.89**| −0.43**    | 0.47**      |
| Resilience       |        |            |             |
| Mindfulness      |        |            |             |

*Note. *p < 0.05, **p < 0.01.
psychological support. Emerging research has proven that app-based meditation may improve students’ stress symptoms.\textsuperscript{2,8} Apps are no substitute for psychotherapy. Even so, it may temporarily benefit students’ mental well-being. Formally, encouraging app-based mindfulness can be a new chapter in interprofessional dental education.

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