

A cross sectional study to evaluate the usefulness of a Dental Mirror app to help with dental students indirect vision training.

Maria Madonna, DDS; General Dentistry Comprehensive Care, Analia Veitz-Keenan, DDS, FAGD Oral and Maxillofacial Pathology, Radiology and Medicine

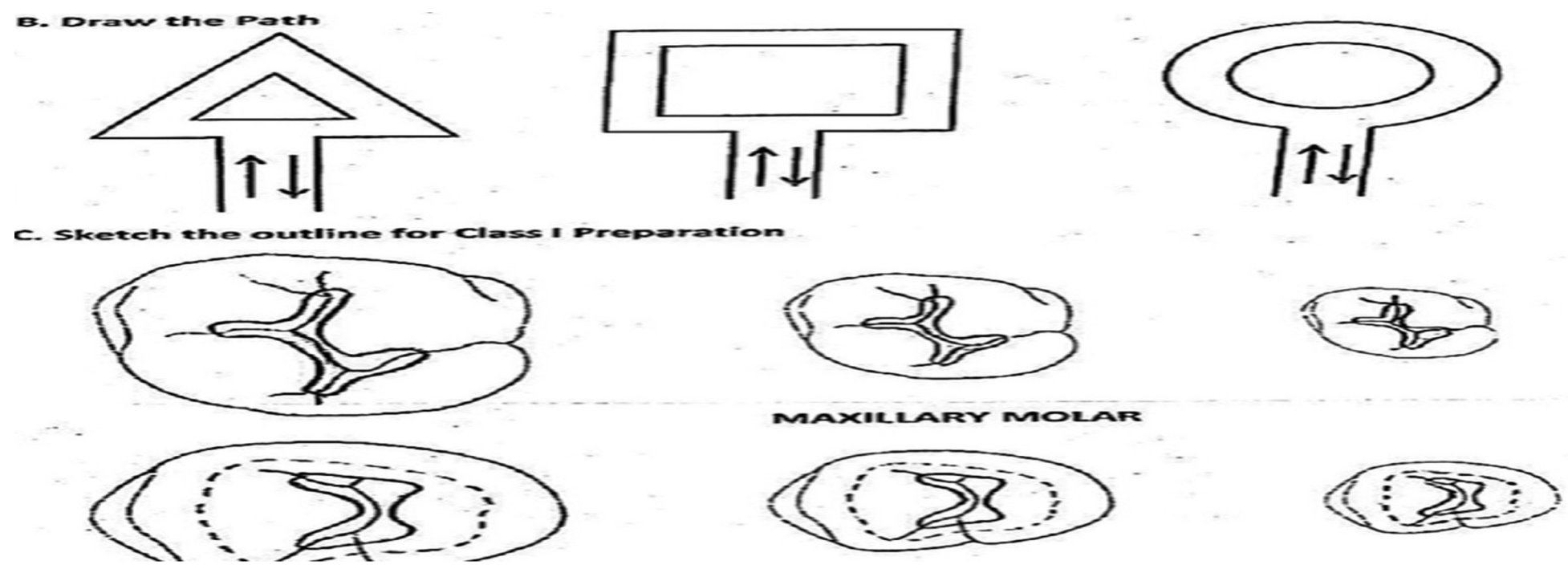
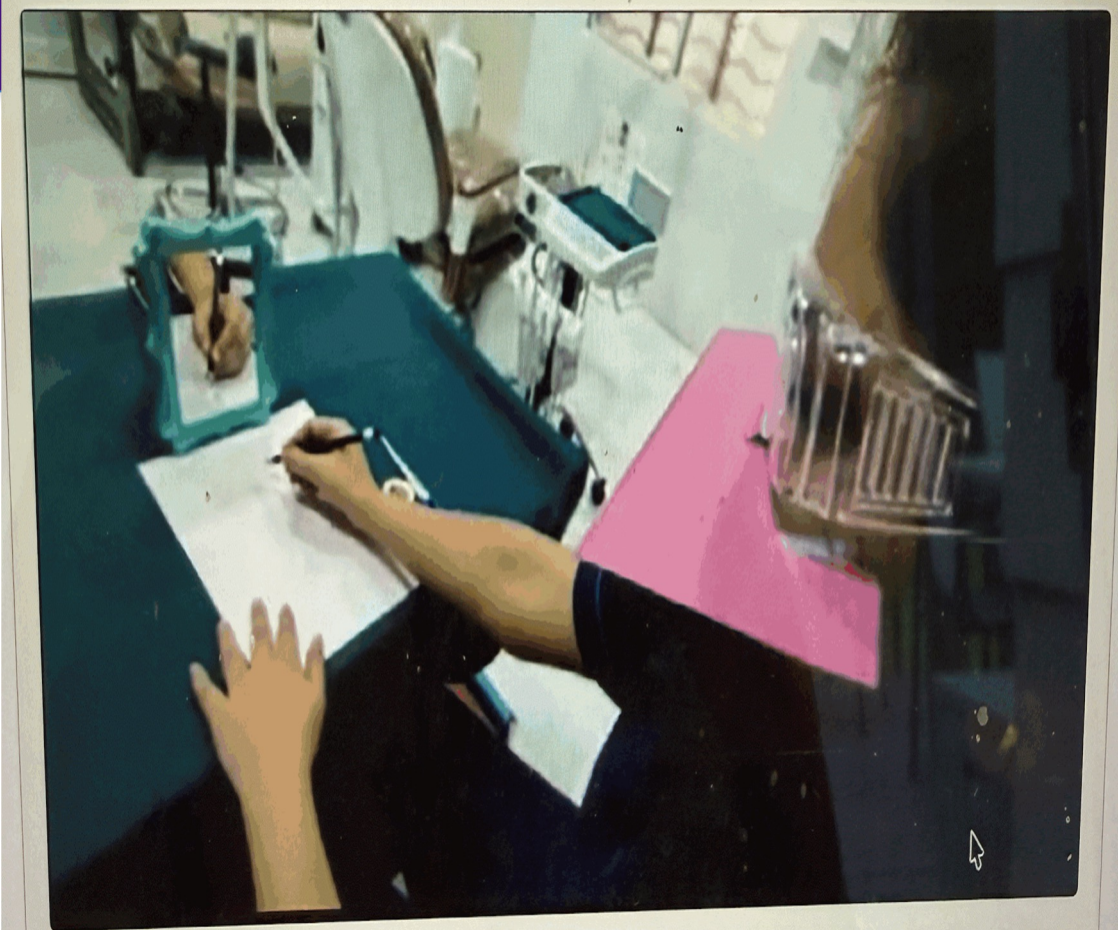
Abstract

Indirect Vision using a Dental mirror is important to the development of dental students and the future dental clinicians. The skill of indirect vision involves learning to operate on teeth inside the oral cavity in reversed mirror images. As the students continue to become comfortable with indirect vision using the mirror, the dental students will learn to maintain steady head position with no direct line-of-sight access. Using a Dental Mirror App will provide another method of practicing hand-eye coordination and dental mirror placement during operative procedures. Indirect vision improves with consistent practice. (IRB-FY2025-1011)

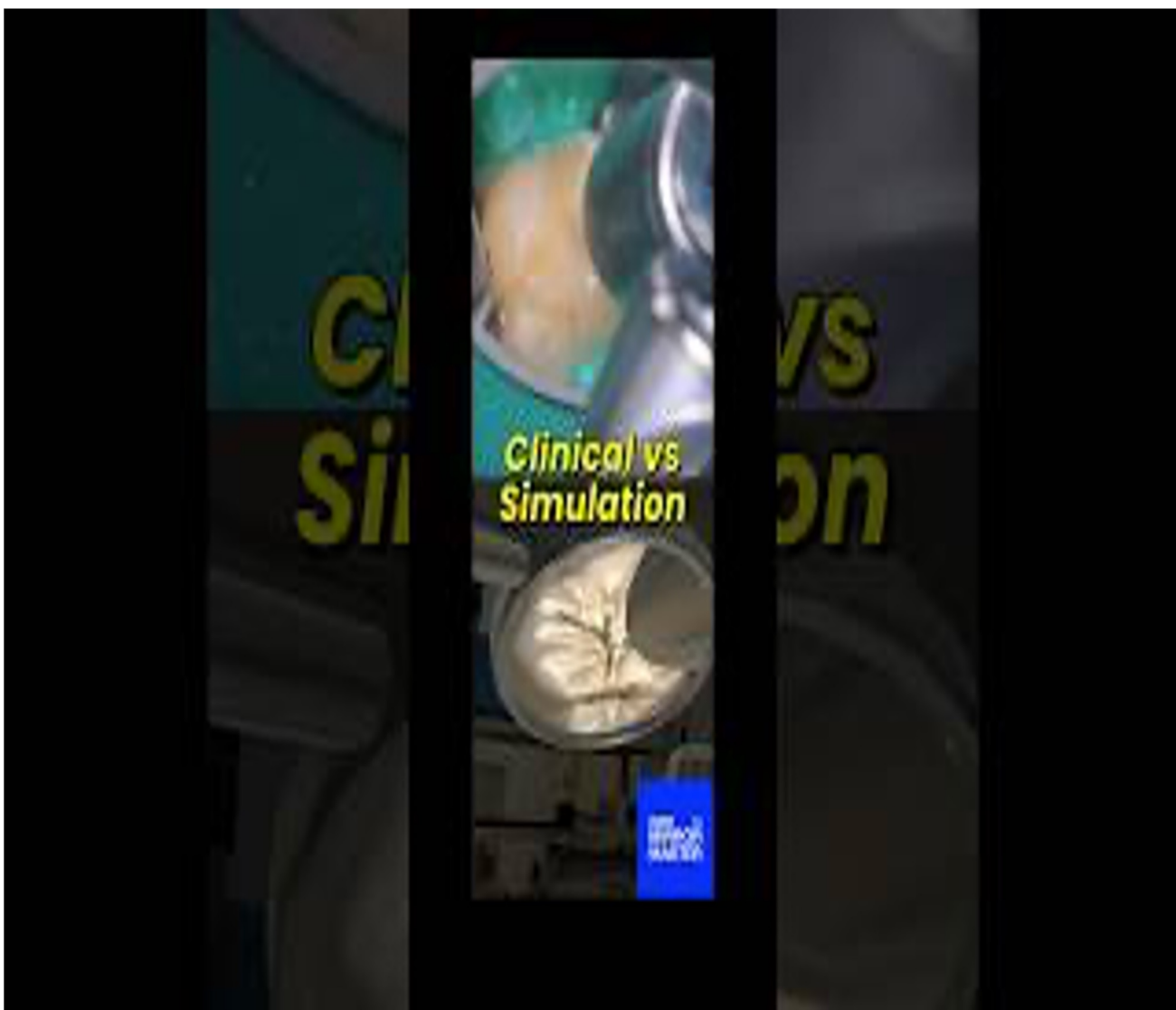
Objectives



Background



Results



Methods

A recruitment email is to be sent to all the dental students who wish to participate

The students are given a link to a pre-survey about their gender, age, grade and giving them a link for the Dental Mirror Master 3.0. to be downloaded on a personal device.

The 8 week course is separated into modules: introduction, posture and position, maxillary premolars, maxillary molars, maxillary anteriors, mandibular premolars, mandibular molars and cavity preparation. Each module is unlocked weekly.

The student's duration and performance data will be uploaded on a secure server via the app. Students must practice at least a minimum of 30 mins each week.

After the 8 weeks are completed, the students will be sent a post survey about the experience using the dental app.

The DentalMaster Dashboard is accessible only to instructors who have created a MyClass course within the DentalMaster app. The data will be used for monitoring student progress, providing feedback and guidance.

Conclusions

Demonstrate the dental app will be an adjunct training to traditional use of mannikin and handpiece in a dental laboratory.

Students will develop visual-motor coordination and establish ergonomic habits for a sustainable dental career using the app.

Clinical simulation will aid students to master indirect vision allowing the brain to translate inverted images.

Taking advantage of serious game learning which can use scores and levels to motivate and engage students and facilitate learning in Gen Z dental students.

Engaging digital or playful experiences will allow students to reduce stress and anxiety by removing a fear of making mistakes.

The simulodont units used in dental student training is expensive. Their own hand held device is always present and available. Student will not need to travel to school to practice in a lab and mannikin.

References

