Virtual Reality (VR) Program of Dental Implant Surgery: Student Perception

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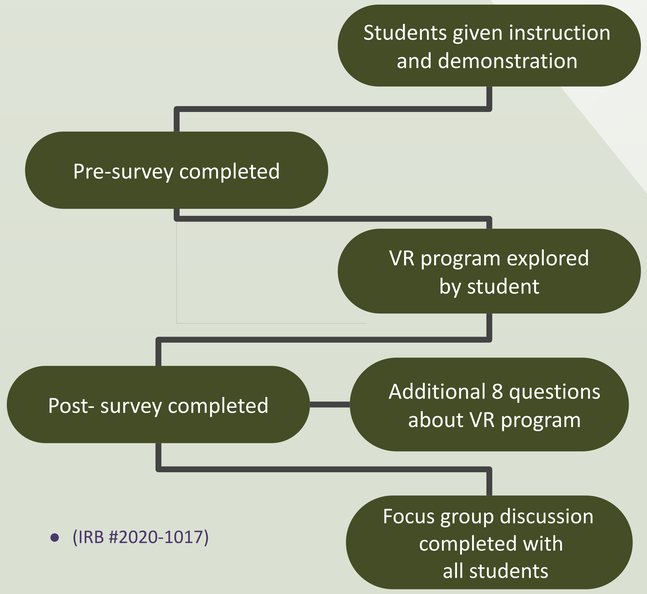
- COVID-19 pandemic has changed dental education due to social distancing implementation.
- Virtual reality (VR) can be used as a medium to allow students to be fully immersed in clinical environment.

OBJECTIVES

To investigate the Advanced Predoctoral Implant Program (APIP) student perception regarding the use of VR on Dental Implant Surgery.

METHODS



- (IRB #2020-1017)

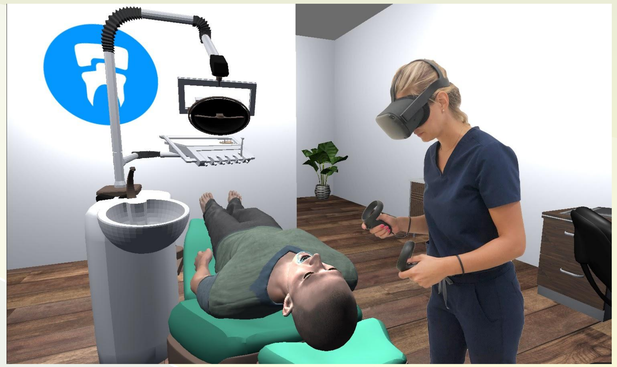


Figure 1. Virtual reality for dental implant surgery.

RESULTS

A. Survey

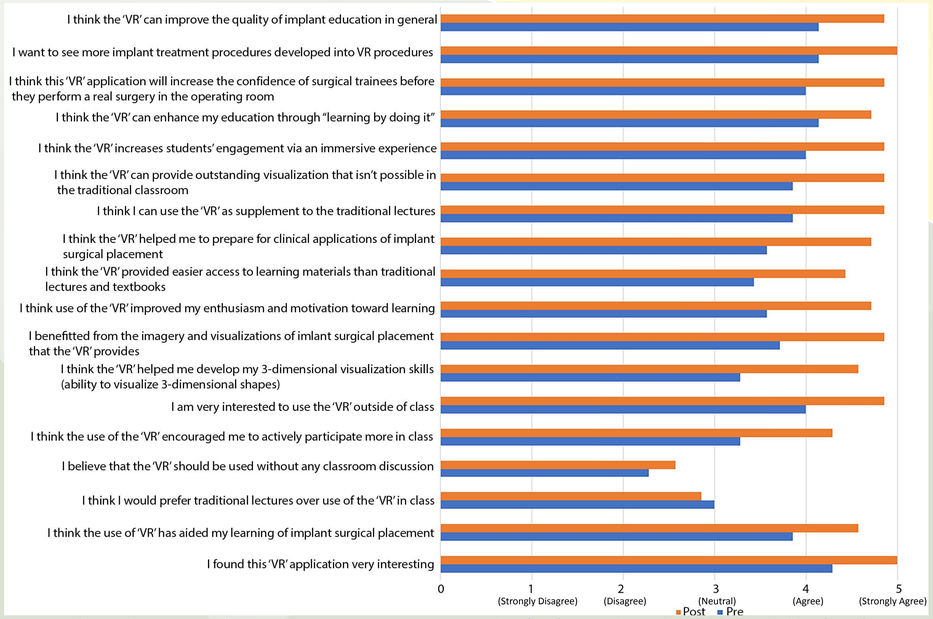


Figure 1. Average of all student responses to survey prior (pre) to testing VR program and after (post).

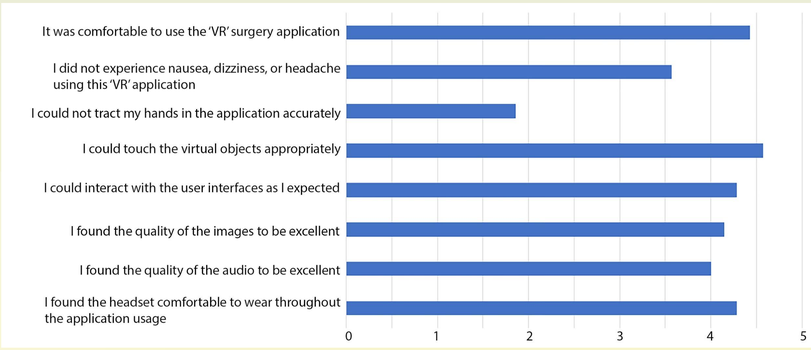


Figure 2. Average student response to additional survey questions after testing the VR program (1: Strongly Disagree -5: Strongly Agree).

B. FOCUS GROUP DISCUSSION

- Supplemental learning aid
- Good for improving chair positioning and ergonomics
- Accessible anywhere if headset and WiFi present
- Able to learn sequence of procedures
- Haptic feedback beneficial and more can be added
- Can be used to standardize pre-clinical station exams
- Better suited for visualizing endodontic procedures
- Applicable for learning BLS, CPR, and emergency situations

CONCLUSION

Students have a positive outlook for using virtual reality as a resource in dental education. They are hopeful to use it in the future for particular topics and subjects such as endodontics, station exams, and emergency clinical situations.

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