Phantom-based interactive simulation system for dental treatment training.

Abstract:
In this paper, we propose a new interactive simulation system for dental treatment training. The system comprises a virtual reality environment and a force-torque measuring device to enhance the capabilities of a passive phantom of tooth anatomy in dental treatment training processes. The measuring device is connected to the phantom, and provides essential input data for generating the graphic animations of physical behaviors such as drilling and bleeding. The animation methods of those physical behaviors are also presented. This system is not only able to enhance interactivity and accessibility of the training system compared to conventional methods but it also provides possibilities of recording, evaluating, and verifying the training results.
Occurences:

- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Klinik für Orthopädie und Unfallchirurgie > 2004

entries: