A virtual reality-based simulated patient encounter that uses artificial intelligence: Results of a pilot project with Family Nurse Practitioner students

Samuel Merritt University

"I think it's a good learning experience for the students because it forces us not to use our materials and come up with differentials on our own."

"I think it would be beneficial during the first semester when we are first trying to do a focused exam."

"It was odd not talking to the patient while doing the PE, but it made me focus more on how I phrase my questions and the language I use."
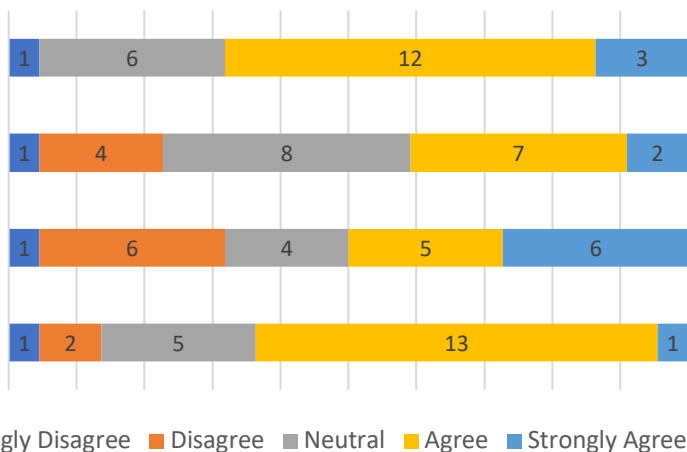
Select Pilot Results

I would recommend PCS Spark to other healthcare learners interested in practicing history-taking.

PCS Spark makes me feel better prepared before seeing a Standardized Patient.
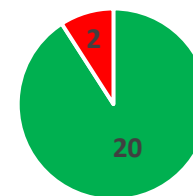
I gave this virtual patient my full attention, and developed a diagnosis and plan of care for the chief complaint.

PCS Spark did a good job at answering most of my questions.

Legend: ■ Strongly Disagree ■ Disagree ■ Neutral ■ Agree ■ Strongly Agree

Pilot dates	Sept 20 – Oct 18, 2019
Pilot cohort	Sacramento-based FNP students enrolled in a Clinical Practicum course (n = 24 students)
Pilot case/ scenario	Ms. Vera Miller is a 38 year old woman who presented to clinic with a chief concern of headaches.
Details of encounter	Each student individually used the Oculus headset to engage with PCS Spark in a realistic virtual reality outpatient clinic environment. After a 4-minute orientation given by an SMU sim tech specialist (STS), each student's encounter with PCS Spark lasted approximately 10 – 12 minutes.
Evaluation strategy	Students were encouraged to complete a survey upon the completion of their PCS Spark experience. A total of 22 students completed the survey (92% response rate).

Would you be interested in seeing other virtual patients with different medical conditions in the remainder of your Nurse Practitioner Program?

■ Yes ■ No

In spring 2020, the Samuel Merritt University Investigational Review Board (IRB) deemed this fall 2019 pilot study at the Health Sciences Simulation Center exempt from formal review.