

RESEARCH QUESTION

How did COVID-19-induced distance/virtual learning impact American and Taiwanese medical students' learning perceptions, engagement, and future willingness to participate in virtual learning opportunities compared to their experiences with traditional in-person learning?

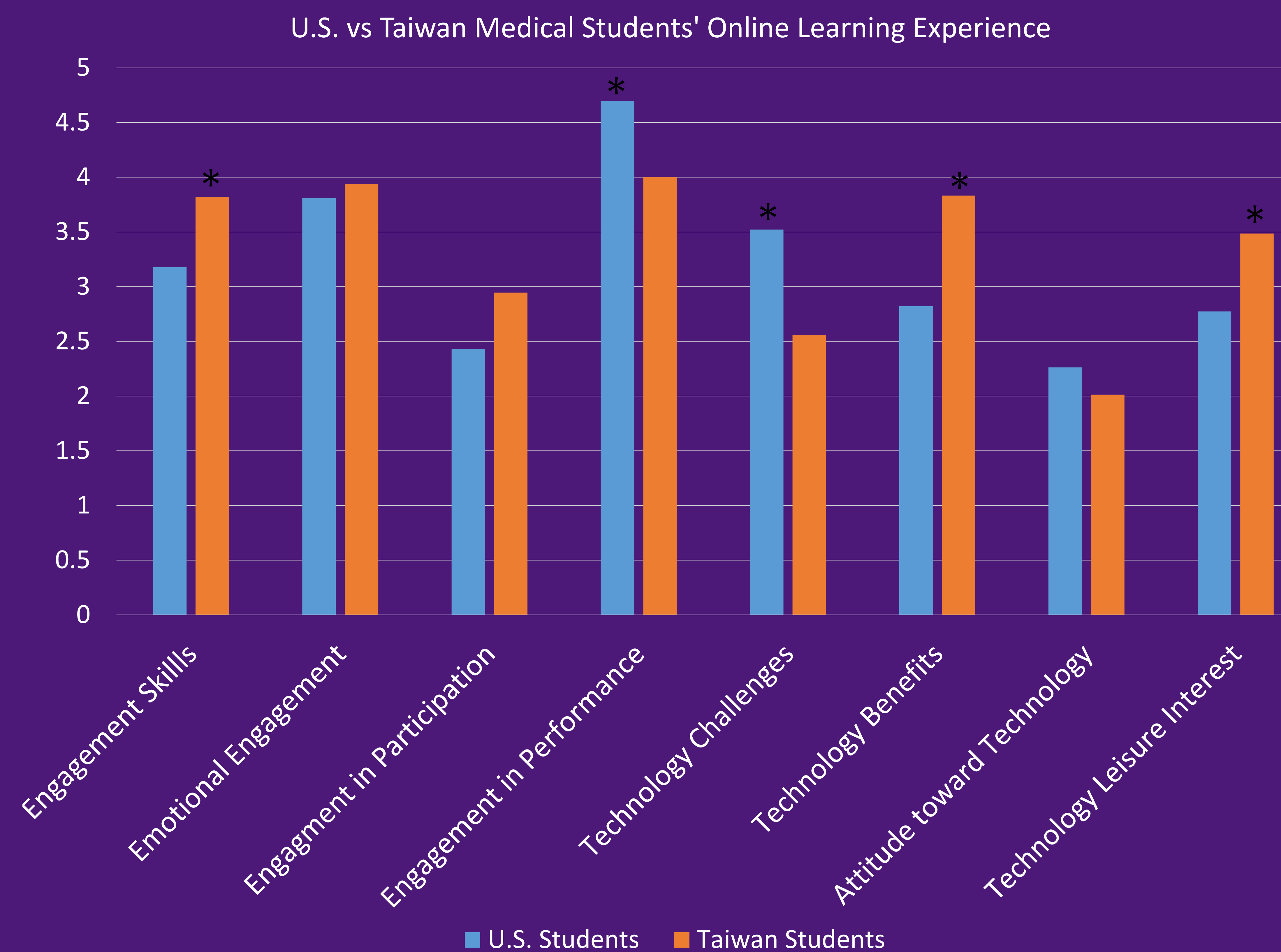
BACKGROUND

The COVID-19 pandemic forced swift, unanticipated, and significant changes in every facet of daily life around the globe. Our personal social lives, work, education, daily chores, and perception of personal safety were turned on their head nearly overnight. As the world adapted to these changes, medical education was not spared. Coursework was moved online, and classrooms became isolated rooms connected via virtual conferencing software so that curricula could continue, and new generations of physicians could be trained. Though diligent effort was taken to maintain normalcy, the learning experience was undoubtedly altered compared to the traditional classroom style. However, amid these changes, little research has been done to try to quantify its effects on students. Essentially, we do not know how learners have perceived and been impacted by these changes, so we decided to try to quantify their opinions to better inform the medical education system moving forward.

METHODS

This study examined medical students from Taiwan and the United States as the research subjects and we distributed a questionnaire survey on issues related to distance online courses. All responses were from medical students beginning their clinical practice years in Taiwan and the United States. Because of the different educational systems in Taiwan and the United States, the respondents in Taiwan were fifth-year medical students, while those in the United States were third-year medical students, both of whom were entering the first year of clinical training. Descriptive statistics and t-tests were used to analyze the data and help draw conclusions. 5=strongly agree, 1=strongly disagree.

Virtual learning was a necessary adaptation to the COVID-19 pandemic, but it had significant impacts on students' experience.



RESULTS

Quantitative:

1. U.S. students were significantly more concerned about class performance and significantly more aware of challenges imposed by virtual learning.
2. Students in Taiwan reported being significantly more engaged in pre-work and class activities, felt more positively about the benefits of virtual learning, and reported stronger interest in virtual learning innovations than their counterparts in the U.S.
3. Both groups reported relatively low engagement with virtual learning and therefore were not "having fun" in the virtual environment.

Qualitative:

1. Students accepted the necessity of online curriculum.
2. Students voiced concerns about not gaining "soft" skills such as communication, ability to read a room, and ability to perform high quality physical exams.
3. Students see the benefits of being able to rewatch and review online lectures.

FUTURE DIRECTIONS

1. Larger cohorts to achieve higher n value, stronger data power
2. Follow up with surveyed students who are now in residency to see if opinions have changed or effects on clinical skill have been noted
3. Surveying of current medical students who were completing their pre-medical coursework during the pandemic to find out how they may have been affected
4. Have both cohorts complete online course and pre/post tests to compare results

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