

### **3rd Year Tennessee State University Physical Therapy Students' Perceptions on Pivoting to a Hybrid Learning Environment During the COVID-19 Pandemic**

**Introduction:** Institutions of higher learning experienced a rapid transition to hybrid and virtual teaching due to the COVID-19 pandemic during the spring of 2020. The closing of campuses not prepared for online instruction mandated the delivery of course material synchronously and asynchronously. The inclusion of hands-on, practical learning is a vital portion of many healthcare curricula, and programs requiring performance of tactile skills for matriculation were forced to adapt with little to no guidance on how to successfully continue the learning process without compromising course outcomes. The purpose of this project was to examine perceptions and experiences of Tennessee State University (TSU) 3<sup>rd</sup> year physical therapy (PT) students with respect to the change in course delivery resulting from the COVID-19 pandemic.

**Methods:** The researchers used a quantitative, cross-sectional survey design with the use of an online questionnaire to examine perceptions with respect to the change in course delivery resulting from the COVID-19 pandemic. Graduate 3<sup>rd</sup> year PT students at TSU were given an anonymous electronic questionnaire assessing their attitudes towards the barriers and facilitators. Investigators administered survey instruments to the 32 students in the cohort, each with an introduction and consent letter. Fifteen total students completed and returned the questionnaire for a 46.8% response rate.

**Results:** The Likert scale responses to participant's perceptions of online and hybrid learning factors were analyzed using JASP software. P-Values were calculated for each variable and the higher the value, the more positive the overall perception for the participants' view of the forced adaptation to the online environment. The lower the p-value, the lower the perceptions were regarding the learning experience during the COVID-19 pandemic. A correlation table was generated in JASP with interesting results. Particularly, there was a strong negative relationship (-.93) between how engaged a student was in the online environment and how effectively the university communicated COVID-19 related information.

**Discussion and Conclusion:** Overall, the students' percepts tended to be positive about the sudden change to online and hybrid learning. The majority of the students' perceptions leaned positive with a few distinct areas. The quality of the lab environment was predictably perceived to be the most impacted by the change to an online format. The traditional lecture environment was not perceived much better. Student engagement in the online environment and in a self-directed environment appeared to be issues with the students that were surveyed. The student perceived the faculty adapted to the online environment very quickly and with few technical issues in the classroom or in the testing environment. Student overall perception of online learning was positive but the engagement with the format was perceived as low. Additional research is needed on how to engage students with a format that is growing in popularity and demand, even as the pandemic comes to an end.