

## BACKGROUND

Experiential Learning Theory described by Kolb<sup>1</sup> requires the learner to engage in a process of learning by experience. Through experiential learning (EL), learners are able to better adapt to the changing world.<sup>1</sup> Multidisciplinary research has shown positive effects of EL.<sup>2-7</sup> Student self-efficacy with communication has been studied in relationship to EL in the chiropractic<sup>4</sup> and nursing fields,<sup>5</sup> but is limited within the physical therapy profession. Jensen et al<sup>8</sup> describes a similar concept of practice-based learning when describing what should be included in a model physical therapy (PT) programs. PT curriculums may offer a variety of EL including full-time clinical experiences, integrated clinical experiences, simulation activities, and individual classroom and clinic patient interactions. In an effort to promote adult learning and transference of skills from didactic coursework to clinical practice, the physical therapy department at Thomas Jefferson University, underwent step-wise curriculum revisions to increase EL, as well as introduce integrated clinical experiences.

## PURPOSE

The purpose of this study was to see if an increase in EL would increase patient communication confidence prior to a physical therapy student's first full time clinical experience.

## SUBJECTS

| Demographics  | N   | Male        | Female      | Mean Age      | EL Hours Completed     |
|---------------|-----|-------------|-------------|---------------|------------------------|
| Class of 2016 | 47  | 10 (21.74%) | 36 (78.26%) | 24.47 (21-45) | 16.5                   |
| Class of 2017 | 55  | 15 (28.30%) | 38 (71.70%) | 23.98 (21-34) | 28.5                   |
| Class of 2018 | 35  | 13 (37.14%) | 22 (62.86%) | 23.83 (22-36) | 42 (n=22)<br>51 (n=13) |
| Total         | 137 | 38 (27.74%) | 96 (70.07%) | 23.93 (21-45) | n/a                    |

## METHODS

**Recruitment and Survey:** Prior to the start of Clinical Experience 1, students were asked to complete the "Patient Communication Confidence Scale"(PCCS) via Survey Monkey during their didactic clinical education course. The PCCS is a 28-item scale that was developed by chiropractic educators to determine student readiness for clinical practice<sup>9</sup> and felt to have relevant questions for PT student self-efficacy in communication. Rasch analysis showed significant correlation ( $p < 0.001$ ) to already existing scales measuring self-efficacy (General Self-Efficacy Scale) and confidence with communication (Personal Report of Communication Apprehension-24).<sup>9</sup>

**Experiential Learning Hours:** Faculty who taught in the first 3 semesters of the DPT program were asked to submit syllabi and class schedules. EL hours were then calculated for each cohort. Hours included from this program included patient simulation, visits to clinical sites, patient interaction in the clinic and classroom, participation in an interdisciplinary patient interaction program, and integrated clinical experiences.

**Data Analysis:** Statistical analysis was completed using SPSS. Correlations between overall confidence scores and EL hours were determined using Spearman P Values. In addition, correlations were also determined for each individual question.

**IRB:** IRB Exempt status was received from Thomas Jefferson University. (Control #14E.482)

## RESULTS

- 180 students were asked to complete the PCCS over a three year period. 137 students completed the survey in its entirety for a response rate of 76.11%.
- A significant correlation was not found between overall PCCS Score and hours of EL ( $p=0.718$ ).
- Positive correlations were noted on select sub-scores. Specifically, 50% of the questions focused on "Taking a patient history" demonstrated positive correlations of confidence in taking a medical history from someone of the opposite gender ( $p=0.013$ ), the same gender ( $p=0.008$ ), and of a similar age ( $p=0.013$ ).

## CONCLUSIONS

Although a statistically significant correlation did not exist within this student sample, interviews with students and clinicians indicated that they all believed that EL positively impacted confidence with communication. One limitation of this research included the inability to control for the quality of EL activities due to varied student placements and varied professors/clinical educators involved. In addition, researchers were unable to control for the influence of non-required EL including volunteer experiences, observation of the clinical setting, and volunteer participation in a pro bono clinic. Further research should be completed on the impacts of EL on student overall self-efficacy and confidence with patient communication. Possible isolation of questions related to patient interviewing should also be considered.

## CLINICAL RELEVANCE

This initial study demonstrated that with EL, students report having confidence in conducting patient interviews with select patient populations. As PT programs continue to increase the amount of EL as they strive for excellence per professional standards, additional research should be done to determine if quantity of hours vs. quality of experience leads to increased confidence in students. In addition, exploration of focused EL opportunities to increase communication confidence with dissimilar patient populations is warranted.

## REFERENCES

- A full reference list, poster citation, and author contact information can be found using the following QR Code:

