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### Background

Gaining a better understanding of students' perceived confidence levels entering into their full-time clinical experiences will allow Physical Therapy programs to enhance student preparation for the clinical environment. Literature has shown students presented a higher confidence level in both communication and clinical skills when they had prior experience in a clinical setting (Hecimovich & Volet, 2008)<sup>1</sup>. Providing students with increased exposure to the clinical environment through integrated clinical education experiences will have a positive effect on student confidence entering into fulltime clinical internships.

# **Purpose/Hypothesis**

The purpose of this study was to determine if there is a difference among confidence levels of physical therapy students who participated in Integrated Clinical Education (ICE) experiences within their DPT program curriculum versus students who were not provided ICE experiences. We hypothesized that students' confidence levels before full-time clinical education would increase with exposure to integrated clinical education experiences.

## Methods

Participants completed a Survey of Confidence adapted from patient/client management expectations in the Normative Model of Physical Therapist **Professional Education: Version 2004 (Curriculum, 2004)<sup>2</sup>. The survey** contained sixteen questions related to perceived confidence during studentpatient interactions commonly encountered during clinical experiences using a 5-point Likert Scale with five being strongly agree and one being strongly disagree. Participants were also asked if their program utilized Integrated **Clinical Experiences.** 

- A pilot study in which 36 responses were collected was conducted among current Doctor of Physical Therapy students at an accredited program.
- Survey was posted in three bursts at three-week intervals via a Physical Therapy Student social media webpage.
- Inclusion criteria: students enrolled in an accredited DPT program.
- Exclusion criteria: students who had not completed at least one semester of their graduate DPT education.

Collected survey data was processed, coded and analyzed:

- Spearman's Rank Correlation Coefficient was used to observe the relationship between confidence levels and program design (ICE vs. No-ICE) using a nonparametric test and looked at a 5 point Likert-scale.
- A series of Fisher's Exact tests were conducted to determine perceived level of confidence in students enrolled in programs offering ICE experiences vs. No-ICE.
- To control for Type I error, significance was accepted at *P* < 0.05.

# Integrated Clinical Experience: **Does it Enhance Clinical Affiliation Confidence?**





(Graphs displayed are for questionnaire items with a P < 0.0001)

Surveys not meeting inclusion criteria

- Participant was uncertain of type of program they attended (ICE vs. No-ICE)
- Participant not wishing to consent to participate
- A total of 153 responses were analyzed.
- attending programs without ICE.

Integrated clinical education experiences enhance student confidence in the area of examination, patient client management, performing systems review, determining a diagnosis & prognosis, adjustment of a plan of care, documentation and outcome measures. Students strongly benefit from increased clinical exposures gained during lce experiences. There is a greater self-perceived confidence level as the DPT student participates in their full-time clinical affiliations. Students who would normally struggle during clinical full-time clinical affiliations are more confident and experience less stress when ICE experiences occur within the didactic portion of their program

Hecimovich, M. & Volet, S. (2008). Importance of building confidence in patient communication and clinical skills among chiropractic students. The Journal of Chiropractic Education, 23(2), 151-164. Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2759993/ Curriculum. (2004). In A normative model of physical therapist professional education: Version 2004 (pp. 15-80). Alexandria, VA: American Physical Therapy Association. Chipchase, L. S., Buttrum, P. J., Dunwoodie, R., Hill, A. E., Mandrusiak, A., & Moran, M. (2012). Characteristics of student preparedness for clinical learning: Clinical educator perspectives using the Delphi approach.

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### Results

- A total number of 411 responses were initially collected. Surveys excluded from analysis included:
- Incomplete surveys (defined as missing more than two responses)

• 10 of the sixteen items surveyed showed a significant difference between students attending programs with ICE experiences vs. students

# Conclusion

## **References** (partial list)

Gilliland, S. (2014). Clinical reasoning in first-and third-year physical therapy students. Journal of Physical Therapy Education, 28(3), 64-80. Retrieved from http://education.uci.edu/news/2014/gilliland\_nov14.php Mai J. A., Thiele, A., O'Dell, B., Kruse, B., Vaassen, M., & Priest, A. (2013). Utilization of an integrated clinical experience in a physical therapist education program. Journal of Physical Therapy Education, 27(2), 25-32. Retrieved from http://www.aptaeducation.org/members/jopte/pdfs/2013/spring/Mai%20Spring%2013.pdf



Table 1: Integrated Clinical Experiences vs. No-   Integrated Clinical Experiences	
Question Topic	P-Value
Q1: Professional Behavior	0.137
Q2: Communication	0.033*
Q3: Respect for Others	0.007*
Q4: Professional Judgement	0.007*
Q5: Evidence Based Practice	<0.0001*
Q6: Determining Need for Referral	<0.0001*
Q7: Obtaining a Patient History	0.889
Q8: Performing a Systems Review	0.359
Q9: Evaluation of Examination Data	.059
Q10: Determining a Diagnosis	<0.0001*
Q11: Determining a Prognosis	0.105
Q12: Establishing a Plan of Care	<0.0001*
Q13: Adjusting a Plan of Care	<0.0001*
Q14: Interventions	<0.0001*
Q15: Documentation	0.007*
Q16: Outcome Measures	0.325

(P values for questionnaire items #1-16)