

# STUDENT PHYSICAL THERAPISTS' SELF-EFFICACY INCREASES OVER A THREE-YEAR ENTRY LEVEL PROGRAM

Suzanna D. Okere, PT, PhD, Lois Stickle, PT, PhD,

Haley Branum SPT, Amanda Jones SPT, Elisabeth Martini SPT, Kayley Stack SPT

Department of Physical Therapy, Texas State University



## BACKGROUND

Self-efficacy is a person's belief about their capability to perform at a certain level for a specific task within a given context. Self-efficacy uses an internal reference of belief about capability rather than an external criterion such as a grade on an exam.

## PURPOSE

The purpose of this study was to document the changes in self-efficacy of student physical therapists over the course of a three-year professional physical therapy program.

## METHODS

Subjects: Seventeen students from the Class of 2022 in the Doctor of Physical Therapy program at Texas State University.

## METHODS

Instrumentation: The Self-Efficacy of Physical Therapist Student Outcomes<sup>1</sup> (SEPTSO) is a 25-item survey identifying self-efficacy in outcomes expected of new graduates. The SEPTSO has excellent internal reliability (Cronbach's alpha = .983). It also has excellent content validity because each item can be directly linked to at least one of the expected outcomes identified by program directors in US physical therapist education programs<sup>1,2</sup> and the practice patterns identified in the Guide to Physical Therapist Practice.<sup>1</sup> It is responsive and lacks bias for sex and age.<sup>1</sup> Participants are asked to rate "How certain you are that you can do each of the activities described below right now" by choosing the appropriate percentage.

Procedure: Participants were assigned a random code so that pre and post test data could be linked. The SEPTSO was administered to the Doctor of Physical Therapy Class of 2022 during the first (pre-test) and final (post-test) semesters of the program.

## Data Analysis

Six males and 11 females with an average age of 28.9 years (SD 7.7) participated. The Shapiro-Wilk test of normality confirmed a normal distribution of scores for both the pre-test (p=0.367) and post-test (p=0.809). Therefore, a paired t-test was used to determine if there was a change in SEPTSO score from the first semester (pre-test) to the final semester (post-test).

## RESULTS

There was a statistically significant increase in SEPTSO scores from the first semester (mean=3.60; SD=1.43) to the final semester (mean=85.63; SD 9.20);  $t_{(16)} = 34.55$ ,  $p < .01$ . The effect size was large (Cohen's  $d = 9.79$ ).

## CONCLUSION

Student physical therapists demonstrate significant improvements in self-efficacy following the didactic and clinical education components of a three-year entry level program. The effect size was large, indicating that the students' self-efficacy changed substantially from the beginning to the end of the physical therapy program, despite the small number of subjects (n=17).

**RELEVANCE:** Self-efficacy affects the type and difficulty of goals that individuals set for themselves and how committed they are to those goals.<sup>3</sup> In the context of physical therapy, students who increase their self-efficacy over a three-year physical therapy program may set more challenging goals for themselves and may be more committed to these goals.

## REFERENCES:

- 1) Stickle LA, Bezner JR, Spivey S. Development and validation of the Self-Efficacy of Student Physical Therapist Outcomes survey. *J Phys Ther Educ.* 2019;33(4):325-334.
- 2) Grignon TP, Henley E, Lee KM, Abentroth MJ, Jette JU. Expected graduate outcomes in US physical therapist education programs: A qualitative study. *J Phys Ther Educ.* 2014;28:48-57.
- 3) Bandura A. Toward a psychology of human agency: Pathways and reflections. *Perspect Psychol Sci.* 2018;13(2):130-136.