

## Pain Attitudes and Beliefs of Doctorate of Physical Therapy Students

### Abstract:

**Introduction:** Pain is a primary impairment that physical therapists help to alleviate. The understanding of pain has evolved over the last decade. The IASP has identified pain as being a multi-dimensional phenomena involving the biological, psycho and social systems. Understanding the biopsychosocial model is believed to help PTs and other practitioners be more effective in treating chronic pain. The International Association of Science of Pain (IASP) has published curriculum for the PT profession of which emphasize the biopsychosocial model. PT curricula have been changing their curriculum to include Pain Science Education to provide students with a broader knowledge base and shift attitudes towards the biopsychosocial model. This change is in congruence with the recommendations made by the IASP and other pain scientists. Determining physical therapy student's attitudes toward pain may support the need for increased pain science education in a PT program's curriculum.

**Methods:** Thirty-one first year and thirty-two second year DPT students at a CAPTE accredited PT program participated. Physical therapy students' pain attitudes and beliefs were measured using the Pain Attitudes and Beliefs Scale for Physical Therapists (PABS-PT). Shapiro-Wilk test and multivariate ANOVA were used to compare cohort's scores in the biomedical and psychosocial beliefs subscales. A 3-hour pain science seminar, based on International Association of Science of Pain (IASP) objectives, was given to second year students after the initial assessment, and the PABS-PT was redistributed to these students 9 weeks after the pain science seminar. A one-way repeated MANOVA was used to compare the scores of the second years following the seminar.

**Results:** No statistically significant difference was found between beliefs of 1st and 2nd year students ( $F(1,61) = 1.209$ ;  $p = 0.306$ ). In addition, no statistically significant difference was found between beliefs of 2nd year before and after the pain science seminar ( $F(1,62) = 0.887$ ;  $p = 0.417$ ).

**Discussion/Conclusions:** Pain attitudes and beliefs were not significantly different between year 1 and year 2 of the program. In addition, a 3-hour seminar/lab was not enough to shift 2<sup>nd</sup> year students' attitudes more towards a biopsychosocial attitude. Limitation: 17 of the 32 second-year students attended a one-hour pain science presentation during the period between initial and second assessment. The attitudes still did not significantly change for the cohort. This curriculum is not effectively shifting the student's pain attitudes and beliefs from a traditional biomedical belief of pain to the currently accepted biopsychosocial belief of pain. Implementation of a pain science curriculum within the Doctorate of Physical Therapy curriculum is recommended to adequately prepare future clinicians to treat pain.