

PHYSICAL THERAPY STUDENT PERCEPTIONS OF THE USEFULNESS OF MNEMONICS FOR INFORMATION RECALL IN ANATOMY. O'Connell JK, Rutland MD, Glowczwski MS, Hardage CD, Haverlah SK. Hardin-Simmons University Department of Physical Therapy, Abilene, TX.

PURPOSE: The purpose of this study is to determine the perception of the usefulness of mnemonic study aids for content comprehension and memory retention in graduate-level physical therapy students. **SUBJECTS:** First year students from an entry-level DPT program were conveniently recruited to be participants. **METHODS:** A survey including questions regarding students' perception of mnemonics and their knowledge of anatomical mnemonics was distributed via email to all participants at the beginning and end of their Doctor of Physical Therapy- Clinical Anatomy I course. The survey included 8 demographic questions, 3 general mnemonic information questions, 25 Likert scale questions based on the students' perception of the usefulness of mnemonics in learning information in their anatomy course, 10 Likert scale questions based on the students' perception of using mnemonics in the clinic, and 10 correct/incorrect and open ended questions to assess the students' knowledge of common anatomical mnemonics. Participants' consent was implied by completion of the survey. The results of the pre- and post-test surveys were compared and analyzed. Statistical analysis included a Mann-Whitney U test to compare the Likert scale questions showing the participants' perception of mnemonics' effectiveness; a Chi-square test to determine if the results of the correct/incorrect knowledge based questions were due to chance; and an Independent t-test to determine difference between the pre- and post-test result of the knowledge based questions with open-ended responses. **RESULTS:** A total of 40 participants completed both the pre- and post-test surveys (males n=14; females n=26). Two of the 35 Likert scale questions related to effectiveness of mnemonics demonstrated a significant difference in usefulness ($p < 0.05$). Those two questions included: "The use of mnemonics in my anatomy course will help me find common ground with a classmate," and "The use of mnemonics will help me clinically participate in group discussion." All knowledge recall questions analyzed with the chi-square test demonstrated significant improvement ($p < 0.001$). Of the four open-ended knowledge-based questions, 3 displayed a significant improvement from pre- to post-test ($p < 0.001$). Those 3 questions included: 1. Please list as many carpal bones as you can remember in association to the mnemonic 'S,L,T,P,H,C,T,T; 2. List as many muscles as you can in reference to the mnemonic 'Lady Between Two Majors; and 3. "Name as many parts to the mnemonic 'N,A,V,L' as you can." The general student perception of the usefulness of mnemonics was positive in both the pre- and post-tests. **CONCLUSION:** Implementing the use of mnemonics in physical therapy education can simultaneously improve students' perceptions of mnemonics and their retention of anatomical information. **CLINICAL RELEVANCE:** There is minimal research on the use of mnemonics in physical therapy education. This research demonstrates mnemonics are useful aids that are time-efficient, have minimal costs, and can improve students' information retention in anatomy.