

Utsey, C. J., Wolters, C. A., Owen, S. V., Yu, S. L., Gaa, J. P., Pease, D. Differences in Motivational Beliefs and Learning Strategies of Physical Therapist Students in Classroom and Clinical Settings. Unpublished Doctor of Philosophy Dissertation, University of Houston, May, 2006.

Abstract

Few studies have focused on healthcare students' motivational beliefs and learning strategies as a means of understanding or explaining their academic success in classroom and clinical learning environments. The purposes of this study were to assess the following questions: 1) whether first-year physical therapist (PT) students differ from final-year PT students in the motivational beliefs they report and the knowledge and regulation of learning strategies that they report; 2) whether motivational beliefs and learning strategies differ in classroom versus clinical learning environments; and 3) which predictors using motivational beliefs and learning strategies variables best estimate academic success in classroom and clinical environments.

Participants were a sample of convenience that included 243 first- (46%) and final- (54%) year PT students from Texas and Louisiana PT programs. Students' demographic information tended to reflect that of PT students nationally. For each analysis, the number of participants varied because of missing data. Students completed an 83-item on-line survey twice, once in relation to the classroom setting and once in relation to the clinical setting. The classroom setting was defined as the learning environment with lecture and laboratory experiences where students obtained information from PT academic instructors and practiced new clinical skills on classmates. The clinical setting referred to learning environments where students practiced these new clinical skills with actual patients under the supervision of PT clinical instructors. Using modified

versions of established instruments, the self-report survey items measured task value, self-efficacy, regulation of cognition, knowledge of cognition, mastery goal orientation, performance-approach goal orientation, and performance-avoid goal orientation.

Demographic information was gathered with the survey and measures of academic and clinical performance were collected from the PT programs.

A 2 (first-year, $N = 68$ vs. final-year, $N = 80$) x 2 (classroom vs. clinical) mixed model multivariate analyses of variance (MANOVA) was used to evaluate differences in motivational beliefs and learning strategies. Findings from this analysis indicated a significant main effect for setting. Post hoc testing using discriminant function analysis indicated that performance-avoid goal orientation primarily characterized the clinical setting over the classroom setting. Finally, four multiple regressions were used to evaluate which motivational and metacognitive factors best predicted classroom and clinical performance. Self-efficacy and task value were found to be the best predictors for the first ($N = 123$) and final ($N = 53$) grade point averages (GPAs), and final clinical performance score ($N = 40$). Self-efficacy was positive and significant, while task value contributed negatively. When assessing the predictability of the first clinical performance score ($N = 112$), the linear model of task value, self-efficacy, and regulation of cognition was significant, with regulation of cognition negatively and significantly contributing to the model.

Findings from this study supported previous college level classroom research with relations of motivational beliefs, use of learning strategies, and performance indicators and added information regarding graduate-level healthcare professions students and authentic settings. In comparing the two settings, students reported the avoidance of

looking incompetent in the clinical setting more than they did in the classroom setting. As expected, the higher reports of self-efficacy predicted higher levels of performance in all but the first clinical performance measure. Contrary to previous findings, students who reported lower levels of task value were more successful in the classroom and final clinical rotation. Also, students who reported lower levels of regulation of cognition scored higher on their first clinical performance measure. These findings suggest that assessing factors of student motivational beliefs and utilization of learning strategies may assist both classroom and clinical faculty in promoting and enhancing self-regulated learning.