

Public Abstract

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Title: Foundational Scientific Knowledge in Athletic Training Curricula

During 2015 the Commission on Accreditation of Athletic Training Education (CAATE) first publically identified they believe strong foundational scientific knowledge produces the best health care providers. Next, in May 2016 a set of proposed accreditation standards were published. One standard delineated that all AT programs must include: anatomy, biology, chemistry, physics, physiology, and psychology as pre-requisite knowledge. No studies to date have examined the relationship of foundational scientific knowledge course inclusion in AT curricula as a predictor of BOC pass-rates. This study was conducted to determine if there is a significant relationship between foundational scientific knowledge courses and 3-year aggregate first-attempt Board of Certification (BOC) pass-rates among CAATE accredited professional Athletic Training (AT) programs. All CAATE accredited professional programs in the United States were evaluated and three hundred and forty-nine ($n=349$) programs were used in this study. AT programs electronically published required science courses for degree completion and 3-year aggregate first-attempt program BOC pass-rates were utilized. Descriptive statistics, independent sample t-tests, and regression analyses were used to evaluate inclusion of science courses in AT curricula as predictors of BOC pass-rates. Results indicated that physics I was most significant, compared to the other courses, when predicting BOC pass-rates, accounting for 6% variance. The difference between the means was statistically significant ($t(204.85) = -5.103$, $r^2 = 0.06$, $p = .000$). AT programs that include physics and chemistry demonstrate a significant difference in BOC pass-rate means when compared to programs that do not. The difference between the means was found to be statistically significant with a small effect size ($t(347) = -2.179$, $r^2 = .014$, $p = .030$).