

THE RELATIONSHIP BETWEEN FITNESS AND ACADEMIC ACHIEVEMENT IN AN URBAN SCHOOL SETTING

Original scientific paper

Abstract

The purpose of this study was to examine the relationship between physical fitness (PF) and academic achievement (AA) in an urban setting. Participants (N = 172) consisted of elementary students (M_{age}=7.62, SD=.96) enrolled in physical education (PE) class. The investigators administered the FITNESSGRAM fitness test to all participants. Fitness data were compared to student achievement in language arts, reading, and mathematics as measured by criterion referenced, standardized tests. Students not receiving free or reduced lunch had significantly higher performance levels on CRCT language arts and mathematics than those receiving free lunch. Additionally, students not receiving free or reduced lunch had significantly higher performance levels on CRCT language arts than those receiving reduced lunch. Multinomial logistic regression analysis revealed that for language arts, back-saver sit-and-reach and socioeconomic status (SES) were significant predictors of meeting and exceeding expectations (back-saver sit-and-reach OR = 1.74, 95% CI = 1.06 – 2.88, Wald χ^2 = 4.71). For every 1% increase in the back-saver sit-and-reach, students were 17% more likely to meet expectations or exceed expectations on the language arts test. For mathematics, back-saver sit-and-reach was a predictor in terms of exceeding the standards only (back-saver sit-and-reach OR = 1.34, 95% CI = .97 – 1.87, Wald χ^2 = 3.08).

Keywords: *student learning, student performance, physical activity, physical education*