

Physical Fitness and Academic Achievement in Third- and Fifth-Grade Students

Darla M. Castelli, Charles H. Hillman, Sarah M. Buck, and Heather E. Erwin (University of Illinois at Urbana-Champaign)

STUDY: The relationship between physical fitness and academic achievement has received much attention owing to the increasing prevalence of children who are overweight and unfit, as well as the inescapable pressure on schools to produce students who meet academic standards.

RESULTS: This study examined 259 public school students in third and fifth grades and found that field tests of physical fitness were positively related to academic achievement. **Specifically, aerobic capacity was positively associated with achievement, whereas BMI was inversely related.** Associations were demonstrated in total academic achievement, mathematics achievement, and reading achievement, thus suggesting that aspects of physical fitness may be globally related to academic performance in preadolescents. The findings are discussed with regards to maximizing school performance and the implications for educational policies.

Key Words: cognition, preadolescent, exercise, standardized testing