Research on P.E. & Academic Achievement

"SPARK is a groundbreaking exploration of the connection between exercise and the brain's performance that shows how even moderate exercise will supercharge mental circuits to beat stress, sharpen thinking, enhance memory, and much more."

Why Play is Vital: No Matter Your Age (Stuart Brown)

"In Brain Rules, Dr. John Medina describes a brain rule—what scientists know for sure about how our brains work—and then offers transformative ideas for our daily lives."

"Eliminate physical education to increase time for reading and math, the theory goes, and achievement will rise. But the evidence says otherwise."

"In schools across the United States, physical education has been substantially reduced, and in some cases completely eliminated, in response to budget concerns and pressures to improve academic test scores. Yet the available evidence shows that children who are physically active and fit tend to perform better in the classroom and that daily physical education does not adversely affect academic performance. Schools can provide outstanding learning environments while improving children's health through physical education."

"This article focuses on research, which shows that nutrition and physical activity affect student academic achievement. Fewer than 25 percent of children in the U.S. get at least 30 minutes of any kind of daily physical activity and fewer than 30 percent of the U.S. high school students attend physical education class every day."

"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."

"This article presents several researches related to the relationship between physical education and academic performance, and the relationship of physical activity to academic achievement. Moreover, researches on the relationship of physical activity and points including the significant relationship of physical fitness and activity to academic achievement, engaging children to physical activity improves their cognitive ability and association of physical and social benefits of physical activity to success in school."

"This study examined the association between time spent in physical education and academic achievement in a longitudinal study of students in kindergarten through fifth grade. Among girls, higher amounts of physical education may be associated with an academic benefit. Physical education did not appear to negatively affect academic achievement in elementary school students. Concerns about adverse effects on achievement may not be legitimate reasons to limit physical education programs."


"This article's objective was to determine relationships between physical fitness and academic achievement in diverse, urban public school children. Results show statistically significant relationships between fitness and academic achievement, though the direction of causation is not known. While more research is required, promoting fitness by increasing opportunities for physical activity during PE, recess, and out of school time may support academic achievement."


"Because school administrators are under more scrutiny in recent years to provide quantitative evidence, more time and dollars are allocated to subjects that are assessed on state achievement tests. [...] research from the neurosciences appears to offer additional evidence that strengthens the case for daily physical education in K-12 education."


"An emerging body of multidisciplinary literature has documented the beneficial influence of physical activity engendered through aerobic exercise on selective aspects of brain function. Human and non-human animal studies have shown that aerobic exercise can improve a number of aspects of cognition and performance. This article examines the positive effects of aerobic physical activity on cognition and brain function, at the molecular, cellular, systems and behavioral levels. A growing number of studies support the idea that physical exercise is a lifestyle factor that might lead to increased physical and mental health throughout life."


"This review examines possible relationships between academic performance and participation in sports, physical education, and other forms of physical activity. Several quasi-experimental studies of other types of physical activity have been completed, mainly in primary school students; these have found no decrease in academic performance despite a curtailing of the time allocated to the teaching of academic subjects. Indeed, in some cases, experimental students undertaking more physical activity have outperformed control students. From the practical point of view, it can be concluded that the physical activity needed for healthy child development can be incorporated into the school curriculum without detriment to academic achievement."

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**Responsible Educators Accountable for Learning**

*Promoting quality physical education through accountability and access to resources*