

Frequently Asked Questions

IL Fitness Assessments and Data Reporting

1. Can fitness test results be used to grade a student or evaluate a teacher?

No, per 105 ILCS 5/27-6.5 of the Illinois School Code.

"Public schools shall integrate health-related fitness testing into the curriculum as an instructional tool, except in grades before the 3rd grade. Fitness tests must be appropriate to students' developmental levels and physical abilities. The testing must be used to teach students how to access their fitness levels, set goals for improvement, and monitor progress in reaching their goals. Fitness scores shall not be used for grading students or evaluating teachers."

2. Who must be tested, when, and how often?

All students in grades 3-12 must be tested annually in the 2nd semester. However, schools are encouraged to administer assessments at the start of the school year as well to have pre and post test results.

3. What tests and protocols must be used?

All students, except those with IEPs, will be assessed using FitnessGram tests and protocols. Teachers will administer:

- a) either the Mile Run or the PACER test to assess aerobic capacity;
- b) the Back-Saver Sit and Reach test (Alternate test: Trunk lift test) to assess flexibility;
- c) Curl-Ups for muscular endurance; and
- d) the Push-Up test for muscular strength.

Schools should use the Brockport fitness testing methodologies, when appropriate as determined by an Individualized Education Program (IEP) team, for students with disabilities.

4. When and how will fitness scores be reported to ISBE?

Teachers will submit aggregate data (only post-test/end of the year) to their school administrator by the date set by the district. Then, the district administrator will submit that aggregate data for each school and the district as a whole to ISBE by May 1st of each year via the ISBE Web Application Security (IWAS) system.

5. What information needs to be reported to ISBE

ISBE requires schools to report the number of students tested (using recommended tests or Brockport alternatives) and the number meeting the "healthy fitness zone" and the "needs improvement" categories for each of the required fitness test components by grade and by gender for grades 5, 7, and 10.

6. Where can I find information about FitnessGram tests and protocol?

Free materials – <http://www.pyfp.org/assessment/free-materials.shtml>

Testing-related information – <http://pyfp.org/assessment/index.shtml>

(e) On or before September 1, 2016, the State Board of Education shall adopt rules for data submission by school districts and develop a system for collecting and reporting the aggregated fitness information from the physical fitness assessments. This system shall also support the collection of data from school districts that use a fitness testing software program.

(f) School districts may report the aggregate findings of physical fitness assessments by grade level and school to parents and members of the community through typical communication channels, such as Internet websites, school newsletters, school board reports, and presentations. Districts may also provide individual fitness assessment reports to students' parents.

(g) Nothing in this Section precludes schools from implementing a physical fitness assessment before the 2016-2017 school year or from implementing more robust forms of a physical fitness assessment.

Section 99. Effective date. This Act takes effect upon becoming law.

Effective Date: 8/4/2014

testing into the curriculum as an instructional tool, except in grades before the 3rd grade. Fitness tests must be appropriate to students' developmental levels and physical abilities. The testing must be used to teach students how to assess their fitness levels, set goals for improvement, and monitor progress in reaching their goals. Fitness scores shall not be used for grading students or evaluating teachers.

(c) On or before October 1, 2014, the State Superintendent of Education shall appoint a 15-member stakeholder and expert task force, including members representing organizations that represent physical education teachers, school officials, principals, health promotion and disease prevention advocates and experts, school health advocates and experts, and other experts with operational and academic expertise in the measurement of fitness. The task force shall make recommendations to the State Board of Education on the following:

(1) methods for ensuring the validity and uniformity of reported physical fitness assessment scores, including assessment administration protocols and professional development approaches for physical education teachers;

(2) how often physical fitness assessment scores should be reported to the State Board of Education;

(3) the grade levels within elementary, middle, and high school categories for which physical fitness assessment scores should be reported to the State Board of Education;

(4) the minimum fitness indicators that should be reported to the State Board of Education, including, but not limited to, a score for aerobic capacity (for grades 4 through 12); muscular strength; endurance; and flexibility;

(5) the demographic information that should accompany the scores, including, but not limited to, grade and gender;

(6) the development of protocols regarding the protection of students' confidentiality and individual information and identifiers; and

(7) how physical fitness assessment data should be reported by the State Board of Education to the public, including potential correlations with student academic achievement, attendance, and discipline data and other recommended uses of the reported data.

The State Board of Education shall provide administrative and other support to the task force.

The task force shall submit its recommendations on physical fitness assessments on or before April 1, 2015. The task force may also recommend methods for assessing student progress on State Goals 19 and 21 through 24 of the Illinois Learning Standards for Physical Development and Health. The task force is dissolved on April 30, 2015.

The provisions of this subsection (c), other than this sentence, are inoperative after March 31, 2016.

(d) On or before December 31, 2015, the State Board of Education shall use the recommendations of the task force under subsection (c) of this Section to adopt rules for the implementation of physical fitness assessments by each public school for the 2016-2017 school year and every school year thereafter.

Public Act 098-0859

HB5397 Enrolled

LRB098 18839 OMW 53984 b

AN ACT concerning education.

WHEREAS, Regular physical activity is associated with a healthier, longer life and a lower risk of cardiovascular disease, high blood pressure, diabetes, obesity, and some cancers; and

WHEREAS, Physical activity offers young people many health benefits, including improved aerobic endurance and muscular strength, better weight control, and the opportunity to build lean muscle and bone mass and reduce fat; and

WHEREAS, Physically fit children have higher scholastic achievement, better classroom behavior, a greater ability to focus, and less absenteeism than their physically unfit counterparts; and

WHEREAS, One important way to stop this rise in childhood obesity is by establishing lifelong physical activity habits with strong physical education programs and regular physical activity opportunities in our nation's schools, both during and outside of the regular school day; and

WHEREAS, The Enhance Physical Education Task Force, established by Public Act 97-1102, recommended enhancing physical education to increase the amount of time students spend in moderate to vigorous physical activity, with an emphasis on fitness, skill-building, and cooperation; therefore

Be it enacted by the People of the State of Illinois, represented in the General Assembly:

Section 5. The School Code is amended by adding Section 27-6.5 as follows:

(105 ILCS 5/27-6.5 new)

Sec. 27-6.5. Physical fitness assessments in schools.

(a) As used in this Section, "physical fitness assessment" means a series of assessments to measure aerobic capacity, body composition, muscular strength, muscular endurance, and flexibility.

(b) To measure the effectiveness of State Goal 20 of the Illinois Learning Standards for Physical Development and Health, beginning with the 2016-2017 school year and every school year thereafter, the State Board of Education shall require all public schools to use a scientifically-based, health-related physical fitness assessment for grades 3 through 12 and periodically report fitness information to the State Board of Education, as set forth in subsections (c) and (e) of this Section, to assess student fitness indicators.

Public schools shall integrate health-related fitness

PEDIATRICS®

OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Effects of the FITKids Randomized Controlled Trial on Executive Control and Brain Function

Charles H. Hillman, Matthew B. Pontifex, Darla M. Castelli, Naiman A. Khan, Lauren B. Raine, Mark R. Scudder, Eric S. Drollette, Robert D. Moore, Chien-Ting Wu and Keita Kamijo

Pediatrics; originally published online September 29, 2014;
DOI: 10.1542/peds.2013-3219

The online version of this article, along with updated information and services, is located on the World Wide Web at:
<http://pediatrics.aappublications.org/content/early/2014/09/24/peds.2013-3219>

PEDIATRICS is the official journal of the American Academy of Pediatrics. A monthly publication, it has been published continuously since 1948. PEDIATRICS is owned, published, and trademarked by the American Academy of Pediatrics, 141 Northwest Point Boulevard, Elk Grove Village, Illinois, 60007. Copyright © 2014 by the American Academy of Pediatrics. All rights reserved. Print ISSN: 0031-4005. Online ISSN: 1098-4275.

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN™



Effects of the FITKids Randomized Controlled Trial on Executive Control and Brain Function

AUTHORS: Charles H. Hillman, PhD,^a Matthew B. Pontifex, PhD,^b Darla M. Castelli, PhD,^c Naiman A. Khan, PhD, RD,^a Lauren B. Raine, BS,^a Mark R. Scudder, BS,^a Eric S. Drollette, BS,^a Robert D. Moore, MS,^a Chien-Ting Wu, PhD,^d and Keita Kamijo, PhD^a

^aDepartment of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, Urbana-Champaign, Illinois;

^bDepartment of Kinesiology, Michigan State University, East Lansing, Michigan; ^cDepartment of Kinesiology and Health Education, University of Texas at Austin, Austin, Texas;

^dDepartment of Exercise Science, Schreiner College, Kerrville, Texas, and ^eSchool of Sport Sciences, Waseda University, Tokorozawa, Saitama, Japan

KEY WORDS

cognition, physical activity, aerobic fitness, randomized controlled trial

ABBREVIATIONS

ANOVA—analysis of variance

CI—confidence interval

ERP—event-related brain potential

FITKids—Fitness Improves Thinking in Kids

HR—heart rate

MVPA—moderate to vigorous physical activity

SES—socioeconomic status

RT—reaction time

Vo_{2peak}—maximal oxygen consumption

Dr Hillman conceptualized and designed the study, drafted the initial manuscript, and critically reviewed the manuscript; Dr Pontifex coordinated and supervised data collection and reduction. He assisted in revising the initial manuscript and critically reviewed the manuscript; Dr Castelli conceptualized and designed the physical activity intervention, assisted in revising the initial manuscript, and critically reviewed the manuscript; Dr Khan, Ms Raine, Mr Scudder, Mr Drollette, Mr Moore, Dr Wu, and Dr Kamijo coordinated and supervised data collection and reduction. They also assisted in revising the initial manuscript and critically reviewed the manuscript; and all authors approved the final manuscript as submitted.

This trial has been registered at www.clinicaltrials.gov (identifier NCT01334359).

www.pediatrics.org/cgi/doi/10.1542/peds.2013-3219

doi:10.1542/peds.2013-3219

Accepted for publication Jul 25, 2014

Address correspondence to Charles H. Hillman, PhD, Department of Kinesiology and Community Health, University of Illinois at Urbana-Champaign, 317 Louise Freer Hall, 906 South Goodwin Ave, Urbana, IL 61801. E-mail: chhillma@illinois.edu

PEDIATRICS (ISSN Numbers: Print, 0031-4005; Online, 1098-4275).

Copyright © 2014 by the American Academy of Pediatrics

(Continued on last page)



WHAT'S KNOWN ON THIS SUBJECT: Physical activity programs have been shown to have positive implications for children's cognitive performance and brain structure and function. However, additional randomized controlled trials are needed to determine whether daily physical activity influences executive control and its neural underpinnings.



WHAT THIS STUDY ADDS: The randomized controlled trial, designed to meet daily physical activity recommendations, used behavioral and electrophysiological measures of brain function to demonstrate enhanced attentional inhibition and cognitive flexibility among prepubertal children.



OBJECTIVE: To assess the effect of a physical activity (PA) intervention on brain and behavioral indices of executive control in preadolescent children.

METHODS: Two hundred twenty-one children (7–9 years) were randomly assigned to a 9-month afterschool PA program or a wait-list control. In addition to changes in fitness (maximal oxygen consumption), electrical activity in the brain (P3-ERP) and behavioral measures (accuracy, reaction time) of executive control were collected by using tasks that modulated attentional inhibition and cognitive flexibility.

RESULTS: Fitness improved more among intervention participants from pretest to posttest compared with the wait-list control (1.3 mL/kg per minute, 95% confidence interval [CI]: 0.3 to 2.4; $d = 0.34$ for group difference in pre-to-post change score). Intervention participants exhibited greater improvements from pretest to posttest in inhibition (3.2%, 95% CI: 0.0 to 6.5; $d = 0.27$) and cognitive flexibility (4.8%, 95% CI: 1.1 to 8.4; $d = 0.35$ for group difference in pre-to-post change score) compared with control. Only the intervention group increased attentional resources from pretest to posttest during tasks requiring increased inhibition (1.4 μ V, 95% CI: 0.3 to 2.6; $d = 0.34$) and cognitive flexibility (1.5 μ V, 95% CI: 0.6 to 2.5; $d = 0.43$). Finally, improvements in brain function on the inhibition task ($r = 0.22$) and performance on the flexibility task correlated with intervention attendance ($r = 0.24$).

CONCLUSIONS: The intervention enhanced cognitive performance and brain function during tasks requiring greater executive control. These findings demonstrate a causal effect of a PA program on executive control, and provide support for PA for improving childhood cognition and brain health. *Pediatrics* 2014;134:e1063–e1071