

January 2011

JOHN W. GARDNER CENTER for Youth and Their Communities

Community-Based After School Programs and Youth Physical Fitness

Background

At the request of Redwood City partners and with funding from the Robert Wood Johnson Foundation's *Salud America!* initiative, the John W. Gardner Center for Youth and Their Communities at Stanford University undertook an analysis of the extent to which participation in community-run after school programs is associated with youth physical fitness outcomes. This research occurred in tandem with the launch of Redwood City 2020's wellness initiative, which aligns with the federal *Let's Move!* campaign. The aims of both initiatives are to promote physical activity and improving access to healthy food.

Medical research shows that activity-focused after school programming can lead to improvements in youth obesity and fitness. However, the programs studied have been small, time-limited medical trials, rather than the sustainable community-designed and led programs that are the focus of this study. The study links individual-level data from Redwood City Schools District (RCSD) and Sequoia Union High School District (SUHSD), the City of Redwood City, and other after school providers using the Youth Data Archive (YDA) to study:

- What is the extent of participation in primarily fitness-focused and other types of after school programs among different student groups?
- What are the effects of participation in primarily fitness-focused and other types of programs on students' physical fitness trajectories?

Although both nutrition and physical activity are important components of weight and fitness, the available data do not include information on nutrition. We therefore focus this analysis exclusively on physical activity.

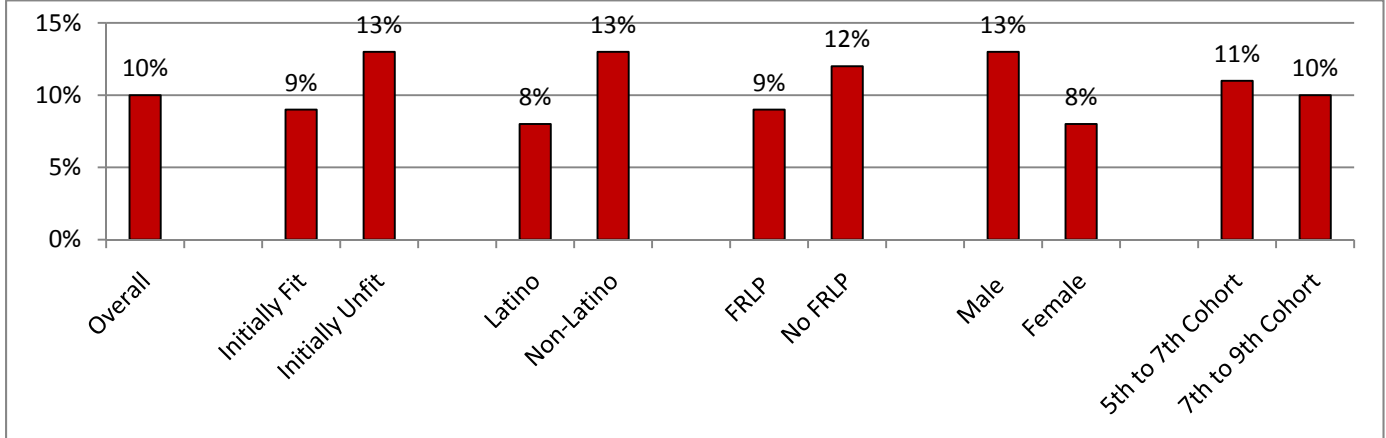
After School Participation and Physical Fitness Outcomes

To understand the link between after school participation and physical fitness, we followed a cohort of fifth and seventh grade students and examined whether participating in after school programs over the next two years increased the likelihood that a student was physically fit. Students were considered "physically fit" if they passed five of six components of the California Physical Fitness Test. The analysis included a sample of seven different after school program providers, including programs that had an explicit fitness focus and those that did not, including some that combined

fitness and other enrichment activities. We found that:

- Two-thirds (64%) of students in the fifth grade cohort and half (49%) of students in the seventh grade cohort participated in at least one after school program. Latino students and those who were physically unfit were less likely to participate in primarily fitness-focused programs, but these groups were almost equally likely to participate in other enrichment programs.
- After controlling for initial fitness level, socioeconomic status, and other factors that might influence students’ fitness trajectories, we found that participation in primarily fitness-focused programs was associated with a 10% increase in the likelihood of being physically fit (Exhibit 1), with a larger effect for students who participated in fitness programs in both years. The effect of participation was largest among those who were initially unfit, male and non-Latino. We did not find any effect of participating in other enrichment programs on fitness status.

Exhibit 1: Effect of Participating in Primarily Fitness-Focused Programs After School on Likelihood of Being Physically Fit at End of Cohort Period (Controlling for Initial Fitness Level)



Implications of this Study

Findings support the notion that community-led fitness-focused after school programs can help students to maintain or improve their fitness levels. However, Latino students had lower levels of participation in these programs and smaller effects of participation on fitness outcomes. Programs could consider improving existing outreach to further target typically underserved students. Students participating in other types of enrichment programs, including those that had fitness as secondary components, did not receive any fitness benefits. These programs could consider ways to include additional fitness components along with their curriculum.

San Mateo County recently released an update to its Get Healthy San Mateo County initiative that described the need to “improve food and physical activity in the school environment” as one of three major areas of focus. Specific strategies included physical activity programs before, during, and after school, as well as efforts to improve nutrition through community gardens, improving the nutritional content of school meals, and removing unhealthy food and drinks from vending machines on school campuses.