

# Active Living Research

Using Evidence to Prevent Childhood Obesity  
and Create Active Communities

## ARTICLE SUMMARY

March 2012

## Impact and Cost-Effectiveness of Family Fitness Zones: A Natural Experiment in Urban Public Parks

### Introduction

Many communities and organizations make changes to local parks to increase physical activity, yet the effectiveness of these modifications is seldom evaluated. We evaluated the impact of installing Fitness Zone equipment — durable, outdoor exercise machines for strength training and aerobic exercise — in 12 parks that served diverse communities.

### Key Findings

After installation of the Fitness Zones, we measured an overall increase in park visitors' energy expenditure while in the parks, and half of the parks with new Fitness Zone equipment also experienced increases in the number of park users. The increases in physical activity reflected a cost-effectiveness ratio equivalent to spending 10.5 cents to get a person to walk briskly for 20 minutes.

Compared to similar parks that did not get Fitness Zone equipment, parks with the new equipment experienced greater increases in the number of park users and total park-based physical activity, but the differences were not statistically significant.

Fitness Zone equipment was used throughout the day and appeared to attract new park users, especially in smaller parks surrounded by a high population density. In contrast, increases were less likely in Fitness Zone parks that were less accessible, larger and already had a wide variety of programs and facilities.

### Methodology

We observed the use of 12 parks before and after installing the Fitness Zone equipment, as well as in 10 similar parks that did not have the equipment installed. Fitness Zone equipment is weatherproof, easy-to-use, low-maintenance and appropriate for people of all fitness levels who are 13 years and older.

### SOURCE

Cohen, D.A., Marsh, T., Williamson, S., Golinelli, D., McKenzie, T.L. (2012). Impact and cost-effectiveness of family Fitness Zones: A natural experiment in urban public parks. *Health & Place*, 18(1), 39-45.

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Our observation included counts of every individual within targeted areas in the park, as well as each visitor's gender, estimated age range, race and ethnicity, and physical activity level during observation. Observations were conducted three times per day (morning, midday and late afternoon) on four days, systematically rotating the hours to cover all daylight time periods over two weekdays and both weekend days in each park.

In the Fitness Zone parks we also conducted interviews with 742 park users at baseline, 942 at the first follow-up and 952 at the second follow-up. We interviewed people both in and away from the Fitness Zone areas and asked them about their perceptions of the park, use of the park and use of fitness equipment.

## Other Findings

Weight loss was the primary reason people gave for using the Fitness Zone equipment. A greater proportion of women used the Fitness Zone equipment than were observed in the parks altogether. Fitness Zone users lived closer to parks than other park area users. There was also an increase in physical activity among park users *outside* the Fitness Zone area.

## Implications

Installing Fitness Zone equipment in parks with limited facilities and in areas that are nearby, and easily accessible to, large populations may increase both park use and physical activity levels among park visitors.

The installations occurred during an economic recession when park budgets declined and park attendance appeared to decrease; park use decreased less in parks with Fitness Zones. In general, novel features in parks can attract users with special interests, and the Fitness Zone equipment appeared to attract visitors with an interest in health and weight loss.