

# Active Living Research

Using Evidence to Prevent Childhood Obesity  
and Create Active Communities

## ARTICLE SUMMARY

March 2012

## Neighborhood Safety and Attractiveness May Help Increase Physical Activity among Women

### Introduction

Obesity rates in the United States have soared across all categories of race and ethnicity, but African Americans and Latinos suffer from obesity and related chronic conditions at a disproportionately high rate. African American and Latina women also have lower levels of physical activity than other racial or ethnic groups. Developing strategies to increase physical activity among African American and Latina women is critical for promoting health and reducing obesity within these populations.

For this study, we enrolled African American and Latina women in a six-month intervention program that either promoted physical activity or encouraged increased consumption of vegetables and fruits. We investigated whether street-scale elements that contribute to neighborhood safety and attractiveness, such as crosswalks and stop signs, affected the likelihood that participants of both groups would adopt and maintain physical activity.

### Key Findings

As the number of traffic control devices, such as stop signs and street lights, and crossing aids, such as sidewalks, in a neighborhood increased, women in the physical activity group were more likely to do physical activity and maintain the physical activity over time (Figure 1). As the number of pedestrian amenities, such as benches and trash cans, in a neighborhood increased, women in the vegetable and fruit group were more likely to do physical activity and maintain the physical activity over time.

### Methodology

For this study, 309 women (202 African American women and 107 Latina women) with an average age of 43.5 from Houston and Austin, Tex., participated in a six-month intervention program that aimed to either increase physical activity or increase consumption of vegetables and fruits.

We measured physical activity using surveys and accelerometers (portable devices that measure levels of physical activity) before and after the program. Trained research team members systematically counted street-scale features in participants' neighborhoods that might be associated with safety and attractiveness for walking and bicycling.

### SOURCE

Lee, R.E., Mama, S.K., Medina, A.V., Ho, A., Adamus, H.J. (2012). Neighborhood factors influence physical activity among African American and Hispanic or Latina women. *Health & Place*, 18(1), 63-70.

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## Other Findings

African American women had higher rates of physical activity both before and after the program compared with Latina women.

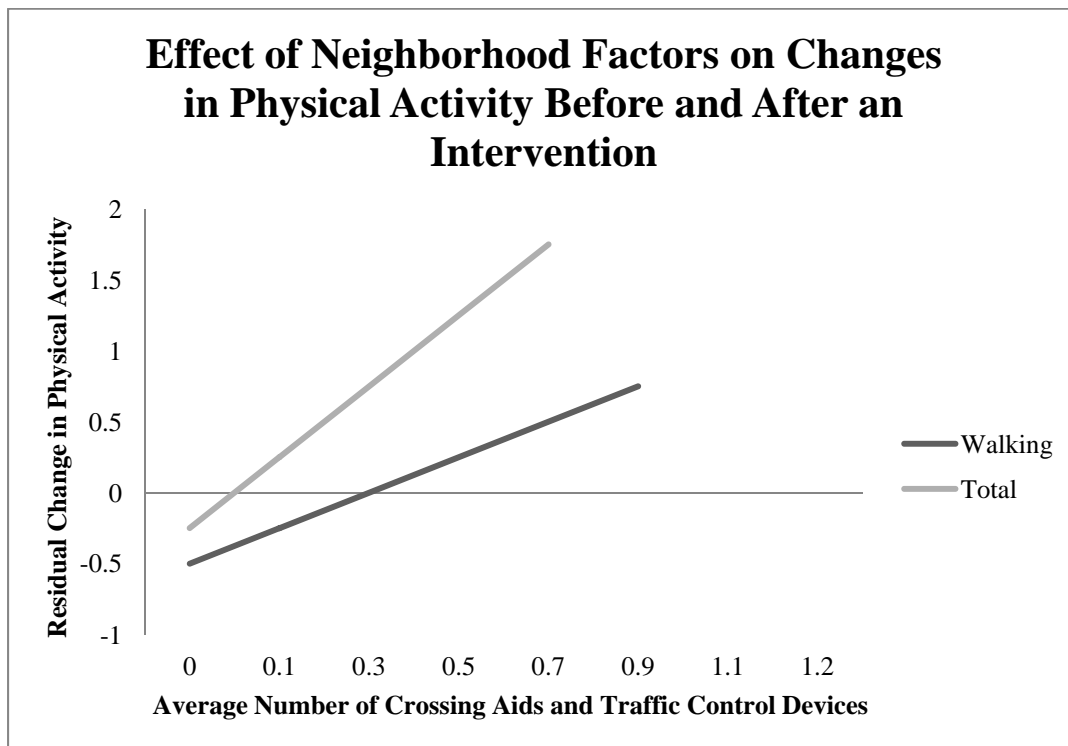
There also were differences in the physical attributes of participants' neighborhoods. Neighborhoods where African American participants lived tended to have more driving lanes and higher speed limits than the neighborhoods where Latina participants lived. Neighborhoods in Houston had more driving lanes, and were perceived as less safe for bicycling, compared with those in Austin.

## Implications

Health-promoting programs may be more effective for increasing physical activity when participants live in a neighborhood that is safe and attractive for physical activity. Women who participated in a physical activity intervention were more likely to increase their physical activity if their neighborhoods had certain street-scale elements, such as traffic-control devices, and pedestrian or cycling crossing aids, and women who participated in a vegetable and fruit intervention were more likely to increase their physical activity if they had other pedestrian amenities.

Future research should continue to investigate the relationship between health-promoting programs and features of participants' neighborhoods. City planners should consider the importance of street-scale features that contribute to neighborhood safety and attractiveness and encourage residents to be active. Policies that support safe and attractive places for people to be active may help improve the health of residents.

Figure 1



**Note.** Walking and total physical activity were both measured as the amount reported by women per week based on the survey. Residual change is a standardized value for the amount of change in physical activity predicted by our statistical model, and represents a significant increase in physical activity from before to after the intervention period depending on the number of crossing aids and traffic control devices in the neighborhoods of those women who participated in the physical activity group.