Active Living Research
Using Evidence to Prevent Childhood Obesity and Create Active Communities

RESEARCH BRIEF
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Community Design Impacts Where and with Whom Children are Physically Active

Introduction

Smart growth is an urban planning strategy that promotes compact housing development, walkable neighborhoods, close proximity of housing to shops and restaurants, and ample parks and recreation areas. These community design features have the potential to promote physical activity and reduce risk for obesity. This study examined whether children living in a community designed according to smart growth urban planning principles are physically active in different types of places or with different types of people than children living in conventional suburbs.

Key Findings

Children living in the smart growth community engaged in more of their physical activity within a few blocks from home, at places they walked to, and with friends, compared with children living in the conventional suburbs (Figure 1).

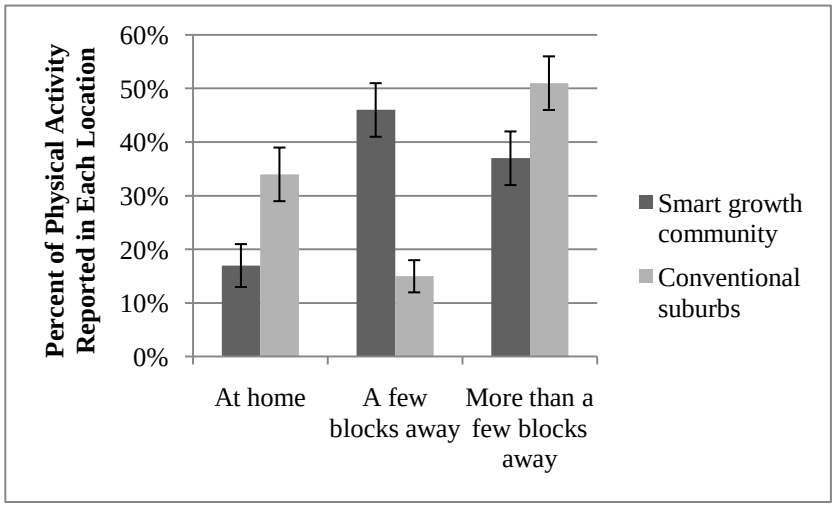

Figure 1: Differences between the smart growth community and conventional suburbs in how far from home children are reporting physical activity.

SOURCE
Dunton, G.F., Intille, S.S., Wolch, J., Pentz, M.A. (2012). Investigating the impact of a smart growth community on the contexts of children's physical activity using Ecological Momentary Assessment. *Health & Place*, 18(1), 76-84.

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CORRESPONDING AUTHOR
Genevieve Fridlund Dunton

University of Southern California

Soto Street Building (SSB)
200 Soto N. Street, 3rd floor, MC 9239
Los Angeles, CA 90033-9045

Email: dunton@usc.edu

Phone: 323-442-8224

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Methodology

We studied the behavior of 121 children (ages 9 to 13) who lived in San Bernardino County, Calif. Approximately half of the children had recently moved into a community designed according to smart growth urban planning principles, and the other half lived in nearby conventional communities. Children responded to electronic surveys delivered on mobile phones at random times across four days (Friday through Monday). The electronic surveys asked children to report whether they were engaging in physical activity, and if they were, where and with whom, as well as how they perceived their settings. During the four-day study period, participating children wore a small activity monitor on their hip that used an accelerometer motion sensor to measure physical activity. Each child was studied for two four-day periods, six months apart.

Other Findings

Prior to this study, little was known about how children's physical activity behaviors are affected by living in smart growth communities. After six months or more of living in the smart growth community, children were less likely to be physically active inside their homes and in locations with high motor vehicle traffic. Children who had lived in the smart growth community for more than six months also had higher overall levels of physical activity than children who had lived there fewer than six months. These findings suggest that moving to a smart growth community may change the types of places where children are physically active and increase the overall amount of physical activity in which they engage.

Implications

Children living in smart growth communities engage in more physical activity near their homes than children who live in traditional suburban communities, possibly because smart growth communities may provide children better access to parks, playing fields and community centers that do not require parents to drive. Furthermore, children in smart growth communities may be active more often with friends, because more children live within walking distance.

Zoning and land use policies that promote compact housing development, walkable neighborhoods, close proximity of housing to shops and restaurants, and access to parks and recreation areas have the potential to increase children's physical activity and reduce their risk for obesity.