ACTIVE WHERE? PROJECT
METHODS AND OVERVIEW

Overview
The Active Where? Study was designed to develop new measures of environmental correlates of diet and physical activity specifically for youth. The environments of interest were home, community, and school. Three different sites were involved in this study in order make the findings more generalizable. These sites were in: San Diego, California; Cincinnati, Ohio; and Boston, Massachusetts. A survey was administered to a sample of adolescents, parents of these adolescents, and parents of a sample of children. The study was supported by Active Living Research (ALR), a program of the Robert Wood Johnson Foundation.

The Active Where? Surveys can be found at the following address:
https://kpwashingtonresearch.org/application/files/3317/3636/7692/ActiveWhere_parent_child_survey.pdf
https://kpwashingtonresearch.org/application/files/2117/3636/7692/ActiveWhere_parent_adolescent_survey.pdf
https://kpwashingtonresearch.org/application/files/6817/3636/7692/ActiveWhere_adolescent_survey.pdf

Setting
The Active Where? Study took place in San Diego, Boston, and Cincinnati.
Neighborhoods selected for recruitment in San Diego and Boston were determined using census information for income and walkability. Walkability was determined in San Diego using maps and local knowledge. Cincinnati used a more complex system that incorporated land use and street network information to determine walkability. The neighborhoods selected were then categorized in one of four quadrants: low income and low walkability, low income and high walkability, high income and low walkability, and high income and high walkability.

Sample
Participants included adolescents age 12-19 years old and a parent of the adolescent. Both adolescent and parent completed the same surveys on two occasions approximately 2 weeks apart.

Recruitment
Data were collected from three cities to enable a range of environments, weather conditions, ethnic diversity and levels of neighborhood walkability. A sprawl score for each metropolitan area shows how much the housing is spread out, homes are segregated from other places, they have only weak centers of activity, and they have poorly connected street networks (McCann, Ewing, Smart Growth, 2003). A recent study found a correlation between BMI and sprawl indicating that people who live in more sprawling communities are more likely to be heavier than people who live in more compact communities (McCann, 2003 pg13). A higher sprawl index score indicates lower sprawl. The cities in this study received the following sprawl scores respectively; Cincinnati 96, San Diego 101.9, and Boston 126.9 (Smart Growth America). These differences highlight the variations between the cities included in this study, particularly the impact the variation may have on eating and physical activity, allowing for more generalizable

results. Slight variation also occurred in the recruitment methods used at each site. Each site obtained approval from the appropriate Institutional Review Board (IRB). Differences in the IRB approval process and resources of each site determined the methods used. The use of varying cities and recruitment methods ensured a wide range of participants in this study.

SAN DIEGO RECRUITMENT

Community Centers and Events

One week prior to recruitment at community centers and local events fliers with information on the study, contact information, and dates when researchers would be at each location were hung in the participating centers. The researchers then attended local events and recreation centers in each of the four quadrants where they explained the study, answered questions, and gave participants packets with required materials.
The packet included a survey for the adolescent and for the parent, assent and consent forms, contact information, information on the study, and a pre-paid return envelope.
Participants were able to fill out the survey at their own convenience.

Phone Recruitment

Phone numbers of parents with adolescents' age 12-17 who lived in the pre-selected quadrant neighborhoods were obtained from a local marketing company. Participants were contacted without a letter and asked to participate in the study. Once a person agreed to participate in the study the packet described in the previous section was sent to the participant by mail. They were then able to go over the information, fill out the survey, and return finished materials at their own convenience.

CINCINNATI RECRUITMENT

Mail Recruitment

Using a list of phone numbers available to researchers, families who had an adolescent age 12-17 and lived in the pre-selected neighborhoods were sent letters with information on the Active Where? Study. A follow-up call was administered to the possible participants to determine their desire to participate in the study. Those who agreed to participate and were eligible were sent surveys and consent forms in the mail. At completion of each survey, participants returned surveys and consent forms in pre-paid envelopes.

BOSTON RECRUITMENT

On Site Recruitment

Researchers left information about the Active Where? Study for children and adolescents at local community centers to take home to parents. One week following, researchers came to the community center and administered surveys for the adolescents who agreed to participate and who had a signed consent form from parents. Parents returned completed survey by mail.

Mail Recruitment

A phone list provided by the YWCA Youth Voice Collaborative was used to contact possible participants in the study. A letter with information on the study was sent to each possible

participant. A-follow up phone call was then administered to determine interest in participation. Once a person agreed to participate in the study, a packet of materials was sent to the participant. The participant filled out the survey and consent forms and returned the survey in a pre-posted envelope.

Procedure

Both adolescent and parent completed the same surveys on two occasions to evaluate the test-retest reliability of the survey instrument over time. Physical activity, fruit and vegetable consumption and height and weight (used to calculate BMI and BMI percentiles) were also reported in order to assess survey validity. The parents and adolescents completed the same items in order to assess differences in perception and establish which group would be a more reliable source of data for perceived neighborhood environment. Approximately one week after receipt of the original survey a second survey was sent to each participant, to enable a 2 week test retest period. The dates of the first and second survey completion and receipt were recorded. After 10 days, the researchers placed a reminder call to participants for the second survey. Immediately following receipt of the retest survey, a gift card was sent to the participant. Upon receipt, the survey responses were received and a research assistant attempted to obtain missing information (if applicable) from participants by phone. Data were entered into an Access form. The data were then checked for correct entry by hand and by a double entry procedure.

Measures

The survey was developed through formative research (i.e., phone interviews and in vivo interviews with a different sample of children and adolescents and their parents) and adaptation of previous measures. Items were discussed with experts for face validity. The survey was pilot tested in all sites among parents and adolescents and amended to improve understanding and readability. Surveys took 30-45 minutes to complete. Following the survey introduction, age, gender, height and weight were reported.

The survey(s) included the following sections:

- Section A has 13 items assessing the number of electronic devices in the home and in the child's bedroom.
- Section B has 20 items assessing the time to walk to various commercial and public destinations. Based on a five point scale, ranging from 1-5 minutes to 30 minutes or more.
- Section C has 14 items assessing the time to walk to recreation locations. Based on a five point scale, ranging from 1-5 minutes to 30 minutes or more.
- Section D has 17 items assessing a) the frequency of activity in recreation locations and b) whether the child usually walked or biked to that location. A is based on a four point scale, ranging from Never to Once a Week or More. B is based on a two point scale, ranging from Yes to No.
- Section E and F have 18 items assessing the barriers to walking or biking to the local park and to shops and restaurants. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section G has 21 items assessing barriers to activity in parks and the local neighborhood. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section H has 4 questions assessing types of homes in the neighborhood. Based on a five

point scale, ranging from None to All.

- Section I has 6 items assessing ease of access to local services. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section J has 3 items assessing aspects of streets in the neighborhood. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section K has 3 items assessing the different places for walking. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section L has 4 items assessing the aesthetic features of the neighborhood. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section M has 13 items assessing the safety of the neighborhood. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section N has 2 items assessing the impact of bad weather on physical activity. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section O has 5 items assessing how often the child is active in the local neighborhood. Based on a four point scale ranging from Never to Once a Week or More.
- Section P has 14 items assessing how often objects promoting physical activity are used in the child's home environment. Based on a five point scale, ranging from Not Available to Use Once a Week or More.
- Section Q has 9 items assessing the time the child spends in physical activity.
- Section R has 23 items assessing the amount of time spent during sedentary behavior. Based on a seven point scale, ranging from None to 4 hours or more.
- Section S has 38 items assessing rules for: playing outside, TV and related behaviors, and for eating. Based on a 3 point scale, ranging from Yes to Sometimes.
- Section T has 18 items assessing the availability of specific types of food in the adolescent's home. Based on a five point scale, ranging from Never to Always.
- Section U has 23 items assessing different aspects about the physical activity environment in the adolescent's school.
- Section V has 18 items assessing the barriers to walking and biking to school. Based on a four point scale, ranging from Strongly Disagree to Strongly Agree.
- Section W has 20 items assessing specific food availability at the adolescent's school and the surrounding areas, and days per week eating specific food or at specific places. Availability was assessed by Yes, No. If yes was selected adolescent was then prompted to answer how many days a week of use, ranging from 0 to 5.
- Section X has 13 demographic items.

Active Where? Publications

- Rosenberg, D., Ding, D., Sallis, J.F., Kerr, J., Norman, G.J., Durant, N., Harris, S.K., and Saelens, B.E. (2009). Neighborhood Environment Walkability Scale for Youth (NEWS-Y): Reliability and relationship with physical activity. Preventive Medicine, 49, 213-218.
- Rosenberg, D., Sallis, J.F., Kerr, J., Maher, J., Norman, G.J., Durant, N., Harris, S.K., and Saelens, B.E. (2010). Brief scales to assess physical activity and sedentary equipment in the home. International Journal of Behavioral Nutrition and Physical Activity, 7, 10. http://www.ijbnpa.org/content/7/1/10
- Millstein, R.A., Strobel, J., Kerr, J., Sallis, J.F., Norman, G.J., Durant, N., Harris, S., and Saelens, B.E. (2011). Home, school, and neighborhood environment factors and youth physical activity. Pediatric Exercise Science, 23(4), 487-503. http://www.ncbi.nlm.nih.gov/pubmed/22109776
- Ding, D., Bracy, N.L., Sallis, J.F., Saelens, B.E., Norman, G.J., Harris, S.K.,

Durant, N., Rosenberg, D., and Kerr, J. (2012). Is fear of strangers related to physical activity among youth? American Journal of Health Promotion, 26(3), 189-195.

- Ding, D., Sallis, J.F., Norman, G.J., Saelens, B.E., Harris, S.K., Kerr, J., Rosenberg, D., Durant, N., and Glanz, K. (2012). Community food environment, home food environment, and fruit and vegetable intake of children and adolescents. Journal of Nutrition Education and Behavior, 44, 634-638
- Durant, N., Kerr, J., Harris, S.K., Saelens, B.E., Norman, G.J., Sallis, J.F. (2009). Environmental and safety barriers to youth physical activity in neighborhood parks and streets: reliability and validity. Pediatric Exercise Science, 21(1), 86-99.