

# Using SOPARC to inform active living planning in micropolitan cities in the Midwest

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#### BACKGROUND

- Physical inactivity is associated with higher risk for many chronic diseases and poor quality of life
- Low levels of physical activity were identified as a concern in a micropolitan city in the Midwest
- Individual, community, and policy related factors are associated with increasing physical activity
- Active Ottumwa- a community-based participatory research interventionwas established to promote PA
- A goal of the intervention is to increase usage of parks and recreational areas, therefore, a tool to monitor physical activity is implemented

#### **Purpose of the study**

• Use a System for Observing Play and Recreation in Communities (SOPARC) to obtain information on participation in community parks and recreational environments to inform local government planning efforts

## **METHODS**

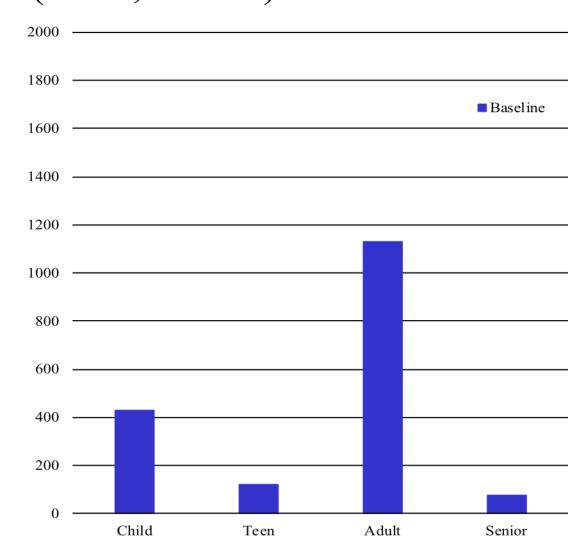
SOPARC is a valid and reliable method to investigate physical activity and associated variables in community parks and recreational facilities

- Data was collected at baseline and 12 months; we present baseline data
- Observers were trained on the systematic review and definitions of measures
  - Observers collect data on:
    - Perceived gender (male or female)
    - Intensity of PA (sedentary, moderate, or vigorous)
    - Apparent age (child, teen, adult, or senior)
    - Contextual characteristics (accessibility, usability, supervision of PA, availability of equipment for PA, organized activity, and time of day)
    - Predominant and secondary types of PA (fitness, sports, game, and sedentary)
- Baseline data was collected by a total of 9 observations in each site:
  - 5 community parks
  - 1 indoor location
  - 2 trails path locations
- 2 weekday and 1 weekend observation was collected in a time period of:
  - 3 mornings
  - 3 afternoons
  - 3 evenings

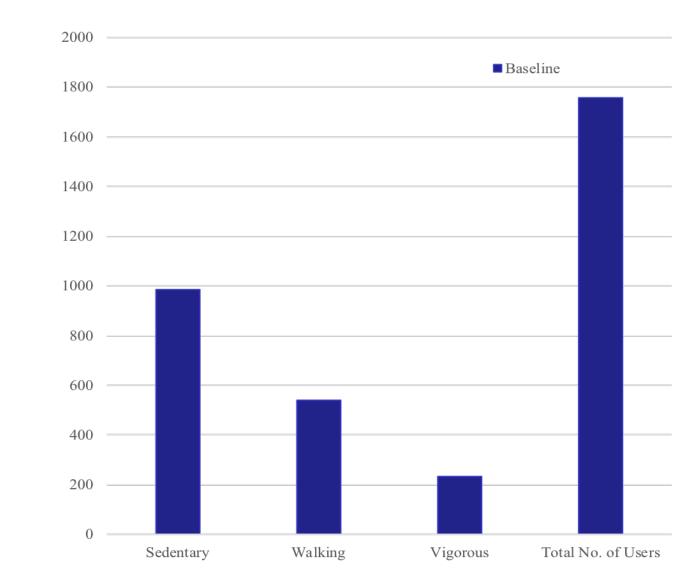
#### **RESULTS**

Observations were conducted in 8 targeted areas at baseline recorded a total of 2027 visit including both parks and recreational areas

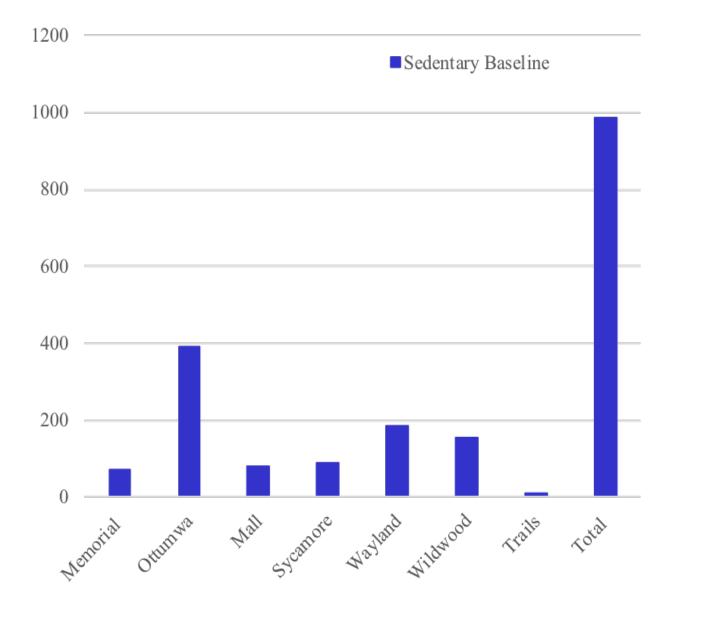
- Data collected showed open spaces, such as public parks and trails being more popular with 1597 of the total visits while indoor locations only accounted for 450 of the total visits collected
  - Adults were more frequent users of parks (n=878,42.91%), followed by children (n=399,19.50%), teens (n=99, 4.84%), and seniors (n=40, 1.95%)

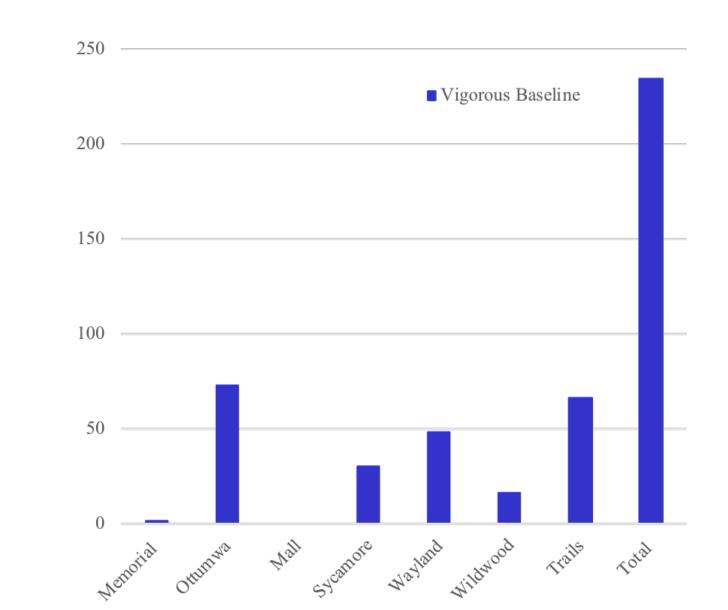


Sedentary intensity was the most observed intensity



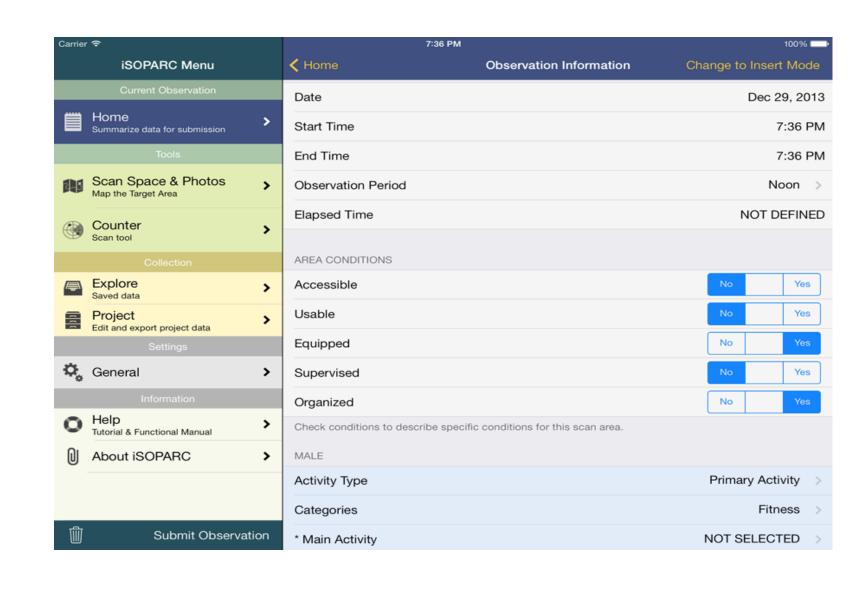
• Sedentary intensity was most prevalent in Ottumwa Park <u>n=393(22.28%)</u>, the same park also accounted for most vigorous activities <u>n=73(4.15%)</u>





### **MATERIALS**

Instrument used for monitoring and collecting data on individual's physical activity





# CONCLUSIONS

- The results can be used to demonstrate how accessibility appear to be related to how many people is observed in a park
- The data collected from these observations can be used to guide and inform stakeholder and local government actions in the community when framing and thinking about future interventions and programs to improve park accessibility usage
- . This data could also be used to understand how contextual characteristics for example, accessibility and usage recreation areas are related to increasing physical activity levels in the community

#### **IMPLICATIONS**

The HEAL principles of system thinking and capacity building applied to this project:

Systems Thinking: Using SOPARC we are evaluating the bigger picture of the usage of community parks and recreational areas by looking at problems as a conjunction of overall systems rather than focusing on isolated events

Capacity Building: Is being used because any data collected could be beneficial for community leaders for future intervention on social and health issues.

