

Park Usage in Relationship to Available Features and Amenities in a Large Urban Park

Hannah Clauss; Eugene Fitzhugh, PhD, Faculty Advisor

Department of Kinesiology, Recreation, and Sports Studies; The University of Tennessee, Knoxville

Abstract

Purpose: The purpose of this study was to examine the relationship between park features and park use in a large urban park. At 45.33 acres, West Hills Park has amenities such as athletic courts and fields, picnic areas, and a 1.9-mile paved trail. **Methods:** Park usage was assessed using the System for Observing Play and Recreation in Communities tool that measures use by gender, age, ethnicity, and moderate to vigorous physical activity (MVPA). Data was collected in 18 zones over four days with three observations per day (morning, midday, and evening). Park features, amenities, and condition, were assessed using the Environmental Assessment of Public Recreation Spaces (EAPRS) tool. Results: In total, 440 individuals were observed using the park. The EAPRS score was 31.78, a high rating. 68.3% of park users were at a MVPA level. Athletic courts had the highest percentage of MVPA users (46.8%) followed by open spaces (20.7%) and playgrounds (20.1%). Sedentary behaviors were observed near pavilions. **Discussion:** MVPA levels are related to the type and condition of park amenities. Park directors may increase MVPA at the design phase of park development by selecting high-intensity amenities.

Background

Local parks provide a great opportunity for the public to be physically active (PA). In the city of Knoxville, TN, 49.7% of people live within a 10-minute walk of a local neighborhood park⁴. Park features and amenities are important driving factors for how people use the park. West Hills Park, serving a large neighborhood in Knoxville, provides a great opportunity to observe how people are physically active across a wide range of features (e.g., open spaces, playgrounds, athletic fields) and amenities (benches, tables, natural feathers)⁶.



Purpose

The purpose of this study was to examine the relationship between park features and PA in a large urban park, West Hills Park. Questions such as who is using the park at any given time and how is the park being used helped drive the investigation.

Methodology

Physical Activity Observations:

The System for Observation Play and Recreation in Communities (SOPARC) was conducted on 4 days during the 2nd week of 2018.

- PA observations were made three times per day (morning, midday, evening) and over 18 zones within 6 categories: open spaces, athletic courts, athletic fields, playgrounds, pavilions (open space), and pavilions (athletic).
- Each park user was observed for gender, age, ethnicity, and PA intensity².

Park Features and Amenities:

The Environmental Assessment of Public Recreation Spaces (EARPS) was used to assess the number and quality of park features and amenities. The EARPS allows the user to calculate a features score and overall park score⁵.

Results

Table 1 provides a demographic profile of park users (N=440). Regarding overall park features/amenities, West Hills scored a 82.8%. The scores by park categories are found in Table 2. Figure 1 provides a PA intensity profile of users across park categories.

Table 1: Demographic Profile of Park Users

User Demographic		Users (n)	Users (%)
Gender	Female	200	45.5
	Male	240	54.5
Age	Child	114	25.9
	Teen	16	3.6
	Adult	238	54.1
	Old	72	16.4
Ethnicity	Latino	31	7.0
	Black	29	6.6
	White	323	73.4
	Other	54	12.3
Activity Level	Sedentary	139	31.6
	Moderate	197	44.8
	Vigorous	102	23.2

Table 2: EAPRS Full Tool Points Scored

Category	Points Scored (n)	Possible Points	Points Scored (%)
Fields	59	293	20.1
Courts	284	294	96.6
Playgrounds	241	413	58.4
Open Spaces	36	42	85.7

Figure 1: Observed PA Intensities by Park Location

