ALR 101: An Overview of Leisure Studies and Recreation and Park Research related to Active Living

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Outline

- Provide a brief overview of the leisure studies field.

- Highlight rationale for “active living research” in parks and recreation areas.

- Show examples of active living studies on park-based physical activity.
Leisure studies is an interdisciplinary field.

Major Foci:

- Activity/behavior patterns
- Experience/benefits
- Use of leisure environments
- Constraints to leisure
- Leisure contributions to quality of life (e.g., health)
Leisure studies is an interdisciplinary field.

Perspectives:
- Psychology (e.g., motivations)
- Sociology (e.g., structure & organization)
- Geography (e.g., place meaning, & impacts)
- Anthropology (e.g., culture & meaning)
- Economics (e.g., valuation & impact)

Provides social science evidence-base for managing parks and recreation areas.
Examples of Leisure Studies Journals
Parks and recreation areas are viable spaces for promoting physical activity.

- Recreation services exist at all levels of government and in special park districts (Godbey et al., 2005).

- 70% of adults live within walking distance of an urban park; 80% use them (Godbey et al. 1992).

- 75% of American households are within 2 miles of a park system (ICMA & NaCO, 2006).
There is consistent evidence: availability of parks increase opportunities for physical activity.

- **Across 20 studies** in the health literature, access to *recreation facilities, programs, and aesthetics* were associated with higher PA (Humpel et al. 2002).

- **14 of 20 studies** show positive associations between access to parks and PA (Kaczynski & Henderson, 2007).

- Other reviews concur (e.g., Sallis & Kerr, 2006; Mowen et al., 2008) but less evidence for children and youth (Kaczynski & Henderson, 2007).
Opportunities for physical activity in parks can be shaped by management and policy tools.

- Programming/Facility Design
- Use policies (active vs. passive parks)
- Regulations
- Programming
- Pricing
- Marketing
- Safety/risk management
- Law enforcement
- Maintenance (built & natural environment)
- Hours of operation
Research Issues

• What factors contribute to physical activity in parks in ethnically diverse communities?

• What specific facilities and amenities contribute to physical activity in parks?

• What is an optimal configuration of park design, management, and programs to promote physical activity?
Current Projects

A Study of Leisure-time Physical Activity in Diverse Communities Robert Wood Johnson Foundation, Active Living Research (#526489)

Co-Investigators:
Myron Floyd, PhD (NC State University): leisure studies; race/ethnicity.
J.O. Spengler, PhD, JD (University of Florida): leisure studies; legal issues
Jay Maddock (University of Hawaii): public health sciences
Paul Gobster (US Forest Service): leisure studies; landscape and urban planning

Project Aim:
Examine neighborhood and environmental influences on physical activity in parks.
Measuring Physical Activity in Parks using The System for Observing Play and Leisure Among Youth (SOPLAY) (McKenzie, 2002).
Levels of Physical Activity in Tampa and Chicago Parks

- Tampa (N=7043)
- Chicago (N=2413)

- Sedentary: 64.8% in Tampa, 50.7% in Chicago
- Moderate: 23.5% in Tampa, 27.7% in Chicago
- Vigorous: 11.7% in Tampa, 21.5% in Chicago
Use of Activity Areas in 18 Chicago Parks

Use of Selected Activity Areas (Counts)

- Baseball: 794
- Playground: 552
- Soccer: 249
- Tennis: 198
- Basketball: 175
- Open Space: 109
- Volleyball: 52
- Dog Area: 8
- Picnic: 9
Mean Energy Expenditure Per Person in Parks by Activity Zones (Chicago Example)

F = 12.83 (P < 0.05)
Mean of “incivilities index” in Chicago parks by activity areas

<table>
<thead>
<tr>
<th>Activity</th>
<th>Means</th>
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<tbody>
<tr>
<td>Playgrounds</td>
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<td>Courts</td>
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<td>Open areas</td>
<td>1.8</td>
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<tr>
<td>Fields</td>
<td>1.0</td>
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</table>
Associations between “incivilities” and park-based physical activity

<table>
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<tr>
<th>Activity Areas</th>
<th>Odds Ratios</th>
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<td>Courts</td>
<td>NS</td>
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<tr>
<td>Open Space</td>
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<td>Fields</td>
<td>.87</td>
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</tbody>
</table>

Sedentary (ref) vs Moderate-to-Vigorous Activity
Mean of “incivilities index” in Chicago parks by neighborhood race/ethnic composition

![Bar chart showing means for White, Black, and Hispanic populations. The chart indicates a significant difference between Black and other groups (p<.05).]
Current Projects

**I-PARK: Investigating Places for Active Recreation for Kids**

**Robert Wood Johnson Foundation, Active Living Research (#526489)**

**Co-Investigators:**
Robin Moore (NC State University): landscape architecture; park design
Myron Floyd (NC State University): leisure studies; race/ethnicity
Perver Baran (NC State University): GIS; urban planning
Jason Bocarro (NC State University): leisure studies; youth development
Nilda Cosco (NC State University): education; childhood development
William Smith (NC State University): sociology/crime

**Project Aim:**
Examine how the neighborhood and park environment influence children’s park use and physical activity.
Frequency of Children in Different Park Zones (n=2847)
Distribution of Children Observed in 20 Durham, NC Parks

Ongoing Analyses

1. Effect of park characteristics on use and activity.

2. Effect of “walkability” on park use.

3. Effect of crime on park use.
Correlates of park-based physical activity among children in Durham (NC) parks

Odds of engaging in MVPA

- age6-12
- informal
- gender
- freeplay
- #rec_fac
- age13-18
- #site_amen
- supervised
- parent
Parks and recreation environments can promote physical activity in communities.

Research is needed on specific environmental factors in relation to park use and activity.

Evidence is needed to guide changes in park management and policies to support active living in communities.
Questions

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