Physical Activity and Health Partnerships among Park and Recreation Departments in North Carolina

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Overcoming Inactivity and Obesity: A State and National Challenge

- NC ranks 10th and 11th in adult and childhood obesity 2010, respectively.
- 32% of NC children (10-17) are overweight.
- 56% of NC adults do not meet physical activity guidelines (30/min daily).

Source: Trust for America’s Health (2010); NC Dept. Heath Statistics Be Active North Carolina.
Parks and recreation agencies are valuable community assets.

- 9,000+ park and recreation departments nationwide.
- 108,000 public parks and 65,000 indoor facilities managed.
- 10,000 playgrounds.
- Access to communities most at risk for physical inactivity.

Partnerships are essential.

• A key strategy in promoting physical activity
  (Active Living by Design, 2010).

• One of the most important challenges in health promotion
  (Kumanyika & Brownson, 2007).

• Contribute to immediate and sustainable interventions
Recent data on partnerships involving Parks & Recreation Departments:

- 88% participated in a health partnership.
- 78% focused on physical activity promotion.
- 61% involved schools; 59% involved public health departments; 52% with health non-profits.

Study Objectives

1. Describe the extent of physical activity partnership participation among North Carolina public parks and recreation departments.

2. Explore potential factors associated with physical activity partnership participation.
Methods

• **Data:**
  – Online survey NC PARDs (N=216).
  – 64% response rate.

• **Dependent Variable:**
  – Formal partnership participation (yes or no):
    - County health departments
    - Schools
    - Faith organizations
    - YMCAs

• **Partnership Definition:** a group that shares resources and that can act as a formal agent.
## Agency Characteristics

<table>
<thead>
<tr>
<th>Factors</th>
<th>Mean</th>
<th>Minimum</th>
<th>Maximum</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Operating Budget</td>
<td>$785,020</td>
<td>$23,894</td>
<td>$12,342,165</td>
<td>$1,640,240</td>
</tr>
<tr>
<td>Capital Budget</td>
<td>$1,028,427</td>
<td>$600</td>
<td>$10,320,253</td>
<td>$2,074,502</td>
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<tr>
<td># Full Time Employees</td>
<td>28</td>
<td>1</td>
<td>429</td>
<td>66</td>
</tr>
<tr>
<td>Size of Population Served</td>
<td>48,032</td>
<td>941</td>
<td>768,574</td>
<td>101,214</td>
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</tbody>
</table>
## Targeted Populations

<table>
<thead>
<tr>
<th></th>
<th>Level of Effort (%)</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>Great Deal</td>
</tr>
<tr>
<td>Obesity among boys</td>
<td>28.6</td>
</tr>
<tr>
<td>Obesity among teen boys</td>
<td>12.7</td>
</tr>
<tr>
<td>Obesity among girls</td>
<td>27.7</td>
</tr>
<tr>
<td>Obesity among teen girls</td>
<td>12.5</td>
</tr>
<tr>
<td>Minority Groups</td>
<td>30.8</td>
</tr>
</tbody>
</table>
Profile of Director Characteristics

- 68% were men
- 20.14 average (mean) years of experience
- 8.07 average (mean) in current position
- 27% held professional certification (CPRP)
Participated in Formal Physical Activity Partnership (% yes)
## Associations for Physical Activity Partnership Participation

<table>
<thead>
<tr>
<th>Organizational Characteristics</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Depts:</strong> Operating Budget</td>
<td>12.96</td>
<td>.005</td>
<td>.327</td>
</tr>
<tr>
<td>Size of Population</td>
<td>14.58</td>
<td>.002</td>
<td>.334</td>
</tr>
<tr>
<td><strong>Faith Orgs:</strong> Operating Budget</td>
<td>11.86</td>
<td>.008</td>
<td>.311</td>
</tr>
<tr>
<td><strong>YMCAs:</strong> Operating Budget</td>
<td>14.71</td>
<td>.002</td>
<td>.346</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Director Characteristics</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>YMCAs:</strong> CPRP</td>
<td>4.84</td>
<td>.028</td>
<td>.191</td>
</tr>
<tr>
<td>Gender</td>
<td>5.58</td>
<td>.018</td>
<td>.206</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Targeted Effort</th>
<th>$\chi^2$</th>
<th>$p$</th>
<th>Cramer’s V</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Schools:</strong> Obese Teen Boys</td>
<td>9.23</td>
<td>.010</td>
<td>.301</td>
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<tr>
<td>Obese Teen Girls</td>
<td>8.24</td>
<td>.016</td>
<td>.282</td>
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<tr>
<td>Minority Groups</td>
<td>6.94</td>
<td>.031</td>
<td>.255</td>
</tr>
<tr>
<td><strong>YMCA:</strong> Adults w/Disabilities</td>
<td>11.10</td>
<td>.004</td>
<td>.338</td>
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<tr>
<td>Youth w/Disabilities</td>
<td>8.28</td>
<td>.016</td>
<td>.279</td>
</tr>
</tbody>
</table>
Partnership with County Health Department by Size of Population Served (n= 131)

χ² = 14.58; p < .01
Partnership with Schools by Effort
Targeting Minority Groups (n= 107)

\[ \chi^2 = 6.94; p < .05 \]
Key Findings & Implications

- NC parks and recreation departments are actively engaged in physical activity partnerships.

- Low participation indicates a need for understanding facilitators and barriers to participation.

- Greater resources may lead to stronger partnership participation.

- Schools and YMCAs are important but underutilized partners for populations most at risk for physical inactivity.
Study Limitations

• Findings limited to North Carolina.

• Secondary data source.
  – *Informal* partnership participation not measured.
  – Limited measures of characteristics and extent of partnership opportunities available.
  – Lack measures of shared resources

• No data on partnership effectiveness for increasing physical activity.
Conclusions: Physical activity partnerships matter for NC.

- North Carolina is confronted with health and economic burden related to physical inactivity.
- Parks and recreation departments can play key roles in physical activity partnerships.
- As public fiscal resources continue to shrink, partnerships are necessary to solve complex problems.
Acknowledgements

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