Positioning P&R Agencies as Preventive Public Health Providers – Research

GP RED
Indiana University
East Carolina University
North Carolina State University
5 Beta Sites for the Healthy Communities Surveillance and Management Toolkit™

NCSU Penbrooke PhD Dissertation 2017
Comprehensive Literature Review
NCSU Delphi Panel And Case Studies
Over 500 Community Plans
Repository of Sample Policies and Strategies
Evidence & Guiding Theory

Parks & Recreation (P&R) agencies can help improve Public Health (PH) through various health factors:

- Increasing physical activity and improving nutrition
- Providing psychological and physical benefits from access to nature
- Facilitating social benefits and parental engagement
- Addressing health equity issues, transportation, and safety
- Addressing stress management, smoking, alcohol and drug consumption, etc.

Flora / Fauna
Attention restoration and ADD

Open Spaces
Physical activity and social support

Community Spaces

Wellbeing & Reduced Stress

P&R Public Spaces

Systems Approach to relationships between access to public P&R spaces and wellness

Adapted from EPA, 2014; Kuo, 2015; Saw, Lim, & Carrasco, 2015; Sturm & Cohen, 2014
Big Finding NOW

Research is shifting from one of asking *IF* P&R agencies can positively affect Public Health factors, to *HOW* they can best do so with limited resources and prioritization needs.
Parks and Recreation play a strong community role and can work with others.
Learning from HIAs and other Available Assessment Tools

- Geographic Site or Topic Specific Assessments
- Food Availability – Deserts / Swamps / Local
- Physical Activity Indicators – design, activity, or emotional components
- Safe Routes to School
- Walk and Site Audits
- Prescriptions for Play / Park Rx
- Let’s Move, Achieve, It Starts in Parks, and other programs designed to evoke change

How does an agency know what to do?
Preventive Community Health

P&R Agencies & Strategies

Medical Care and Public Health Agencies

Partners & Providers

Schools / Education

Physical Activity & Nutrition

Academic Research & Methods

Transportation and Access

Social & Parental Engagement

Public Safety & Perception of Safety

Modifiable Factors, Spaces, Programs, and Policies

Modifying Preventive PH through P&R Systems Thinking

Actions on all levels (Penbrooke, 2017)

Actors Facilitating Partnerships and outcomes in the Community
National Initiatives – Are you active with them?

- Safe Routes to School
- Community Health Needs Assessments (CHNA)
- Let's Move
- NRPA's Commit to Health
- NRPA's Safe Routes to Parks
- Complete Streets
- Community Health Improvement Plans (CHIP)
- After School Association's - HEPA
- Live Well
- KaBOOM!'s Playability
- Alliance for a Healthier Generation
- GP RED's Safe Routes to Play
- GP RED's SMT
- Active Living Research
- SPARK
- NIOST's Healthy Out of School Time
- CDC's Healthy Places Parks HIA Toolkit
- Active Living Coalition
- ACHIEVE
- Healthy Parks Healthy People
- Eat Smart, Move More
- Healthy Kids Concepts
- NFL Play 60
- Together Counts
- ACSM's Exercise is Medicine
- Active Living by Design

2016

Not now but YES in past
YES
<table>
<thead>
<tr>
<th>Method</th>
<th>Effectiveness</th>
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<tbody>
<tr>
<td>Creating specific program to address factors</td>
<td>1000%</td>
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<tr>
<td>Creation of a community coalition</td>
<td>1400%</td>
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<tr>
<td>Hiring specific staff to address factors</td>
<td>1600%</td>
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<tr>
<td>Pursuing grant funding for factors</td>
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<tr>
<td>Analyzing partners and alternative providers</td>
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</tr>
<tr>
<td>Youth Programs around factors</td>
<td>0%</td>
</tr>
<tr>
<td>Creating Positive Policy focus on factors</td>
<td>0%</td>
</tr>
<tr>
<td>Systematic Program Analysis</td>
<td>0%</td>
</tr>
<tr>
<td>System Inventory of Assets Available</td>
<td>0%</td>
</tr>
<tr>
<td>Other special assessments on factors (walkability,...)</td>
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<tr>
<td>General community surveying on factors</td>
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</tr>
<tr>
<td>Centralized web/social media on the factors</td>
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<tr>
<td>Evaluation of crime rates / safety</td>
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<td>Parental education around factors</td>
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<td>Creation of Youth Group to address factors</td>
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<td>Correlation of health metrics to site planning</td>
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<tr>
<td>Surveying of youth in community</td>
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</tr>
<tr>
<td>Financial analysis of health factors impact</td>
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</tr>
<tr>
<td>Other</td>
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Other (1) = MVPA- SO PLAY study
HOW CAN P&R AGENCIES ADDRESS MODIFIABLE FACTORS?
- Step by Step “Toolkit” Approach

1. Convene staff, key stakeholders, and the public - FRAME & PARTNER
2. Collect community-specific information using valid methods
   - Inventory and analysis of assets and programs available / participation / awareness
   - Analysis of current policies, practices, financial, and allocation of resources
   - Demographics, regional trends, alignment with national initiatives
   - Document partnerships, current providers, and social networks
4. Create an Action Plan / Logic Model for priorities - MESSAGING & ACTION
5. Report, communicate, and garner resources
6. Evaluate and repeat
# Five Elements for Systems Analysis

## Warrant for Action
- Start inquiry
- Input information
- Create documents
- Start database
- Data transmission
- Warrant for intervention
- Proposal for action

## Community Systems
- Convene Stakeholders
- Intersections
- Collaborations
- Partnerships
- Agreements
- Shared assets
- Negative Markers

## Policies, Laws & Procedures
- Laws (Fed, State, County, City)
- Ordinances
- Agency regulations
- Agency policies & practices

## Fiscal Resources & Distribution
- Identify funding paths
- Determine allocation patterns/%
- Identify sources of $$$
- Document use of $$$
- Identify ROI

## Inventory of Assets & Affordances
- Assets
  - Built
  - Natural
- Affordances
  - Formal programs
  - Services

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### Why? Who? Impact?
- What in our community working?
- What influence on AL?
- What funds? For what?
- What do we have?
Priority of Health Factors for P&R in Hutchinson
Multi-Attribute Utilities Technique (MAUT)

© Kiboum Kim
Hutchinson Youth Activity and Nutrition Survey

• 804 Middle School Students
• Significant findings
  • Nutrition - SSB & Breakfast frequencies
  • Screen Time & Activities
  • High Perception of Safety
  • Low Active Transportation for Youth
• Strong Parental Support, but lower Personal Modeling

<table>
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<tr>
<th>OST</th>
<th>Walk</th>
<th>Bike</th>
<th>Bus</th>
<th>Adult drives</th>
<th>Other</th>
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<td>12.3%</td>
<td>0.4%</td>
<td>1.3%</td>
<td>70.5%</td>
<td>11.8%</td>
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<tr>
<td>Girls</td>
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<td>2.1%</td>
<td>0.03%</td>
<td>79.0%</td>
<td>9.3%</td>
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<tr>
<td>Boys</td>
<td>15.0%</td>
<td>5.8%</td>
<td>2.2%</td>
<td>62.5%</td>
<td>14.2%</td>
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Component-Based Methodology (CBM)
GIS Inventory and LOS Analysis (including walkability)
• Components
• Access
• Functionality
• Quality
• AEE
• Programs

Among the factors assessed was an Active Energy Expenditure rating based upon recent research.

Active Energy Expenditure or “AEE Value”

(Floyd et al., 2015; Layton, 2016)
Bloomington, IN
Outcomes

- Toolkit Template creation and utilization for tracking capabilities and awareness
- Partnership with IUB for Get Onboard Active Living (GOAL) - focus on family relationships, food, activity, behavioral, nutrition, mentoring - 12 week program. Kinesiology Graduates working with youth for personal training - more than 60 so far.
- Funded FT Health and Wellness Coordinator
- Multiple grants, tracking outcomes
South Bend, IN - Active Youth Initiative
AYI Accomplishments & Outcomes

- Passport to Play
- AYI Facebook Page
- Prescription to Play
- Alternative Providers Documented
- Participation Increases

Mayor Pete Buttigieg Adopted!
Liberty, MO L-CHAT (Community Health Action Team)

Outcomes

- Increased partnerships with County Health, Schools, and Hospitals
- Stakeholder identification and new programs
- Full inventory and focus on connectivity
- Helped create new HCRG Youth and Nutrition Survey (YANS) (created with East Carolina University)
- Hired FT Fitness and Wellness Coordinator
AHPD, IL Key Outcomes

1. Strong **increased partnerships** for the newly formed *Arlington Heights Health Action Alliance (AHHAA)* – created a buzz!

2. A complete **inventory and level of service analysis** for all facilities, parks, trails, and programs.

3. The Youth Focus Group & YANS gave **youth a voice**.

4. Relevant trends, demographics, financial, and **key management aspects** were compiled.

5. Program & participation enhancements **achieved**!
Applying Systems Thinking
Adapted Knowledge to Action (K2A) Framework for P&R
(CDC, 2017; Penbrooke 2017)

Research

- Evidence on Factors Theory Effectiveness and Implementation Studies

Translation Phase

- Decision to Translate
- Knowledge and Dissemination
- Practice based Evidence

Translation Supporting Phase

- Decision to Adopt

P&R Agencies

- Practice Strategies Methods ROI

Strategies Phase

Evaluation
Key Conclusions for P&R and Health

- Organizational culture is key to effectiveness - must have leadership and incorporation of health into all messaging
- Assignment of resources matters - staffing gets it done
- Creation of community collaboration is crucial
- Good sample policies, methods, and guidelines are available and are working
- Measurement, toolkit and evaluation - built in (ROI)
- P&R agencies do not need to “make up” their own methods, but application to practice may be different
Thank you for attending!

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