Childhood Obesity Prevention Research Through a Community Context

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Project Overview

Multi-state
• IN, KS, MI, ND, OH, SD, WI

Multi-disciplinary team
• Nutrition
• Physical activity
• Community development
• Family and youth development

Funding
• USDA Agriculture and Food Initiative (AFRI) Grant #2011-68001-30100
Innovative Aspects

7 states collaborating

Socio-Ecological Model of Childhood Overweight

• Rural communities
• Low-income families
• Preschool aged children

Community capacity development approach
Davison and Birch, 2001- Obesity Reviews 2, 159-171.
Situation

Childhood obesity
  • Greater risk in rural areas
  • Greater risk in low income

Obese by age 4
  • Increased risk of being overweight or obese as an adult
Why Focus on Environment?

• Growing evidence shows that environment is related to the incidence of obesity

• Healthy choices need to be easy choices

• Environmental changes can improve the health of the whole community, not just individuals
Choosing the Community

• Two communities per state
• Rural
• Low Income
• Population of 4 year old children
• An active health-related coalition
Community Coaching

One community per state assigned a “Community Coach”

“A Community Coach: a guide who supports communities and organizations in identifying and achieving their goals.”

(Emery, Hubbell, & Miles-Polka, 2011)
1. To empower rural communities to create and sustain environments that support healthy lifestyles for young children, with emphasis on good nutrition and physical activity.

2. Test community coaching model.
14 Communities

- Selected Community coalitions identified as part of application
- 1 intervention, 1 comparison community per state
- Community coach hired and placed with intervention coalition
Funding to each community annually, for 4 years

Required:

- one nutrition activity
- one physical activity-related project
Assessment Tools

• Socio-ecological Model of Childhood Overweight Assessment Toolkit
• Active Where? Parents survey, initial + end
• CHLI tools: Initial + end assessments
• Coalition Self-Assessments: annually
• Ripple Mapping: End
• Reflections: Regularly
• Post-intervention interviews: Coalitions and coaches
• Insights leading to “Best Practices”
Active Where? Survey

Parents of 4-year-olds completed a community assessment

• At start and end of project
• Team adjusted wording for rural, age application
• Asks about physical surroundings, access to services, safety, physical activity
• Gathered brief demographic data, etc.
CHLI - Community Healthy Living Index

Three assessments:

- Neighborhood
- Early Childhood Program Assessment
- Community-At-Large

Conducted before and after
Coalition members provided information
COALITION NAME

______________________________

Date

Q12. How are decisions usually made regarding coalition priorities, policies and actions? Check the main way(s) you think decisions are usually made. CHECK NO MORE THAN TWO.

1. Coalition members vote with majority rule
2. Coalition members discuss the issue and come to consensus
3. The coalition statutes make final decisions
4. The coalition executive or steering committee makes final decisions
5. The lead agency for the project makes final decisions
6. Don't know

Q13. Please check a number to show how comfortable you are overall with the coalition decision-making process.

1. Not at all comfortable 2. Somewhat Comfortable 3. Very Comfortable

Q14. Please check a box to show how much you agree or disagree with the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly</th>
<th>Disagree</th>
<th>Agree</th>
<th>Strongly</th>
<th>Don't</th>
</tr>
</thead>
<tbody>
<tr>
<td>The coalition has clear and explicit procedures for making important decisions</td>
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<tr>
<td>The coalition follows standard procedures for making decision</td>
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<tr>
<td>The decision making process used by the coalition is fair</td>
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<tr>
<td>The decision making process used by the coalition is timely</td>
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<tr>
<td>The coalition makes good decisions</td>
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</table>

Q14a. Check the number that represents the amount of conflict in your coalition.

1. More conflict than I expected
2. Less conflict than I expected
3. About as much conflict as I expected

Q14b. Check the box that best represents your opinion of how much conflict within the coalition was caused by each of the following factors.

<table>
<thead>
<tr>
<th>Factor</th>
<th>None</th>
<th>Some</th>
<th>A Lot</th>
<th>Don't</th>
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</thead>
<tbody>
<tr>
<td>Differences in opinion about coalition mission, goals and objectives</td>
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<tr>
<td>Differences in opinion about specific objectives</td>
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<tr>
<td>Differences in opinion about the best strategies to achieve goals</td>
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<tr>
<td>Personal conflict</td>
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<td></td>
</tr>
<tr>
<td>Fighting for power, prestige and/or influence</td>
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<tr>
<td>Fighting for resources</td>
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<tr>
<td>Differences in opinion about who gets public exposure and recognition</td>
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</tbody>
</table>

Developed by: Erin Konzey, Ph.D. and Sherwood Sinha, Dr. PH. School of Public Health, University of New York, 2000. Adapted by Communities Preventing Childhood Obesity.
Ripple Effect Mapping

Method used to better understand the “ripple effects” and relationships of this project on individuals, groups, communities, and regions.
Mapping Community Progress

Ripple Mapping

• Coalition Members
• At the end of the project
• Discussion was invited, recorded observed
• Number of participants varied/state
Mapping process

1. Post a large piece of white paper on the wall and write “the project name” or purpose of the session in the middle of the map. (Some used Xmind to electronically record map)

2. Draw out several branches from the list identified

3. Ask and probe participants about the activities, programs, services, collaborations/connections, funding that resulted from the coalition’s work with our project - CPCO
Mapping Results – ND

- Educational Resources
  - MyPlate Plates
    - Handed out to 3 to 5 year olds
    - Used in the daycare
    - Talk about the food groups
    - Makes accountability to get all food groups
    - Lesson cards with the plates
    - Color pieces to choose what to eat (game)
  - Color Me Healthy
    - Projects sent home with the children
    - Train the trainers were completed
    - North Dakota Growing Futures trainers put on for the state
    - 18 people were trained
    - Daycare trainings continued
    - Local trainers gives more opportunities
    - Police officer giving coupons to family wearing certificates
    - Over 80 bike helmets given away
    - Safe Kids from Grand Forks given training

- Take Home Fitness Bags
  - Fitness bags go to headstart schools, daycare providers, create multiple activities and relationships in the families
  - Choosing ideas that would continue from the beginning
  - Used evidence based practices

- Sustainability
  - Individuals, agencies, and daycare providers working together

- Community Preventing Childhood Obesity 2011
  - Schools, pre schools 5 Minute Physical Activity for Kids Booklets
  - Earn Smart Eat Smart Cook Booklets
  - 5 minute Recipes for Kids Booklets

- Community
  - School
  - Stories
  - Community
  - More active
  - Each other
Mapping Results – KS Control

Health & Wellness Advocates
Cherokee County, Kansas (Control)
Ripple Effect Mapping

1. Color Me Healthy
   - Toolkits: 10 toolkits given out
   - CEUs obtained
   - Presentation
   - Follow-up
   - Increased
   - Head Start

2. Let's Get Moving
   - Trained community members
   - Targeted Physical Activity & Nutrition
   - Providers educated

3. Eat Play Grow
   - Police/Fire Department
   - MCO (United Health Care)
   - Coalition growth

Overall Impact

Small, but mighty
- Identified Leaders
- Need for intern/full/part-time employee for coalition
- 3rd event motivated members
- Improved with each event
- PACCC group grown from coalition activities
- $5 for another community fair available
- Employer support
- Increased traffic on coalition Facebook page

We Can Curriculum
- Interventions (22 vendors)
- 8 modules + Health/Wellness
- Family Pictures: Brought from
- Kid's Passport: Earned in
- Kid's Ball: Printed out
- Receptive to event due to it being 2nd
Results

Which capitals from *the Community Capital Framework* increase from community coaching?

Human, Social, Political, and Built capitals were **higher** in coached communities:

- human capitals (89 vs 82 comparison commun)
- social capitals (108 vs 81 comparison commun)
- political capitals (27 vs 11 comparison commun)
- built capitals (29 vs 27 comparison commun)
Results

What is the difference between coached and non-coached communities terms of the Socio-Ecological Model levels or rings?

Coached communities employed more programs, services, and activities under the organizational, community, and public policy rings than the non-coached communities.
Is there a significant difference in the number of “ripples” between coached and non-coached communities?

Yes, a difference was observed between the intervention and comparison communities.

Total ripple score among intervention communities was 37 and among the control communities was 33.
We all came together, all the coalition members and our coach and the project director, and we went over all the different projects that we’ve actually done and realized that we did a lot more than we actually thought we did. So we just kind of looked at the big picture and thought “Oh, that was a good idea, that really worked out well” or “we really didn’t get much turn out for this type of thing”

– Coalition Member
Best Practices

Online modules for community coalitions
(http://go.osu.edu/CPCOtoolkit)

1. Readiness
2. Socio-Ecological Model
3. Using Evidence-Based Strategies
4. Evaluation
5. Community Coaching
Screenshot of online toolkit Module 1

OBJECTIVES:

Is Your Coalition “Ready” to Make a Change in Childhood Obesity?

In this tutorial you will learn:
- How to define coalition readiness
- What are the key attributes related to coalition readiness
- Specific strategies to increase the readiness of your coalition
Insights

Community Coaching is being “refined”
  • No “right” way

Relationships and partnerships are essential
  • Coalition members
  • Coaches, staff, students

Reflection is critical

Sustaining community involvement over an extended time is challenging

Working in 7 states is challenging, yet rewarding
Research Team

Program Director:
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Questions?

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