
The Role of CBPR in Childhood Obesity Prevention and Treatment

Alice Ammerman DrPH, RD

Director, Center for Health Promotion and Disease Prevention
Associate Professor, Department of Nutrition
Schools of Public Health and Medicine

University of North Carolina at Chapel Hill

What comes to mind when you think about the term "Researcher?"

"I think that some people feel like researchers come and suck things out of the community and go back and don't leave anything behind that is positive so you are thinking both about damage in terms of lack of feeling and lost trust ...of feeling like they have been mistreated in some way but also feeling that the researchers got a lot more out of it than they did."

How can researchers best address your concerns?

“....if you want to do your research then the relationship has to go above the rest... Its an old cliché...people want to know how much you care and not how much you know.”

Community-Based Participatory Research

C. helps identify key issues

→ *incr. motivation to participate*

C. helps with study design, budget, proposal submission

→ *Incr. acceptability and "buy-in"*

C. gives guidance re recruitment and retention

→ *Enhanced recruitment and retention*

C. helps with measures development and testing

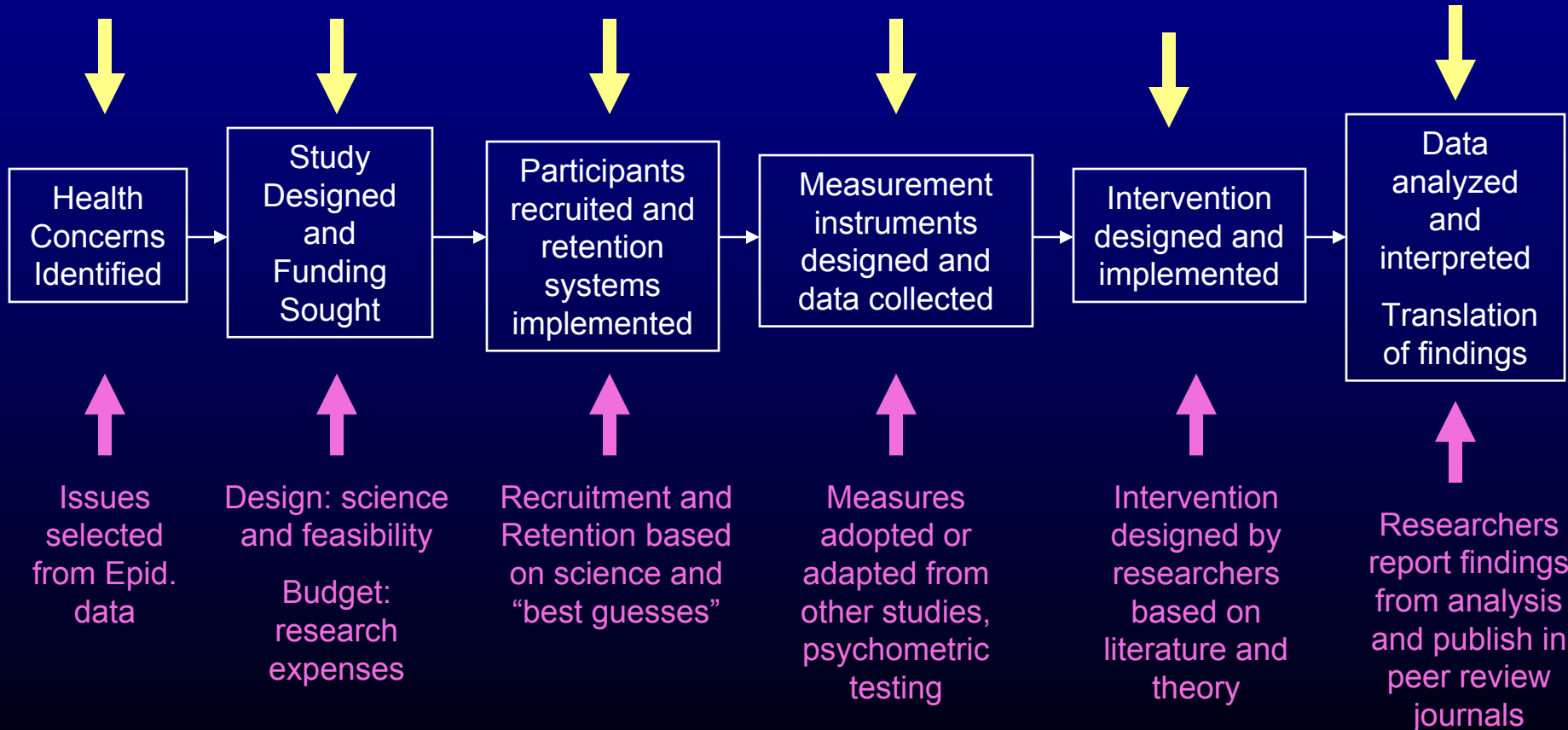
→ *Increased reliability and validity*

C. helps guide intervention development

→ *Greater relevance and likelihood for success*

C. helps with data interpretation and publications

→ *Enhanced sensitivity and potential for dissemination*



Traditional Research Approach

Systematic Evidence Review

Community-Based Participatory Research: A Summary of the Evidence

Funded by AHRQ to the RTI-UNC Evidence-Based Practice
Center (EPC)

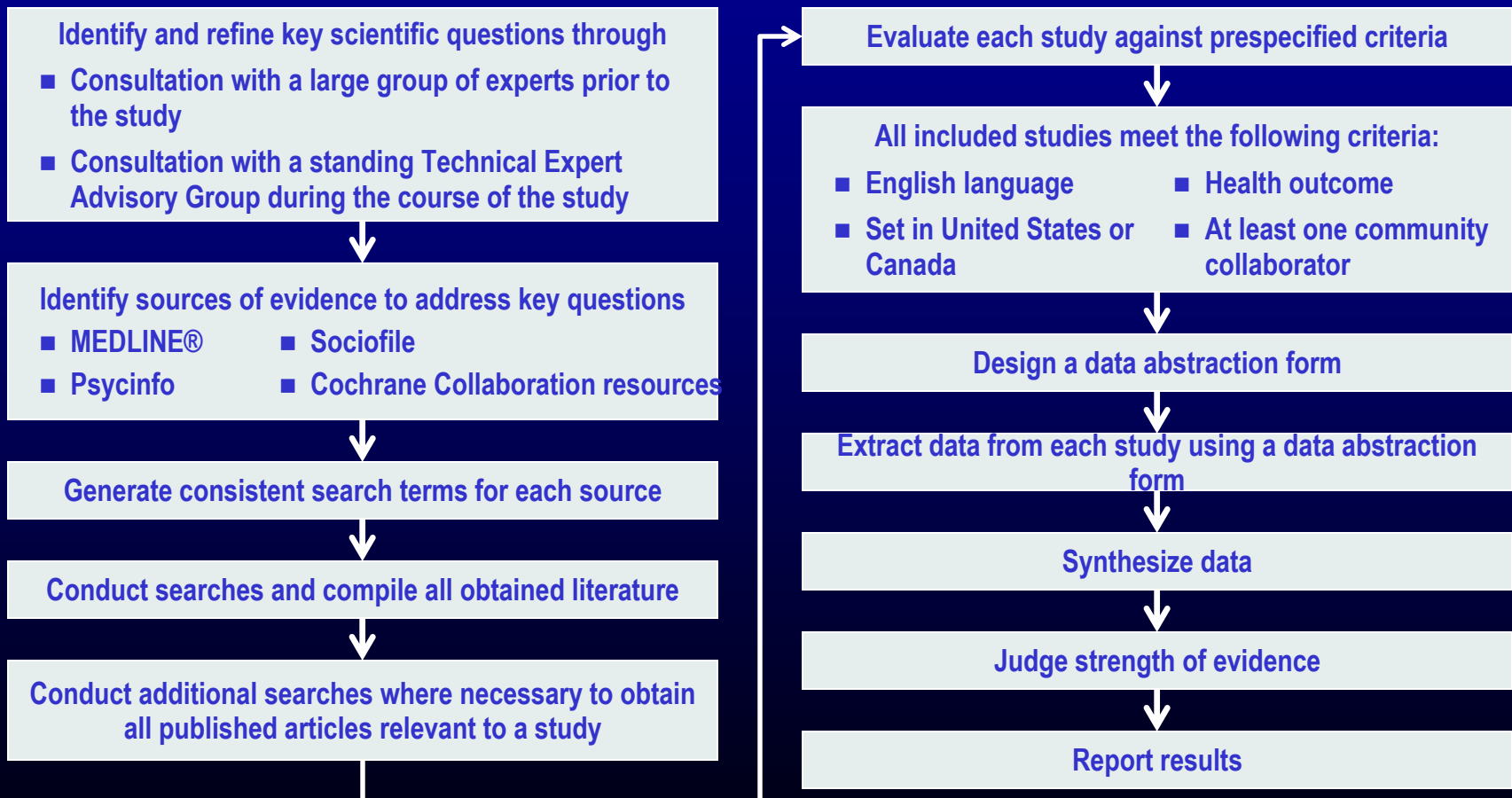
INVESTIGATORS:

Meera Viswanathan, PhD
Alice Ammerman, DrPH, RD
Eugenia Eng, DrPH
Gerald Gartlehner, MD
Kathleen N. Lohr, PhD

Derek Griffith, PhD
Scott Rhodes, PhD
Carmen Samuel-Hodge PhD
Siobhan Maty, PhD
Lucille Webb, MEd

Evidence-Based Review of CBPR*

Systematic Review Methods



Quality of Research Methodology: *R*

- Research Q. clearly specified
- Appropriate study population, sample size
- Control or comparison group
- Retention and follow-up
- Internal & External validity
- Quality of measures, blinding as appropriate
- Statistical analysis

Quality of Research Methodology: *CBP*

- Nature of community involvement:
 - Selection of research question
 - Proposal development
 - Shared financial responsibility for grant funds
 - Recruitment and retention
 - Measurement instruments and data collection
 - Intervention development, implementation
 - Interpretation of findings
 - Dissemination of findings
 - Application of findings to health concern identified
- Shared decision-making structures
- Contribution to community capacity building
- Findings applied to original health concern

Definition

- Co-learning and reciprocal transfer of expertise among all research partners
- Shared decision-making
- Mutual ownership of the research process and products
- Commitment to application and dissemination of findings

Overview

- 123 articles pertaining to 60 CBPR studies
 - 30 intervention studies
 - 12 completed and evaluated that met inclusion criteria
- Modest health effects on a variety of topics
- Limited no. of observational studies using CBPR methods (Environmental Justice)
- Large number of papers reporting CBP methods with few research outcomes
- Several studies still in process (final outcomes not yet reported)
- Many studies that appear to use elements of CBPR but don't use any of the search terms to identify it.

Characteristics of CBPR studies

Characteristics

Number

General characteristics

Total number of studies identified **60**

Average number of publications per study **2**

Publication dates of the first article from the study

Percent

Before 1980 **2%**

1980-1985 **0%**

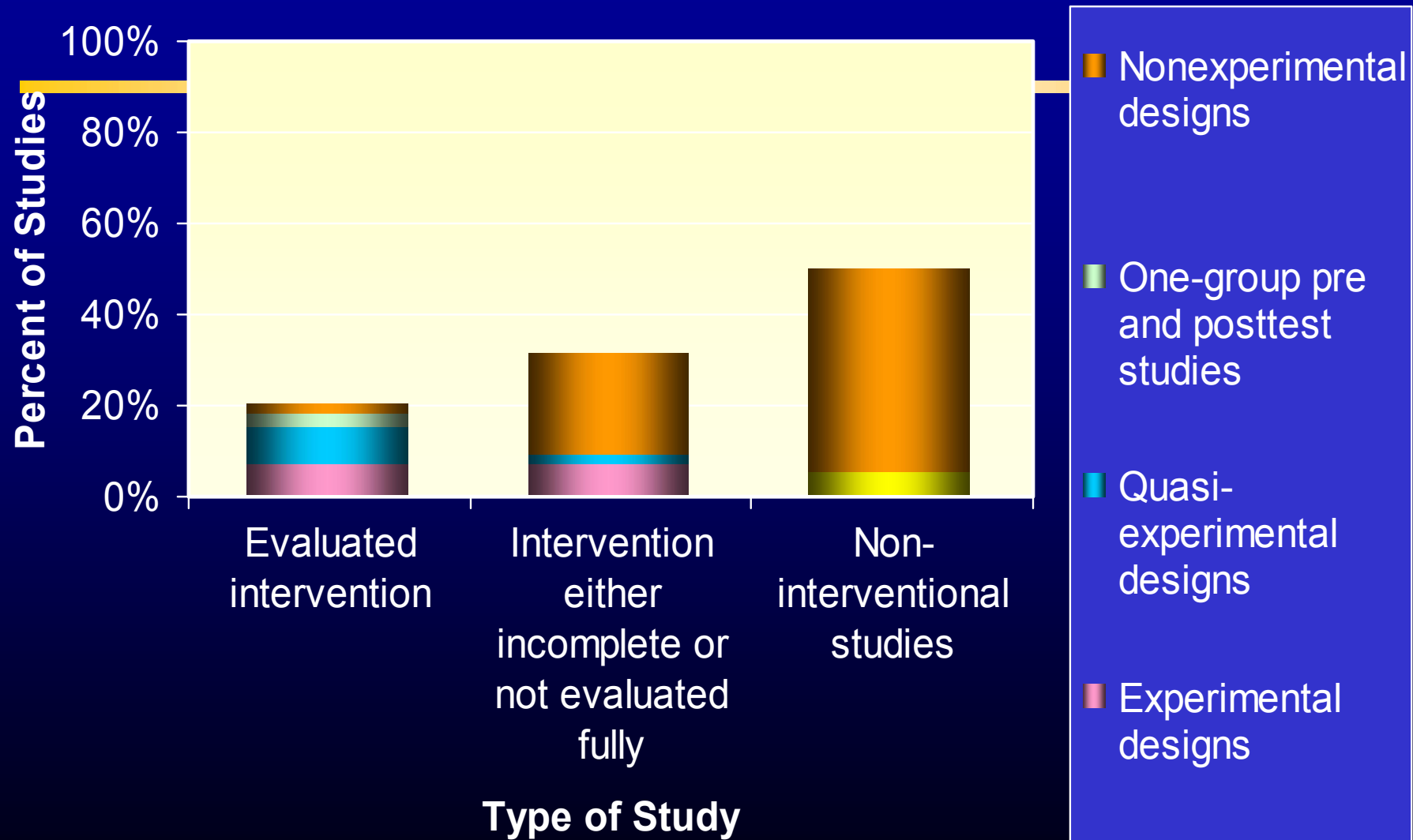
1986-1990 **3%**

1991-1995 **13%**

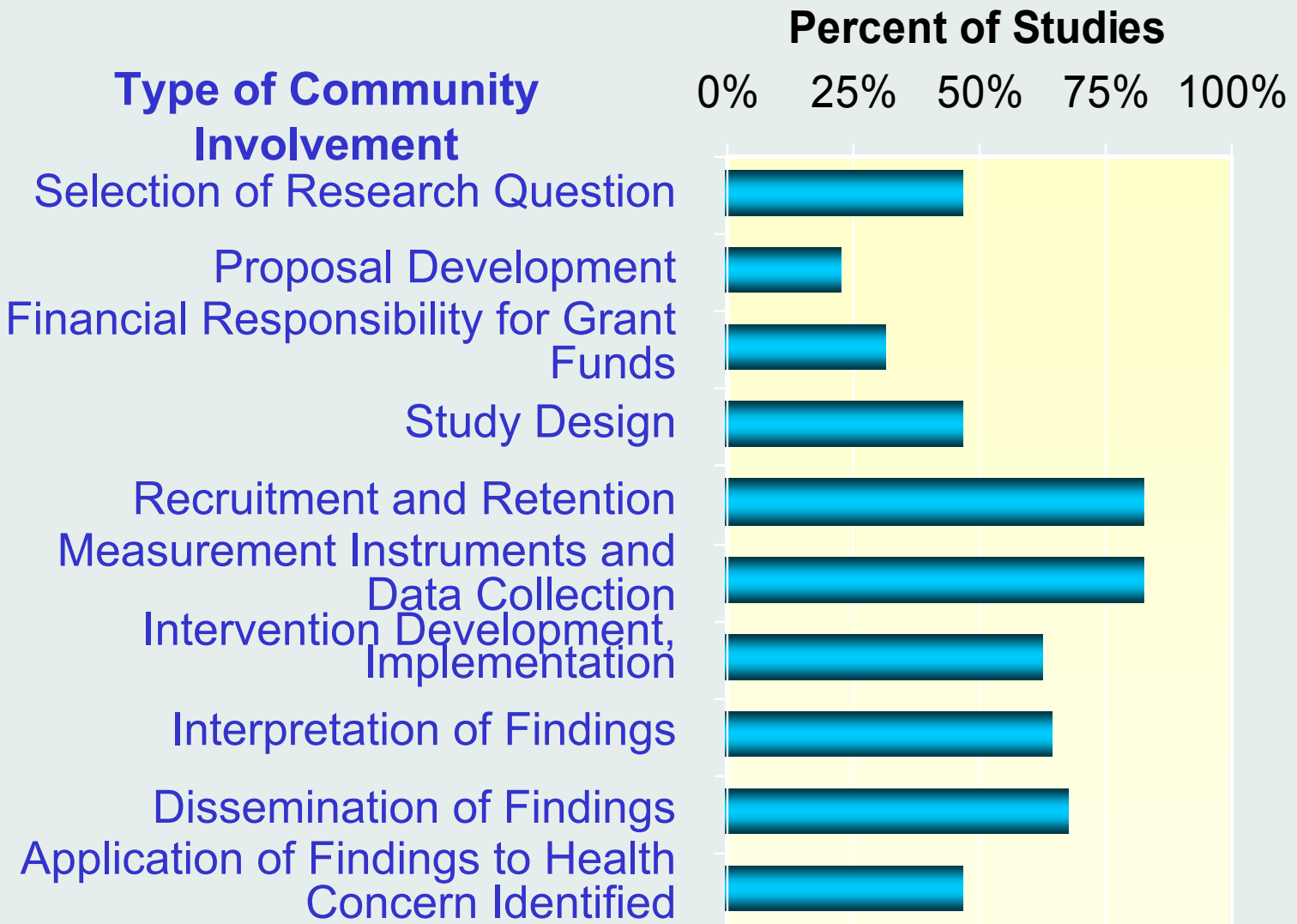
1996-2000 **42%**

2001 to 2003 **40%**

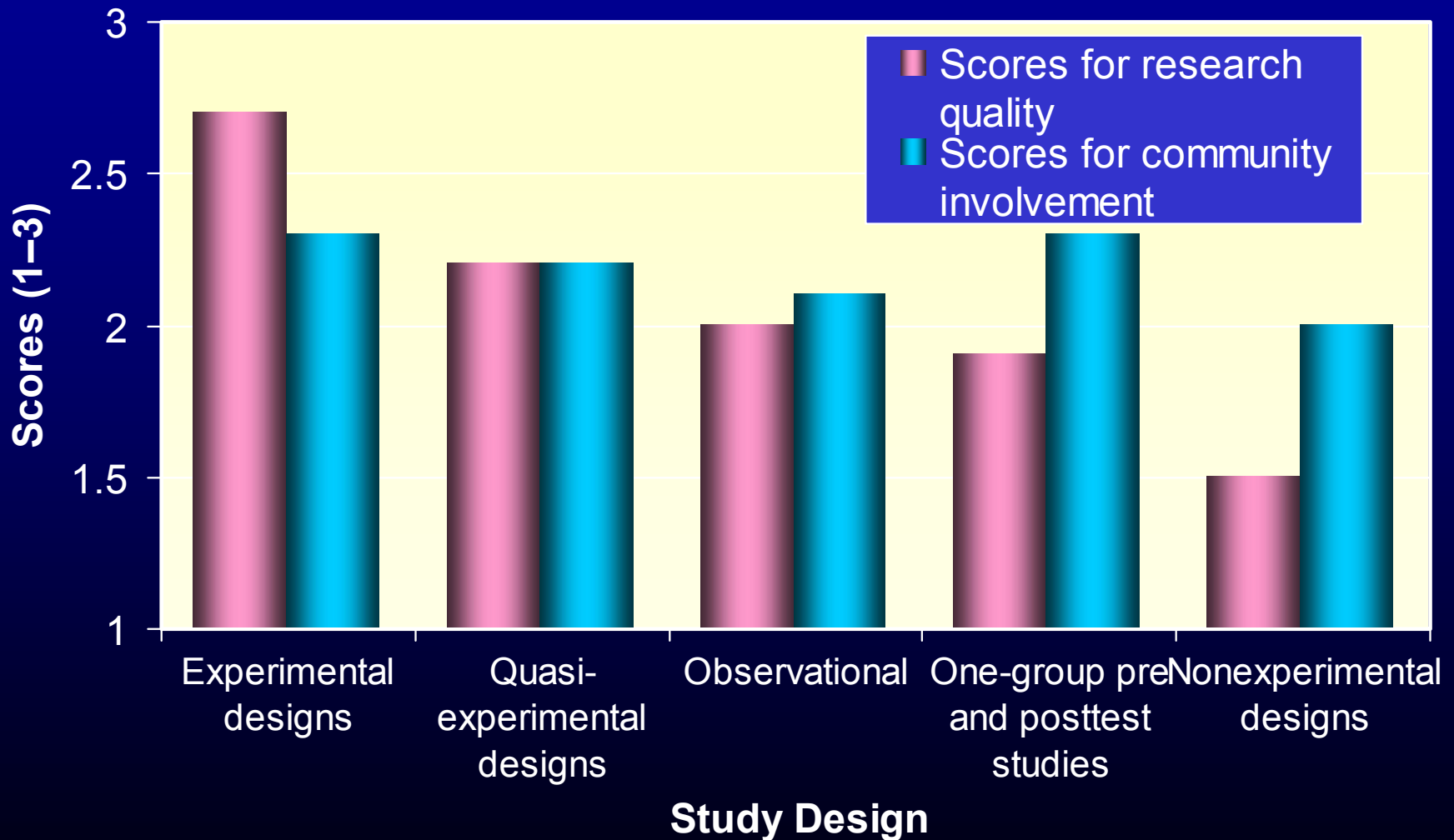
Type of Study and Research Design



Community Involvement



Comparing Research Quality and Community Involvement across Study Designs



Implications for Practice

- High quality research and intense community involvement are not contrary to each other. Our review uncovered several examples of outstanding research combined with collaborative community participation throughout the research process.
- Review is limited by the variable reporting standards in the field. Authors and journal editors need to be aware of the need for and commit to improved standards for reporting both research process and results.



Girls Rule!: Church and Home-Based Obesity Prevention Pilot

**National Heart Lung and Blood Institute
(&NIDDK)**

“Innovative Approaches to Obesity Prevention”

Alice Ammerman

Kristine Kelsey

Dianne Ward

Benita Weathers

Penny Gordon-Larsen

Peggy Bentley

Kenitra Carby-Shields

Specific Aims

- Understand factors influencing obesity among pre-adolescent African-American girls ages 6 through 9.

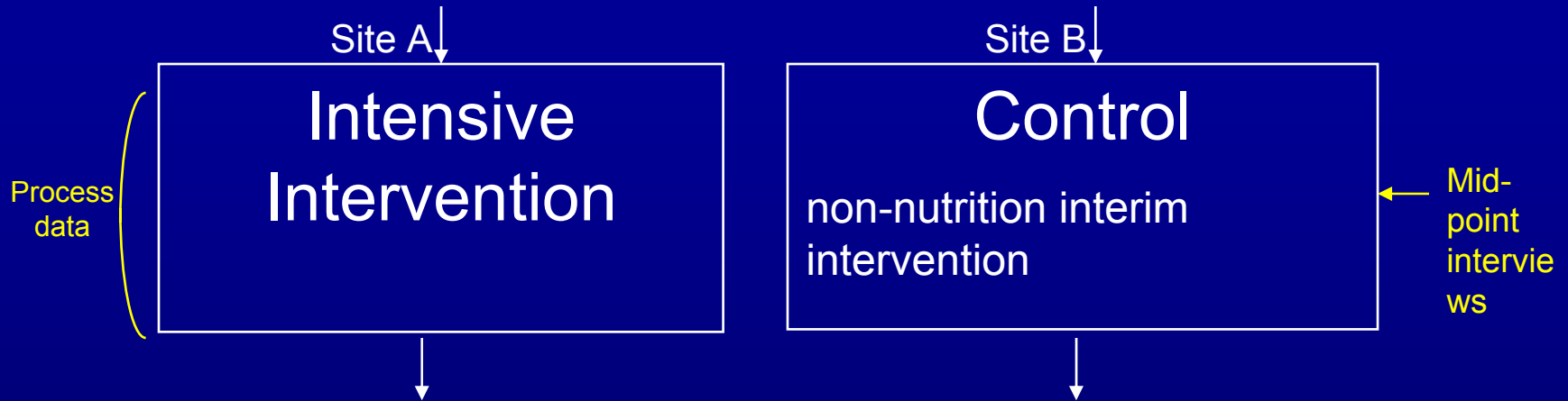


- Assess the acceptability and feasibility of a church and home-based diet and physical activity intervention and maintenance program.

Girls Rule!....

.....Boys Drool

Baseline 1 measures: BMI, diet, CSA, psychosocial, sexual maturity



Follow-up 1/Baseline 2 measures:

BMI, diet, CSA, psychosocial, sexual maturity (8 mo.)



Follow-up 2 measures: BMI, diet, CSA, psychosocial, acceptability (16 mo.)

Outcome Measures Tested for Future Randomized Trial

- Primary Outcomes
 - BMI
 - Body fat
 - Physical activity (CSA)
 - Sexual Maturity
- Secondary Outcomes
 - Diet: 24-hour recall
 - Psychosocial factors

Key Formative Findings

- Heavier girls and CGs both want to be thinner but don't always see child's current weight as a health concern
- Family life is hectic, thus limited time for meals → frequent eating out, esp. fast food
- Girls see CGs as role models, particularly re PA
- Wide variation in the home environment re access to healthy/unhealthy food and PA opportunities
- Limited household controls on TV viewing – many girls have TVs in their rooms
- CGs perceive that their daughters would benefit from healthier diet and PA habits

Weekly Girls Sessions

- Girls Session
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Caregiver Sessions

- Caregiver Only
- Combined
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Intensive Intervention: 8 months

Home Visits: Girls & Caregivers

- Home Visit + phone call
- Home Visit + phone call
- Home Visit + phone call
- Home Visit + phone call

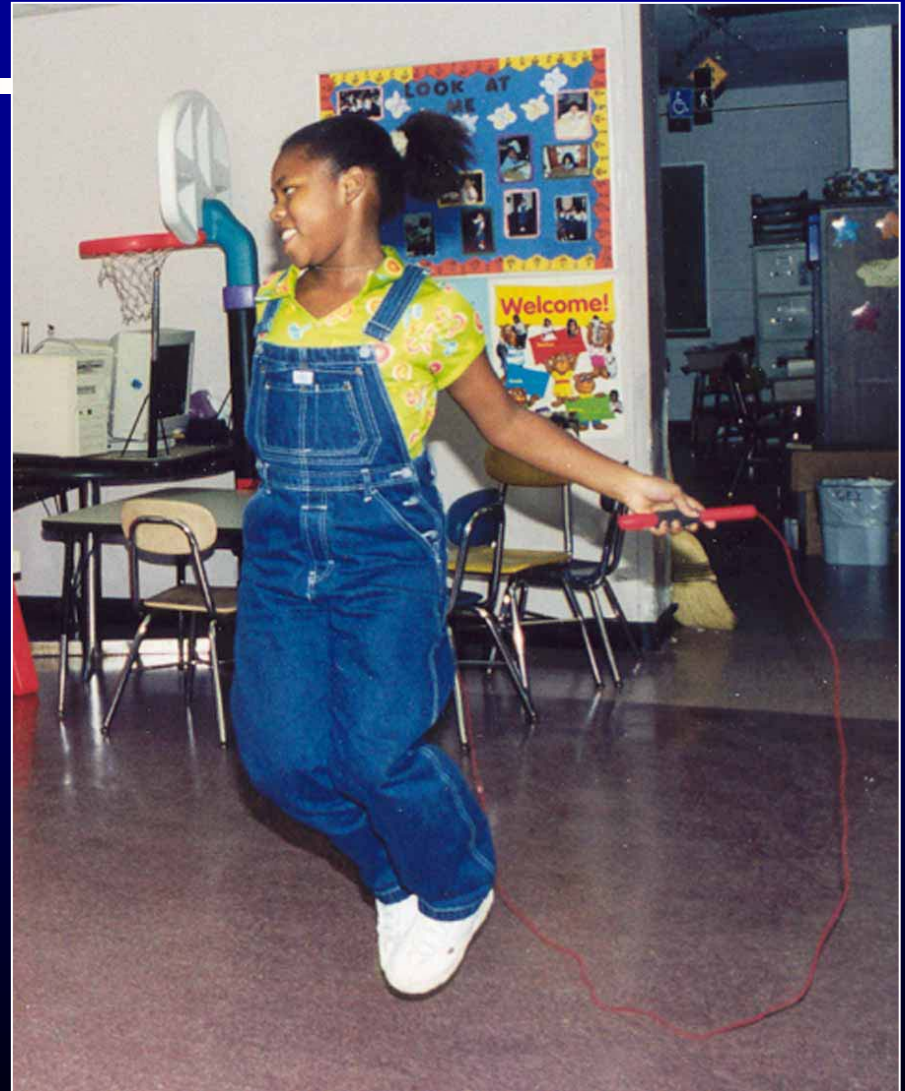
Excursions

- Women's B-ball Game
- African Dance
- Roller Skating
- Jump Rope Team
- River Hike

Church-wide Events

- Kick-Off Girls & CGs
- "Inform-ance"
- Jubilee

Girls Sessions





Girls Rule Dance



**We stand for strength and unity
We work together in harmony
So just sit back and watch us groove
We are the children of Girls Rule!
Girls Rule, break it down...**

Acting out commercials



Weekly Challenge



Unhealthy Meal
Burger King



Weekly Challenge: Vegetable Poetry

Broccoli

Broccoli is green.

It is not mean.

It is nutritious, and delicious.

Broccoli can make you strong.

And believe me, I am not wrong.

Caregiver only and Combined Sessions



Excursion: River Hike



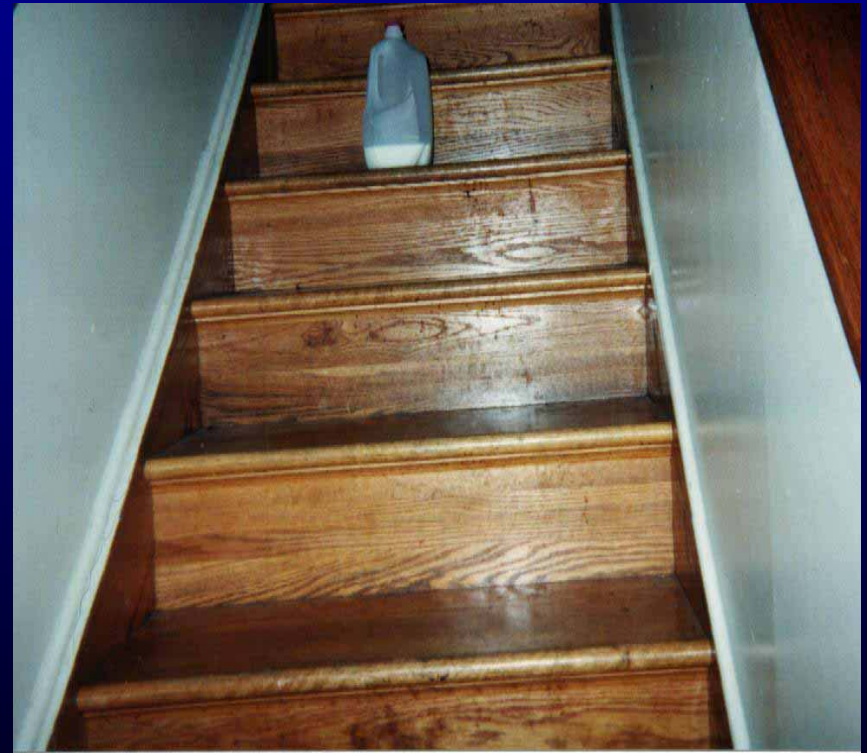
Photovoice in Girls Rule!

- What is healthy?
- What makes it hard to be healthy?

Photovoice: What is healthy?



What is healthy?



The Jubilee.....

Moving from the Intensive
Intervention to Micro
Environmental Maintenance

“Share, Tell and Keep it Going”

Time to Celebrate....



Show your stuff....





Micro Environmental Maintenance Intervention – 8 months

- Lead by Church Liaison and CAB (small stipend)
- Increased involvement of Youth Leaders
- Provided with training and materials
- Focus on incorporating Girls Rule themes into existing Church activities and policies
 - Church food events (include healthy alternatives)
 - Youth group activities (encourage activity and healthy snacks)
 - Health fairs (include GR in annual events)
 - Sunday School (encourage activity and healthy snacks)

Baseline Data

	Intervention	Control
Dyads enrolled	19	8
Age – Girls	7.9	8.1
– Caregivers	38.9	33.2
BMI – Girls	19.7	20.0
– Caregivers	33.7	35.7
Household Income < \$50,000	39%	71%
Caregivers Employed Full or Part-time	95%	86%
Caregiver Education Beyond High School	84%	86%

Results

- 21 of 27 dyads retained through intervention
- Less increase in BMI and BF (skinfolts) in intervention
- Reported decrease in calories in intervention vs. increase in control
- High PA levels at baseline for Girls, LOW for CGs, no change at follow-up
- TV viewing 2 hrs wkday, 4 hrs weekend, no change
- High intervention acceptability among girls and CGs, improved attitudes about nutrition and physical activity
- Good acceptability for individual measures (even sexual maturity) but concern about overall respondent burden



“... I appreciate Girls Rule! For inspiring my husband and daughter to drink more water. I thought they were really scared of it for a long, long time....”

Influence on the church membership.....

“We have a health board up and we’re involved in talking about health issues and eating right and exercising, and a friend of mine, I want to share, told me the other night that she had lost 13 pounds... and I’m sure that Girls Rule! had something to do with that, the information that we took back.”

Conclusions

- Girls Rule! intervention rated highly by girls, caregivers and church leaders
- Changes in some lifestyle and attitudinal measures show trends in a positive direction
- More work needed on PA and TV watching
- Using African American churches and individual homes as the setting for the program was feasible and welcomed by the participants
- Involving primary female caregivers important
- Many challenges related to sustainability

Putting CBPR and Girls Rule! Together

- Pilot Study
 - Church Advisory Board key
 - Role of dance in the church, use of sanctuary
 - Identify leaders, resources (caterers)
 - “Informance” to get church buy-in
 - Ideas for sustainability
- Full Trial (proposed)
 - Wider community involvement to support church
 - Organizational and environmental change
 - Emphasis on leadership development – early!
 - Build support and buy-in for sustainability

CBPR: Tips for Proposal Writers

(Guides and checklists included in report)

- Good CBP doesn't substitute for (or preclude!) good R
- Bring community partners "to the table" as soon as possible
 - DON'T rush it at the last minute!
- Describe potential *research* benefits of CBPR
- Trust community partners to understand research basics (everything on the table) and have good intervention ideas
- Plan for sustainability from the beginning
- Think long, hard, and creatively about optimal balance between scientific rigor, implementation constraints, and ethical treatment of community partners
- Be responsive to community's resource burden/needs
- Build in measures to assess CBPR impact (within study)

CBPR: Tips for Funders and Reviewers

- Give adequate guidance (or links) re CBPR in RFA
- Recognize the time needed to build true partnerships
 - Length of funding period
 - Planning phase
 - Start-up time
- Look for a thoughtful balance of science, burden, ethics
 - Consider alternatives to RCTs
- Budgetary options should address community burden
- Recognize evidence of *true* partnership development
- Provide guidance and training to reviewers re CBPR
- Include experienced CBPR researchers and community members on review panel

CBPR, Obesity Research, & Kids

- Parents and community leaders are key
- Include separate (parent/child) and combined intervention time
- Kids can be the “gateway” to larger community
- Look for creative ways to get “controlled” feedback
- Consider older kids in leadership roles
- Home/Family-based interventions may be surprisingly well received and provide new learning opportunities
- Churches provide many options for organizational change and sustainability
- Good measures an ongoing challenge
 - Use interactive, entertaining methods
- Tackle social norms

