



# Refining a physical activity promotion model through formative evaluation: The Good Fit Project for multiethnic urban adolescents

Amanda S. Birnbaum, Tracy R. Nichols, Sara Birnel, Melanie Shefchik

## **Acknowledgments**

This research is supported by the National Cancer Institute  
Grant # R21CA109846-02



# Background

- Increasing interest in understanding physical activity (PA) behavior in youth
- Literature suggests key directions for youth PA promotion interventions
  - Importance of afterschool time for accumulating PA
  - Importance of multilevel intervention approaches
  - Need to understand mechanisms of PA behavior change



# The Good Fit Project

- Mixed-methods formative evaluation for promoting afterschool PA in multiethnic urban adolescents
- Community-based academically-focused after-school programs as venue
- Goal of helping train adolescents to identify and try PAs that are a good fit for them

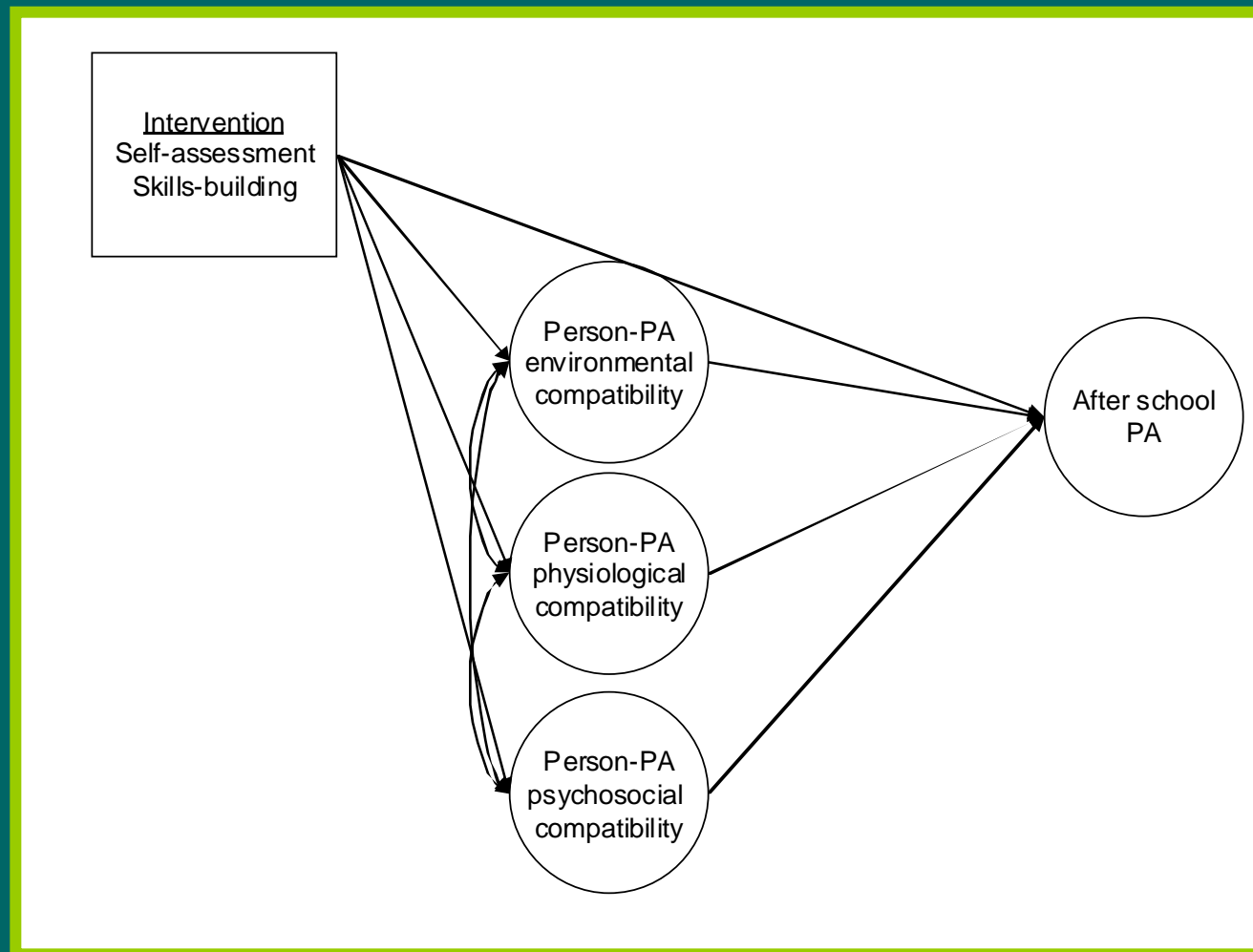


# Original Hypothesized Mechanism

## Person-PA compatibility

- PAs have different characteristics or “profiles”
- “Fit” of PA for an individual differs by:
  - Characteristics & resources – environment
    - Space, time, & economic resources
  - Characteristics & resources – individual
    - Physical abilities and limitations
    - Social concerns, personal issues and preferences
- Training adolescents to self-assess and maximize person-PA compatibility will increase PA participation

# Hypothesized Mediation Model





# Theoretical Foundations

- Social ecological model
  - “Dynamic interplay of situational and interpersonal factors”
  - Multilevel influences
- Adolescent development
  - Competence
  - Embarrassment
  - Changing social needs & contexts
  - Gender-specific development
- Social marketing strategies



# Good Fit Approach

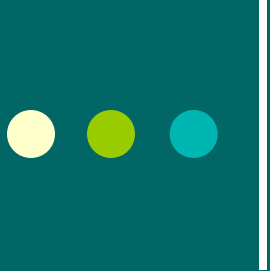
- Initial idea was that finding PA is like finding a pair of jeans – need to find one that fits you well
  - Based on premise that individuals’ “profiles” and PA “profiles” are both fairly immutable
- Formative evaluation designed to validate and refine this model in the target audiences (1° & 2°)



# Data Collection

- 51 participants interviewed
  - 41 Adolescents (ages 11-14)
    - 10 one-on-one interviews
    - 6 focus groups – 3 boys & 3 girls
    - Primarily Latino and African American
  - 10 Key Informants
    - Adult afterschool program leaders
    - 9 females, 1 male, various racial/ethnic backgrounds
- All data were audiotaped, transcribed, reviewed & entered into ATLAS.ti for coding & analysis





# Listening to Adolescents and Program Providers

- Major formative evaluation questions
  - Which PAs are urban adolescent friendly and what are their “PA profiles?”
  - How can we best convey the good fit approach to adolescents?
  - **What are the most salient aspects of environmental, physiological, and psychosocial domains in our population?**
  - What gender differences exist and how can we best address them?
  - What resources and methods would be most appealing and helpful to program providers?



# Coding Process

- Team of 3 coders
- Codebook development through consensus
  - Guided by method of MacQueen et al (1998)
- 3 phases of coding for reliability & efficiency
  - Phase 1: Group coding
  - Phase 2: Consensus coding
  - Phase 3: “Funnel” approach
    - Multiple reviews of each coded transcript
    - Discussion directly entered into ATLAS
    - Disagreements addressed by full group



# A Model in Crisis






































- Unexpected paradigm shift
  - Approached the work as social marketers
    - Audience's needs, values, realities
    - Qualitative methodology
  - Qualitative analysis begins early
    - “not sharply divided from the other activities in the process”— J. Cresswell 2003
  - Soon confronted two competing worldviews
    - Adults
    - Adolescents



# Transformations

- First attempted surface solutions
  - Expand from 3 → 4 domains
  - Modify the PA profiles
    - Structured vs. unstructured, etc.
- Listened to adolescent experiences of fun
  - Commanded our attention
  - Could we reconcile their perspective with the dominant paradigm?

## PHYSICAL ACTIVITIES

<p>DANCE</p> 	<p>STEPPING</p> 	<p>CHEERLEADING</p> 	<p>DOUBLE DUTCH</p> 	<p>YOGA</p> 	<p>EXERCISE</p> 	<p>WEIGHTLIFTING</p> 	<p>HIKING</p> 
<p>WALKING</p> 	<p>RUNNING</p> 	<p>PLAYGROUND PARK</p> 	<p>BIKING</p> 	<p>SCOOTER</p> 	<p>SKATEBOARDING</p> 	<p>ROLLERBLADING</p> 	<p>FRISBEE</p> 
<p>TENNIS</p> 	<p>RAQUETBALL</p> 	<p>HANDBALL</p> 	<p>STICKBALL</p> 	<p>SOFTBALL</p> 	<p>BASEBALL</p> 	<p>FOOTBALL</p> 	<p>SOCCER</p> 
<p>BASKETBALL</p> 	<p>VOLLEYBALL</p> 	<p>HOCKEY</p> 	<p>GOLF</p> 	<p>DODGEBALL</p> 	<p>KICKBALL</p> 	<p>ICE SKATING</p> 	<p>SKIING SNOWBOARDING</p> 
<p>SURFING BODY BOARDING</p> 	<p>SWIMMING</p> 	<p>PADDLING ROWING</p> 	<p>GYMNASTICS</p> 	<p>MARTIAL ARTS</p> 			



# Confronting Assumptions: PA Profiles

- Participants challenged the idea of PA profiles
  - See PAs as mutable, adaptable
    - Not bound by adult or more suburban/middle class perceptions of “types” of PAs
    - Most activities can be done either competitively or non-competitively, with many or few other people, etc.
  - If jeans don't fit you can alter them

# Confronting Assumptions: Environmental Constraints

It's not like the so-called old days, you'd go home, throw your books in the house and run outside and hang out on the block. And we're also Manhattan here, so there are no blocks, so to speak of, there aren't parks. I mean yes, there's the Central Park but there's, Manhattan is not sports friendly. It seems that way because it's the focal point of the marathon and bike tours, but the truth is, for kids, it's not a kids' sports friendly place.  
– Adult program provider

We'll put up obstacles and things like that. Like we'll have to use our skateboard, like shoot each other...It be so fun like crazy.... We do this right here. We consider this whole neighborhood to be our playground. As long as nobody get hurt, we're cool. – Adolescent male

# Confronting Assumptions: Program Providers and PA

But they play...street ball...they're not playing it in the way that they understand concepts and how to really develop skills of shooting the ball or doing drills. It's just, it's...it's what I call street ball. They're just on the court, they have the ball, they're knocking into each other, and they just want to get a basket and slam dunk it. And they're not really learning any other skill that they could use or any other exercise that brings their stamina to like, really play full court.

You ask them what do you want to be when you grow up and they all say a basketball player....You don't hear em say doctors or lawyers, but if they had to pick a sport, that's the sport they'll pick. I don't...see kids playing baseball either. Or soccer. Or tennis. I would love for them to play tennis.





# Importance and Gendered Nature of Fun

You just, like, get that burst of power and that confidence, and you can't stop, like, *whoo whoo*. – Adolescent Boy

Today in gym we had to play volleyball. The thing that made it fun was because we're all really bad... But the thing that made it fun was that the other team was good so it was kind of competitive and the best part about it was that we won. – Adolescent Girl



# Validation/Triangulation Plans

- Survey including original Good Fit and Fun items to be given to target population
  - “Physical activity is most fun when...”
    - “...I feel a rush”
    - “...I get to tackle someone”
    - “... my friends and I are goofing around”
    - “...my friends and I are all really bad at it”
    - “...we make up games”
  - 44 Fun items to be tested
  - Multiple new scales



# Conclusions and Next Steps

- Re-visioning of Good Fit approach
- Questioning who our primary intervention targets are
- Grappling with ethical dilemmas and responsibilities of a social marketing framework
  - Pandora's box
- Moving forward towards effective responsible PA promotion for urban adolescents



# See our other Good Fit presentations

## ○ **MONDAY**

- What makes physical activity fun for urban adolescents? Listening to youth and opening Pandora's Box. **11:30 am – 3155.0**
- Applying Durkheim's theory of solidarity to health promotion for multiethnic urban youth **4:30 pm – 3389.0 Board 4**
- Representations of adolescent eating in commercial image banks **4:30 pm – 3388.0 Board 6**

## ○ **TUESDAY**

- Motivating adolescents to be physically active: After-school program providers' perceptions of gender and class constraints **9:15 am – 4063.0**