

The Trial of Activity In Adolescent Girls:



An Example of a Trans-community intervention

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✓ **Goals of this talk:**

- **Briefly describe TAAG**
- **Discuss our experience to date in developing a trans-community intervention**
- **Discuss issues in developing interventions that are sustainable**



What is TAAG?

- **Multi-centered intervention trial**
- **36 school/community catchment areas (6 per field center)**
- **Focus on reducing the decline of activity in adolescent girls**
- **Intervention links middle schools with community**
- **Collaborative study with National Heart, Lung, and Blood Institute, NIH**
- **Six field centers, one coordinating center**



TAAG Academic Research Partners

San Diego State University: John Elder, P.I.

Tulane University: Larry Webber, P.I.

University of Arizona: Tim Lohman, P.I.

University of Maryland: Debra Young, P.I.

University of Minnesota: Leslie Lytle, P.I.

**University of North Carolina (Coordinating Center):
June Stevens, P.I.**

University of South Carolina: Russ Pate, P.I.

**National Heart, Lung and Blood Institute: Charlotte
Pratt & Jared Jobe, Project Officers**



Primary Aim

- ✓ Evaluate the effectiveness of an intervention linking schools to community organizations to reduce the age-related decrease in MVPA in middle school girls
- ✓ Primary Hypothesis:
 - The intervention will reduce, by half, the decline in physical activity for girls between 6th and 8th grade



Study Design

- ✓ **36 Schools randomized to control or treatment**
- ✓ **3 Cross-sectional samples of girls**
 - **Spring 2003: 6th grade**
 - **Spring 2005: 8th grade**
 - **Spring 2006: 8th grade**
- ✓ **Measures include:**
 - **Minutes of MVPA (CSA monitors)**
 - **Physical fitness (PWC-170)**
 - **Body Composition (Ht, Wt, triceps skinfold)**
 - **Types and context of MVPA (3DPAR)**
 - **Psychosocial mediators/moderators**
 - **Environmental variables**
 - **Physical activity in PE class**



TAAG Intervention Components

- TAAG Health Education with Activity Challenges
- TAAG Physical Education
- TAAG Promotions
- TAAG Programs for Physical Activity



Developing a School-Community Link

- ✓ **Why not just a school-based intervention?**
 - **Field is moving toward an ecological approach, examining multiple levels of influence and the social and physical environments**

 - **Adolescents spend active time in various places**
 - **Baseline CSA data show that in this population, MVPA occurs:**
 - ◆ **20% of the time in schools**
 - ◆ **45% of the time at home**
 - ◆ **20% of the time at a community facility or other outdoor facility**



What do we mean by a school-community linked intervention?

- ✓ Are we attempting to:
 - Conduct community-based participatory research?
 - Work on locality development or social planning?
 - Develop community coalitions?
 - Build community capacity?
 - Positively influence the social capital in communities?
 - Work, simultaneously, in 2 community agency toward some common goal?



What Does TAAG Ask Schools and Community Agencies to Do?

- ✓ Embrace the idea that increasing physical activity programs and PA opportunities for adolescent girls is a school/community priority
- ✓ Begin the process of increasing opportunities, incentives and a supportive normative culture in their own schools and agencies
- ✓ Be willing to be involved in a partnership with the university, a middle school and other community stakeholders to work toward common goals that would help all girls be more active



TAAG Pilot Experience

- ✓ **Conducted one-on-one interviews with a wide range of stakeholders in the schools and communities (Direct action community organizing)**
- ✓ **Piloted a process-oriented model of community involvement (Partners for Physical Activity) stressing:**
 - **consensus building among the partners**
 - **ownership of the process by the partners**
 - **goals and objectives set by partners**
 - **university staff as facilitators in the process**



TAAG Pilot Experience

- ✓ **Difficulties encountered:**
- ✓ **Process was slow. Nearly one year after the pilot partnership process began, 2 sites had no after school programs implemented**
- **Some partnerships had difficulty in making decisions for the common good and competed among themselves for limited resources**



TAAG Pilot Experience

✓ Difficulties encountered:

- Some TAAG activities were conducted in a manner that allowed girls to be very inactive for large proportions of time
- Some problems were observed around discipline issues, staff to student ratios, appropriate supervision of girls



Changes for the Main Trial

- ✓ **PROGRAMS** Physical activity is more university directed with clear and explicit research and programming goals and timelines
- ✓ **Planning committees are smaller than the Pilot Partnership**
- ✓ **Developed a variety of tools to assist school and community agencies in working more effectively to involve girls in MVPA**
- ✓ **University staff assumes more responsibility for identifying and promoting existing programs, developing new programs and problem solving issues as they arise**



✓ One-year post randomization:

- **74 programs across six sites**
- **Nearly 14,000 attendees at programs**



Positive TAAG experiences

- ✓ Health Education lessons are well-received
- ✓ PE teachers are beginning to adopt the TAAG philosophy
- ✓ Schools and community agencies remain interested and committed to TAAG
- ✓ Appears that TAAG programming is reaching a wide variety of girls



New Programs: Fitness





Steps





Kick Boxing





✓ **What we are learning about trans-community interventions?**

● **Time is an important issue**

- **both school and community partners have severe limitations on the time they can devote to additional projects**
- **difficult to coordinate schedules between school and community agency folk**
- **great deal of time required to develop true collaborative relationships between community partners**



✓ What we are learning about trans-community interventions?

- **Schools and agency partners have competing responsibilities, needs and motivators**
 - **Schools have tremendous pressure to meet academic standards**
 - **Schools and community agencies must balance very limited resources (space, personnel, money)**
 - **Community agencies may have few incentives to have more adolescents in their facilities**



✓ **What we are learning about trans-community interventions:**

- **Linking schools and communities very difficult**
 - **Systems of payment, coordinating program registration, compensating instructors are formidable barriers for schools and community agencies to negotiate**

 - **Transportation between schools and agencies is difficult. Formative assessment data from community agencies show that for youth attending programs at community agencies:**
 - ◆ **51% arrive by car**
 - ◆ **28% walk**
 - ◆ **9% arrive by school bus**



What do we know about sustainability in school-based programs?

- **CATCH Institutionalization Grant, School Health and Tobacco Education Project and Smart Choices Diffusion study**
- **Program champions, patron saints, or boundary spanners that emerge after the active phase of the intervention, increase the chances of institutionalization**
- **What might be the effect of identifying and working with program champions as part of the active intervention trial?**



Program Champion Intervention Component

- ✓ **TAAG PC component: Actively plan for the institutionalization of the TAAG intervention during the 2nd year of the intervention**
- ✓ **Identify and train potential program champions in our schools and communities during the active intervention period**
- ✓ **Help them develop action plans for sustainability**



Conclusions

- ✓ **Trans-community *interventions* that are linked are very difficult to implement**
 - **Require change in social, physical, and often policy environments in not one, but two or more community agencies**
 - **Require a great deal of time to forge community partnerships**
 - **May be more powerful in terms of effectiveness and sustainability than sole-agency programs but developing trans-community interventions requires many years of commitment.**



Conclusions

- ✓ **Trans-community *research* is very difficult to conduct**
 - **Highly defined research goals conflict with community-based research ideals**
 - **Often uses individual-level assessment as primary outcome when environmental change is intervention goal**
 - **Requires assessing change at individual and environmental levels**
 - **Intervention impact may be limited due to the time needed for community intervention**



Conclusions

- ✓ We need to be creative in looking for ways to increase the chances of institutionalization. The TAAG Program Champion component might be a good start.



Conclusions

- ✓ **The community is well aware of and concerned about the childhood obesity epidemic.**
- ✓ **They are willing to be involved in helping with a solution.**