Disseminating Strategies for Incorporating Physical Activity Breaks in Community-Based Settings

Melicia C. Whitt-Glover, Ph.D.
Gramercy Research Group
Winston-Salem, NC
Email: mwhittglover@gramercyresearch.com

This project was supported by a Transition Supplement from the Active Living Research program at the Robert Wood Johnson Foundation (Grant#1916 GJC639 UCLA)
Study Design

- Transitional supplement funding from RWJF
- Focus on disseminating materials to schools and churches in South
  - They asked for it, we studied it
- Two phases, 1 year study
  - Phase 1—call for proposals
  - Phase 2—program implementation and evaluation
Phase 1

Months 1 - 3

- Call for proposals for $500 mini-grants
  - Schools or churches
  - Interested in increasing PA *within* their organization
  - Willing to incorporate the *Lift Off* concept
  - Attend information session
  - Willing to conduct exercise program for at least 3 months
  - Recruit and retain 20 program participants
  - Agree to allow data collection

- Provided grant writing assistance when requested
  - *The goal was to fund 25 organizations to execute the program*
Application Process

CRITERIA FOR SELECTION AND CONDITIONS FOR FUNDING

- Identification of a program coordinator to oversee program activities
- Demonstrated support from your organization for conducting the program
- Description of how the 10-minute exercise breaks will be incorporated
- Demonstrated ability to recruit and retain 20 participants in the program
- Demonstrated willingness to participate in pre/post-program assessment
- Description of how funds will be used for the program
- Demonstrated interest in and plans for obtaining funding and/or other resources to continue your program
Additional Requirements

- Grant funds could only be used for completion of the specific project outlined in the application.

- All grant recipients required to submit a final written report no later than 60 days after the project is completed.

**Grants were reviewed by panel of investigators from WFUSM and UCLA**
Results

- Phase 1
  - 25 participants representing 19 organizations attended grant session
  - 12 applicant packets
    - Funded 3 schools and 9 faith-based institutions *
Phase 2

Months 4 - 12

- Technical assistance to train on implementation of *Lift Off*
  - Provided copies of materials

- Pre-program data collection
  - PAR-Q for screening
  - Self-report PA using IPAQ
  - Anthropometrics
  - 7-day accelerometer with Actical
  - Health status and process measures
Results

• Planned Programs
  • Group walking/exercise sessions with *Lift Off* as warm up (some incorporated prayer and scripture before sessions)
  • Group-facilitated health discussion with *Lift Off* as exercise break followed by healthy meal and bible study
  • Individual PA program with log sheets and monthly check-in (*Lift Off* was done at check-in)
  • Daily activity break incorporated into work day

• Funding used for
  • Incentives (e.g., individual *Lift Off* copies, pedometers, videos)
  • Exercise leaders
  • Guest speakers
## Baseline Participant Characteristics

**N=199 participants recruited initially**

<table>
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<tr>
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<th>% of total*</th>
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<td>Women</td>
<td>89.1</td>
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<td>African-American</td>
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<td>Self report health status as “Good”</td>
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<td>Self report health status as “Very Good or Excellent”</td>
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*N=138 (includes only those who completed pre and post data forms)

Significant difference between schools in churches for raising children
### Baseline Participant Characteristics

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<th>Mean</th>
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<tr>
<td>Age</td>
<td>47.9</td>
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<td>Body Mass Index</td>
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<td># Chronic Conditions</td>
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<td>Diastolic Blood Pressure</td>
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</table>

Church participants significantly older than school participants  
There was a significant difference among sites for BMI (p=0.0016)  
Average BMI between churches and schools significantly different (p=0.0008)
**Accelerometer-Assessed Physical Activity**

**Changes likely driven by large improvements among participants in schools**
Accelerometer-Assessed Physical Activity

**Changes likely driven by large improvements among participants in schools**
Anthropometric Changes

- BMI: -0.19, p >0.05
- SBP: -1.2, p >0.05
- DBP: -1.8, p=0.007
Process Measures

❖ Reasons for joining
  ❖ 77% to improve physical health
  ❖ 26% to improve mental/psychological health

❖ Thoughts about program
  ❖ 91% said breaks made them feel good about themselves
  ❖ 80% planned to continue the 10-minute PA breaks after program
  ❖ 96% stated PA was worthwhile
  ❖ 67% experienced increased motivation
  ❖ 68% intended to increase PA levels after program end

❖ Several sites have continued programs
  ❖ Extra available funding was used to support maintenance ($500)
A Success Story!

UCBC Obama Walkers

Union Chapel Baptist Church
Intercessory Prayer Ministry
for
President Barack Obama
and the First Family

"I exhort therefore, that, first of all, supplications, prayers, intercessions, and giving of thanks, be made for all men;
For kings, and for all that are in authority; that we may lead a quiet and peaceable life in all godliness and honesty.
For this is good and acceptable in the sight of God our Saviour."

1 Timothy 2:1-3
THE WHITE HOUSE
WASHINGTON

September 28, 2009

Dear Friend:

I want to thank you for your message and for holding me in your prayers. My family and I are honored that so many Americans have supported us in this special way.

Our country faces enormous challenges, but each day I am uplifted by the enduring spirit of the American people. I know that we will meet these challenges if our optimism and hope are met with the necessary will and hard work.

We understand that “the strength to go on produces character. Character produces hope. And hope will never let us down” [Romans 5: 4-5]. In these times of trial and opportunity, I deeply appreciate your prayers for this country, my family, and myself. May God bless you.

Sincerely,

President Barack H. Obama
44th President of the United States of America
Elected: November 4, 2008
Inaugurated: January 20, 2009
Conclusions

- These data suggest the feasibility and acceptability of *Lift Off* in schools/churches among adults in the south.

- Participating organizations were able to incorporate the activity breaks into routine activities.

- Participants showed progress toward increasing PA levels.

- Additional support/technical assistance may be needed to:
  - Improve programs offered
  - Increase focus on 10-minute bouts of PA
  - Increase focus on overall PA
Instant Recess™
in Schools

Jewel R. Mitchell, BS, CHES
Gramercy Research Group
Jmitchell@gramercyresearch.com
Why Schools?

- Schools are prime targets for interventions to increase PA among children since 95% of children are enrolled in school.
- Attendance enforcement ensures high levels of exposure.
- The organizational infrastructure permits institutionalization.
- NC has the Healthy Active Children Policy (HSP-S-000)
Documented Policy

- NC State Board of Education Healthy Active Children Policy (HSP-S-000)
  - Establish and maintain a local School Health Advisory Council
  - Provide > of 150 minutes/week of [moderate-to-vigorous] physical activity to all K - 8 students.
  - Move toward having 225 minutes per week of physical activity (every other day throughout 180-day school year)

Full policy available at http://www.learnnc.org/lp/media/articles/physed0510/Final_HAC_Policy.pdf
Why Forsyth County, NC

- 16th most obese state among adults
- 5th most obese state among children
- ~40% of children in WSFCS school system OW/OB
Forsyth County, NC
Community-Based Dissemination of *Instant Recess* Breaks

- Goal: Evaluate planned policy change for PA in elementary schools and afterschool sites
  - TA through teacher training & provision of IR materials
  - 8 elementary schools & 8 after schools enrolled
  - Randomized (delayed intervention control)
  - PA measured using modified SOFIT to capture
    - Activity level
    - On-task vs. off-task behavior
    - Context of lesson being taught
    - Teacher behavior
Methods for Incorporating *Instant Recess™*
How to get In

Winston Salem/Forsyth County Schools (WSFCS)

Dr. Donald L. Martin
WSFCS Superintendent of Schools

Local School Health Advisory Council

Nancy Hoover
WSFCS Health and Physical Education Program Specialist

WSFCS Elementary School Principals and Staff
Instant Recess™
TEACHER TRAINING

A partnership between:
Gramercy Research Group
UCLA School of Public Health
Professional Athletes Council
Winston-Salem/Forsyth County Schools
YWCA of Winston-Salem
Overview of the Training

- Why am I here?
- Why is this important?
- What do you want me to do?
- How do you want me to do it?
- When do you want me to do it?
- What is supposed to change?
Let’s Get Fit!

• YOU can help Winston-Salem/Forsyth County lead the way in creating healthier, more active school and afterschool environments and lifestyles!

“You must be the change you wish to see in the world.”
-- Mahatma Gandhi

“Never doubt that a small group of thoughtful, committed citizens can change the world. Indeed it’s the only thing that ever has!”
-- Margaret Mead
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<th>Activity</th>
<th>On-task</th>
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Activity: 1 sitting, lying down 2 light PA, standing 3 mod. PA, brisk walk 4 vigorous PA, run

On-task: On Student is on-task

On-task: M Off-task (motor/movement) N Off-task (noise) P Off-task (passive other)

Lesson Context: K Knowledge, lecture P Game play, free play

Teacher: M Classroom mgmt K Knowledge, lecture

Behavior: O Observation

Unengaged: U Unengaged

Classroom mgmt: M Classroom mgmt

Active engaged: aE Actively engaged
Percentage of School Classrooms Observed Participating in Any Fitness Skill, Game, or Free Play

- **Intervention Schools**
- **Crossover Schools**
Mean Minutes of PA in School Classrooms by Intervention Type

Bar = SE

- Intervention Schools
- Crossover Schools
- Control Schools
- Instant Recess Classrooms

Spring baseline
Spring followup
Fall baseline
Fall followup

Mean Minutes

0.0
2.0
4.0
6.0
8.0
10.0
12.0
14.0
Mean Minutes of Fitness Skills and Game and Free Play in School Classrooms by Intervention Type
Minutes of Fitness Skills and MVPA in Classrooms by Level of Enthusiasm for Instant Recess

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<th>Enthusiasm for Instant Recess</th>
<th>Minutes of Fitness Skills</th>
<th>Minutes of MVPA</th>
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<td>No Instant Recess</td>
<td>0.64</td>
<td>0.61</td>
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<tr>
<td>Mixed enthusiasm</td>
<td>4.79(^a)</td>
<td>0.54</td>
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<tr>
<td>Enjoyed Instant Recess</td>
<td>6.47(^b)</td>
<td>2.57(^\d)</td>
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\(^a\) p = 0.0008 vs No Instant Recess
\(^b\) p < 0.0001 vs No Instant Recess
Gramercy Research Group

Presents
Former NFL player
Allen Rossum's
Mobile Health 4 Kids

Saturday, March 13, 2010
10am to 1pm
@ the Gateway YWCA
(1300 S. Main Street, Winston-Salem, NC)

FEATURE PRESENTATIONS:
* An Instant Recess activity led by Allen Rossum
* Preparing healthy snacks with “Chef Allen”
* Performances by local youth groups
* Exhibits by local organizations
* Goody bags
* Much, much more!

Hosted by Gramercy Research Group, Gateway YWCA, and St. John CME Community Outreach

For additional information or questions, please contact Gramercy Research Group (336) 293-8540
Lessons Learned

- Having support is critical
  - WSFCS Superintendent, PE Program Specialist
  - Principals, teachers, staff

- Instant Recess was used
  - Involve students in creating additional breaks
  - Additional teacher training may be necessary

- Need additional, more frequent evaluation
  - Timing of evaluation is important
  - Number of classrooms observed is important

- Consider ways to expand for middle/high school
Thank You!!

**Gramercy Research Group Staff and Consultants**
- Melicia Whitt-Glover, Ph.D.
- Irma Richardson, MHA
- Tangky Murphy
- Robin Rosenbalm
- Juanita Montgomery
- Raymond Glover
- Lester Whitt
- Ethel Whitt
- Lyndsey Hornbuckle, Ph.D.
- Jewel Mitchell, BS, CHES
- Dan Heil, Ph.D.
- Sandra Ham, MS
- Viewfinders Media

**UCLA**
- Antronette (Toni) Yancey, MD, MPH
- Brian Cole, DrPH

**Professional Athletes Council**
- Allen Rossum
- Shawn Wilson

**Winston-Salem/Forsyth County Schools**

Visit us at: [www.gramercyresearch.com](http://www.gramercyresearch.com)