Making Physical Activity Policy Practice

GROUP RANDOMIZED CONTROLLED TRIAL IN AFTERSCHOOL PROGRAMS

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Policy to Practice in Youth Programs


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Focus on physical activity in Out-of-School-Time (OST) programs

Afterschool programs (3-6pm)
Non-sport or single activity focused
Serve Snacks, Homework, Enrichment, Physical Activity
Operate everyday of school year
10.2 million youth attend
Physical Activity Policies in OST Programs

Amount of physical activity accumulated

Amount of PA to schedule
How we think policy works

Policy → Increased Child HEPA
Policy is necessary, but... alone it’s insufficient

“Best” Policy

Nexus of public health impact and what practice can deliver
(given a realistic amount of resources)

Policy is adopted,
Strategies are implemented to reach specified policy goals
OST Programs more complex than simply adding policy to make changes
How policy “actually” works, maybe…

Policy

OST Environment

Staff Competencies

Increased Child HEPA

- feedback loop -

Indoor/Outdoor Play Spaces & Size, Equipment Availability, Curricula, Evaluation, Equity Physical Activities

Ongoing Compliance/Oversight • Technical Assistance

Changes in Routine Practice

(Considerations for differences among OSTs in human and physical resources)

Most modifiable characteristic of OST programs – STAFF Leaders and Frontline Staff

Policies need to be S.M.A.R.T.
(Specific, Measureable, Attainable, Realistic, and Time-Bound)

Policies only state (clearly or unclearly) where practice should go – NOT how to get there

Outside Organizational Partnerships (e.g., Universities)
Collaboratively develop “how to get there”

Continuous modification of policy goals

Changes in Routine Practice

(Considerations for differences among OSTs in human and physical resources)
Physical Activity Policies in OST Programs

Schedule 60min PA Opportunities daily
Children accumulate 30min MVPA

Practice can’t do it!
Children attending ASPs fail to accumulate 30min MVPA/day

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Legend

NC: Engage in MVPA for 20% of program
A: (interpreted as percentage of time spent in MVPA out of total program duration)

NC: Engage in MVPA for 20% of program
B: (interpreted as percentage of time spent in MVPA out of total time in attendance)

C: CA: Minimum of 30 min of MVPA

D: CA: Minimum of 60 min of MVPA

NAA: Engage in PA for 20% of program
E: (interpreted as percentage of time spent in light-to-vigorous PA out of total program duration)

NAA: Engage in PA for 20% of program
F: (interpreted as percentage of time spent in light-to-vigorous PA out of total time in attendance)

NAA: Engage in MVPA for at least 50% of scheduled PA time
G: (interpreted)

Students were categorized into those who met the following benchmarks per day by afterschool program type:

- **Community-Based** (n=10)
- **Faith-Based** (n=3)
- **School-Based** (n=6)

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Research Design and Methods

- Group randomized controlled trial
  - 20 ASPs serving >1,700 children (5-12yrs)
  - Diverse settings – school, community centers, faith-based
  - Randomized post-baseline data collection

- Baseline (spring 2013)
- Training August 2014, Boosters Fall 2014
- Post (spring 2014)
- Accelerometer-derived MVPA
  - Evenson cutpoints
  - % Children meeting 30min/d MVPA guideline
  - Minutes of MVPA
**6. Staff Physical Activity-related Skills**

- **Yes, limited**
- **None**

**LET US Play**

- Lines, Elimination, Team Size, Uninvolved Staff/Kids, Space Equipment and Rules

- **Girls Only**
  - Specific games/activities scheduled for girls—can include gender-specific activities like dance and/or girl version of game—soccer for girls

- **Yes, some** of the days
  - Yes, limited description
  - Defines time of occurrence with broad label for activity, no other details provided

**2. Following Schedule of Daily Programming**

- **None of the days**

**Detailed**

- Clearly defines type of activity [snack, homework, enrichment, physical activity], location of occurrence, staff roles/responsibilities, necessary supplies/materials/equipment

**3. Physical Activity Scheduled**

- **Yes, every day**

**Represents Intentional Programming at Every Level:**

- Snack, Homework/Academics, Enrichment, and Physical Activity Opportunities

**4. Allocated Time for Physical Activity**

- ≤60 Minutes
- ≥60 Minutes

**Recommend 60min for 30min MVPA**

**5. Types of Physical Activity Scheduled**

- **Organized Activities**
  - Specific games/activities scheduled and led by adult

- **Target Program Staff**

**Target Program Leader Weekly Physical Activity Checklist**

- Ongoing evaluation of adherence to physical activity strategies

**暇?**

**All Elements Are Embedded Within and Are Responsive to Each Unique Program Environment**

**Strategies To Enhance Practice for Physical Activity**

- **Programs can enter anywhere along the continuum, with entry at higher STEPs requiring fewer intervention components/support**

**Physical Activity Standards Reviewed**

- **Target Program Leader**

- Professional Development Training
  - Face-to-Face and Online

- **Building**

**Framework for Practice to Meet Policy - Maslow’s Hierarchy of Needs, Capacity Building**
Let Us Play
(Lines, Elimination, Team Size, Uninvolved Staff/Kids, Space Equipment and Rules)

Girls Only (Specific games/activities scheduled for girls – can include gender-specific activities like dance and/or girl version of game – soccer for girls)

Yes, limited

Yes, some of the days

Yes, every day

None of the days

Yes, limited description (Defines time of occurrence with broad label for activity, no other details provided)

Yes, some of the days

Yes, every day

None of the days

None

Yes, some of the days

Yes, every day

None of the days

Represents Intentional Programming at Every Level: Snack, Homework/Academics, Enrichment, and Physical Activity Opportunities

Detailed (Clearly define type of activity [snack, homework, enrichment, physical activity], location of occurrence, staff roles/responsibilities, necessary supplies/materials/equipment)

None

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Physical Activity Standards Reviewed

Programs can enter anywhere along the continuum, with entry at higher STEPs requiring fewer intervention components/support

Strategies To Enhance Practice for Physical Activity

ALL ELEMENTS ARE EMBEDDED WITHIN AND ARE RESPONSIVE TO EACH UNIQUE PROGRAM ENVIRONMENT

Framework for Practice to Meet Policy - Maslow’s Hierarchy of Needs, Capacity Building

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Children Accumulate 30 Minutes of Moderate-to-Vigorous Physical Activity while the Program is in Operation

**6. Staff Physical Activity-related Skills**
- Yes, limited
- None

**LET US Play**
(Lines, Elimination, Team Size, Uninvolved Staff/Kids, Space Equipment and Rules)

**Target Program Staff**

**5. Types of Physical Activity Scheduled**

- Organized Activities
  (Specific games/activities scheduled and led by adult)
- Girls Only
  (Specific games/activities scheduled for girls – can include gender-specific activities like dance and/or girl version of game – soccer for girls)
- Free Play
  (Children released to play ground, no structured, adult-facilitated games taking place, some children active, some not – Recommend limited Free-Play)

**Activity for All**

**Target Program Leader**

Allocating time to Organized and Free-play, as well as, offering Girls’ only opportunities*.
*Decision of games to schedule/play is responsibility of program, with staff and child feedback.

**Professional Development Training**
Face-to-Face and Online

Framework for Practice to Meet Policy - Maslow’s Hierarchy of Needs, Capacity Building
### Effectiveness of STEPs to PA – 1st Year MVPA Outcomes

R01, GRCT 20 ASPs serving >1,700 children, highly diverse sample of ASPs, Spring 2013 (baseline) to Spring 2014 (1st Yr)

**Boys**

- OR 2.26 (95CI 1.35 to 3.80)

**Girls**

- OR 2.85 (95CI 1.43 to 5.68)

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<tr>
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<th>% 30min MVPA</th>
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<td>Boys</td>
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<tr>
<td>Girls</td>
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**Graphical Representation**

- **MVPA (min)**
- **% 30min MVPA**

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*Table: Minutes MVPA and % 30min MVPA for boys and girls before (Pre) and after (Post) intervention.*
Effectiveness of STEPs to PA – 1st Year MVPA Outcomes

R01, GRCT 20 ASPs serving >1,700 children, highly diverse sample of ASPs, Spring 2013 (baseline) to Spring 2014 (1st Yr)
Control ASP Boys: 5 of 10 increase

Effectiveness of STEPs to PA – 1st Year MVPA Outcomes
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Effectiveness of STEPs to PA – 1st Year MVPA Outcomes
R01, GRCT 20 ASPs serving >1,700 children, highly diverse sample of ASPs, Spring 2013 (baseline) to Spring 2014 (1st Yr)
Control ASP Girls: 4 of 10 increase

Effectiveness of STEPs to PA – 1st Year MVPA Outcomes
R01, GRCT 20 ASPs serving >1,700 children, highly diverse sample of ASPs, Spring 2013 (baseline) to Spring 2014 (1st Yr)
Control ASP Girls: 6 of 10 increase

Effectiveness of STEPs to PA – 1st Year MVPA Outcomes
R01, GRCT 20 ASPs serving >1,700 children, highly diverse sample of ASPs, Spring 2013 (baseline) to Spring 2014 (1st Yr)
Take Away

• Improving MVPA in ASPs is **difficult** — but not impossible

• **30min MVPA** — realistic?
  – 3-2-1, 30-20-10min MVPA (school, ASP, home)

• **Diversity of programs** — if it can happen here, it can happen anywhere

• **2 Year outcomes (spring 2015)**
  – 2 years of implementation vs. 1 any better?
Thank you

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