Measuring Policy & Practice Environment in Afterschool settings

Responsiveness to Change of the Healthy Afterschool Activity and Nutrition Documentation (HAAND) Instrument

Rahma Ajja, M.P.T., M.P.H.,
Doctoral Candidate, Arnold School of Public Health, University of South Carolina
Policy to Practice in Youth Programs
Afterschool healthy eating and physical activity (HEPA) policies

Physical Activity Allocated and Accumulated

Quality of snack served

   **Endorse:**
   
   - F & V
   - Whole grains
   - Milk/dairy product

Limit food high:

   - Sugar
   - Fat
   - Energy (calories)

Staff Training
Ongoing Evaluation
Child Feedback


Measuring policy and practice Environment

HEPA Policies → Policy/environmental audit tools → Adherence to HEPA Policies

 качество информации?

Health behavior \( \Delta \) HEPA
Policy and practice audit tools

Majority are self assessment
Practitioner use
Majority don’t report psychometric information
If
Psychometric properties is tested
Often uses
Cross-sectional design

Policy and practice audit tools

Intended purpose

Need assessment
Advocacy
Research/ Intervention Evaluation

Audit tools are widely used as outcome measures to evaluate policy and practice interventions Yet

Rarely assessed for responsiveness to change


Responsiveness to change

If Audit tools are to be used as outcome measures

Tools ability to detect change when real change has occurred is ESSENTIAL

Linked policy and practice changes to Δ HEPA behaviors


Purpose

Examine the **responsiveness** of the HAAND instrument to changes in the **policy & practice environment** following the implementation of Strategies To Enhance Practice to Healthy Eating and Physical Activity (**STEPS-HEPA**) intervention.
The Healthy Afterschool Activity and Nutrition Documentation (HAAND)

1st section - collect basic program information
- # of staff / kids
- Program location
- Program duration
- Snack cost / month

<table>
<thead>
<tr>
<th>Program Name:</th>
<th>Date of Observation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location: School</td>
<td># Children in Attendance:</td>
</tr>
<tr>
<td>Program Name:</td>
<td># Staff:</td>
</tr>
<tr>
<td>Today's Date:</td>
<td></td>
</tr>
<tr>
<td>Today's Weather:</td>
<td></td>
</tr>
<tr>
<td>Time of Day:</td>
<td></td>
</tr>
</tbody>
</table>

- How much does your program spend on snacks per month?
- What was served for snack today?
- Are you not scheduled for a snack?
- Did children bring outside food?
- Did children bring veggies?
- Did staff members teach other than snack in front of children?
- Are children allowed to bring beverages they consume?
- Total time allocated for Physical Activity (PPA)
The Healthy Afterschool Activity and Nutrition Documentation (HAAND)

2nd section - Healthy Afterschool Program Index scale for Physical Activity (HAPI-PA)

• 11 items
• Score range 0 to 25

<table>
<thead>
<tr>
<th>Physical Activity Scale</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. No active policies</td>
<td>No</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>2. Child Management</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>3. Parent Involvement</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>4. Nutrition Status</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>5. Physical Activity</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

- 11 items
- Score range 0 to 25
The Healthy Afterschool Activity and Nutrition Documentation (HAAND)

3rd section - Healthy Afterschool Program Index scale for Nutrition (HAPI-N)

- 12 items
- Score range 0 to 34
Strategies To Enhance Practice (STEPs) for HEPA

Multi-step, adaptive

Incorporating the HEPA polices into daily routine practice

Delivering professional development training

Identification low cost outlet for snack

Strategies To Enhance Practice (STEPs) for HEPA

Healthy eating
• Daily/weekly snack menu
• Challenges associated with serving menu-specific snack
• Staff healthy eating related skills

Physical activity
• Daily programming/ Scheduling
• Allocated time
• Types of activity scheduled
• Staff physical activity related skills


Research Design and Methods

- Group randomized controlled trial
  - 20 ASP’s across South Carolina
  - Diverse settings – school, community centers, faith-based
  - Randomized post-baseline data collection
- Baseline (spring 2013)
- Post (spring 2014)
Research Design and Methods

Policy and Practice Characteristics

- Healthy Afterschool Activity and Nutrition Documentation (HAAND)
- Single day visit to ASP’s
- Document review, observation, self-report
Healthy Afterschool Program Index for Physical activity HAPI-PA

Control

- Baseline Median (IQR) = 9.0 (3.8)
- Year 1 Median (IQR) = 8.5 (4.8)

P = 0.50

Intervention

- Baseline Median (IQR) = 9.5 (5.8)
- Year 1 Median (IQR) = 13.5 (2.0)

P = 0.002
Healthy Afterschool Program Index for Nutrition- HAPI-N

Baseline Median (IQR) = 8.0 (5.8)
Year 1 Median (IQR) = 7.5 (5.0)

P = 0.637

Baseline Median (IQR) = 6.5 (6.5)
Year 1 Median (IQR) = 21.0 (4.0)

P = 0.01
HAAND instrument  Responsiveness

Effect Size (ES): $M_2 - M_1 / IQR_{baseline}$

Standardized response Median (SRM): $M_2 - M_1 / IQR_{diff}$

Responsiveness index (RI): $M_2 - M_1 / IQR_{stable}$

Cohen effect size benchmarks
- Minimal responsiveness: <0.2
- Low: $\geq 0.2$ and < 0.5
- Moderate: $\geq 0.5$ and <0.8
- High: $\geq 0.8$
Audit tools are valuable in assessing policy & Practice intervention impact.

Establishing tool responsiveness is vital criterion for tools used as outcome measures.

Both scales (HAPI-PA & HAPI-N) showed moderate to high responsiveness.

HAAND Instrument appear to be capable of detecting changes in ASP’s HEPA policy & practice environment.
Thank you

ajja@email.sc.edu

P2YP.org