The Effects of Photographic Activity Schedules on Moderate-to-Vigorous Physical Activity in Children with ASD

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Physical Activity and Autism Spectrum Disorders

1. Ogden, Carroll, Kit, & Flegal (2012)
## Physical Activity and Autism Spectrum Disorders

<table>
<thead>
<tr>
<th>MVPA</th>
<th>• Moderate-to-vigorous physical activity reduces risks associated with obesity in children¹</th>
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<tbody>
<tr>
<td>OSRAC²</td>
<td>• Observational System for Recording Physical Activity Codes</td>
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</table>
| Activity Schedules³ | • Sequence of pictures that prompt engagement  
• Increase number of engaging activities |
| Purpose | • Assess the effects of photographic activity schedules on MVPA and varied play across two contexts for preschoolers with ASD |

Settings & Materials
Hustyi, Normand, Larson, & Morley (2012)
Method

• Participants
  • Three 4-year-old preschoolers with ASD
  • Mastery of activity schedules (academic/leisure items)

• Dependent Variable
  • Percent MVPA
  • Percent activity schedule following
  • Number of different activities
Design and Conditions

- Non-concurrent multiple baseline across participants

Context Assessment (Multielement design)
- Picture-Activity Correspondence Pretraining

Baseline
- Schedule probe
- Generalization probe

Activity Schedule Teaching
- No schedule probe
- Generalization probe

2-week Maintenance Probe
Context Assessment Results

1. **Penny**: Empty Field
   - Outdoor Toys

2. **Nathan**: Outdoor Toys
   - Fixed Equipment

3. **Kendra**: Empty Field
   - Outdoor Toys
Baseline Example
Activity Schedule Results

Graph showing percent MVPA (Moderate to Vigorous Physical Activity) across sessions for Penny, Nathan, and Kendra.
Activity Schedule Results
Activity Schedule Results

- BL
- SP Gen
- NSP Gen Main

MVPA

Percent MVPA

Sessions

Penny

Nathan

Kendra

Percent Activity Schedule Independence

Utah State University
Video Example
Discussion

Varying levels of MVPA evoked during context assessments across conditions for all participants.

Increase in MVPA after activity schedules were implemented

Increase the number of different activities completed

Future Research

Appropriate social activities