Assessing the Physical Needs and Capabilities of Individuals with Autism Spectrum Disorders: A Multiple Perspectives Approach

Lisle S. Hites, MS, MEd, PhD
Jessica F. Wakelee, MPH
Matthew M. Fifolt, PhD

2012 American Evaluation Association Conference
Minneapolis, MN
October 25, 2012
Overview

- Variants of Multisource Feedback
- New variant used for Needs Assessment
- Example of how new methods applied
- Results and Conclusions
360° Feedback

- Traditionally used for performance evaluation
- Focus on the individual from multiple perspectives
  - Self
  - Supervisor
  - Subordinate(s)
  - Peers
Inverted 360° Feedback

- Process inverted for needs assessment
- Focus on the group or agency from multiple perspectives
  - Self
  - Supervisor
  - Subordinate(s)
  - Peers
• Information may not be known from multiple sources
• Simple to complex
  • Need for more robust assessment tool
Draw information out of environment in addition to individual’s perspectives
Background

• ASD Needs Assessments are often Problematic
  • Individuals with ASD (IWASDs)
    • Typically reluctant to communicate
    • Avoid social interaction
    • Exhibit comorbid language comprehension difficulties
Researchers often survey “others” as surrogates

• Parents
• Care providers
• Therapists
• Individuals who interact with IWASDs
• Current investigation sought information regarding:
  • Physical activity
  • Nutrition preferences, practices, and needs
• Problem of systematic variance
  • Relationship between target and respondent
  • For IWASD, relationships may result in more pronounced bias
    • Parents/Family: Advocate for IWASD
    • Activity Providers: Advocate for Physical Activity
    • Service Providers: Advocate for mental wellness
    • IWASD: Advocate for personal comfort/interests
Survey Design

- Demographic information
- Specific ASD diagnosis
- Physical activities (type, frequency, mode, and duration)
- Sources of encouragement related to physical activities
- Challenges to participation in physical activities
- Nature of physical activity related to daily living routines
Analysis/Results

- Related to physical activities, IWASDs identified preferences for:
  - Types
  - Duration
  - Potential limitations

- Service and care providers:
  - Barriers to physical activities
  - Potential strategies for real and perceived obstacles
Analysis/Results

- IWASDs expressed moderate interest in increasing physical activity
- Providers expressed growing concerns regarding inactivity/lack of activity by IWASDs
- Physical activity providers expressed need for more training in working with IWASDs
Sample Results – Physical Activity Habits

Service Providers:

“IWASD I serve Never or Rarely...”

- Play organized team sports (82.9%)
- Play organized individual sports (73.2%)
- Exercise (46.3%)
- Play physically active games or recreational activities with others (53.6%)

Individuals w/ ASD (Group)

Persons w/ ASD:

“When I am physically active...”

<table>
<thead>
<tr>
<th></th>
<th>Usually</th>
<th>Prefer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td>19%</td>
<td>16%</td>
</tr>
<tr>
<td>Either</td>
<td>25%</td>
<td>39%</td>
</tr>
<tr>
<td>Group</td>
<td>30%</td>
<td>39%</td>
</tr>
</tbody>
</table>

“I usually spend ___ hours each day...”
- TV: 0-12 (2.6)
- Video /Computer Games: 0-12 (2.3)

Caregivers:

“When my child is Physically Active, s/he...”

<table>
<thead>
<tr>
<th></th>
<th>Usually</th>
<th>Prefers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alone</td>
<td>34%</td>
<td>32%</td>
</tr>
<tr>
<td>Either</td>
<td>33%</td>
<td>35%</td>
</tr>
<tr>
<td>Group</td>
<td>23%</td>
<td>32%</td>
</tr>
</tbody>
</table>

“I would prefer my child ___ (much) more often.”
- Play team sports (60%)
- Play sports alone (54%)
- Exercise (71%)
- Play games/activities w/ others (78%)
- Play games/activities alone (50%)

Activity Providers:

“IWASD I serve...”

- Always participate (68.2%)
- Never or Rarely need accommodation to participate (4.5%)
- Could potentially become very to extremely physically fit / professional athlete (41.9%)
Sample Results – Barriers to Physical Activity

**Service Providers:**
“Some of the barriers to physical activity among IWASD...”
- Physical Challenges
- Social/Communication Challenges
- Sensory Challenges
- Safety concerns
- Lack individual instruction
- Lack involvement of family/peers
- Lack of training
- Personal motivation
- Lack of adapted/appropriate activities

**Activity Providers:**
“Some of the barriers to offering better services to IWASD...”
- Insufficient personnel
- Lack of training for serving this population
- Lack of adapted equipment
- Class size/ lack of individual attention and instruction
- Required curriculum/limited time

**Individuals w/ ASD (Group)**

**Persons w/ ASD:**
“I do not participate in physical activity more regularly because of...”
- Health/medical reasons or conditions
- Balance, Motor Skills
- Low tolerance to interaction with others/
- Lack of activities for me
- Other obligations
- Lack of interest

**Caregivers:**
“My child does not participate in physical activity more regularly because of...”
- Lack of motivation
- Physical challenges
- Social/Communication challenges
- Sensory challenges
- Safety concerns
- Access/Availability of activities
- Time/availability
- Cost

**Persons w/ ASD:**
“I do not participate in physical activity more regularly because of...”

**Caregivers:**
“My child does not participate in physical activity more regularly because of...”

**Persons w/ ASD:**
“I do not participate in physical activity more regularly because of...”

**Caregivers:**
“My child does not participate in physical activity more regularly because of...”
Conclusions

• Gathering accurate information from IWASDs essential for informing research and practice
• Multiple perspectives can be used in designing future physical activity programs for IWASDs
• Design promotes inclusive and accurate information gathering
Special thanks to the following individuals:

• Kristi S. Menear, Department of Human Studies, University of Alabama at Birmingham
• William H. Neumeier, Department of Psychology, University of Alabama at Birmingham
• Joe Carter, Glenwood, Inc.
• Brooke Stephens, Triumph Services, Inc.


Contact Information

Lisle S. Hites, MS, MEd, PhD
Assistant Professor
(205)975-8980
lhites@uab.edu

Jessica F. Wakelee, MPH
Manager of Data Collection & Analysis
(205)975-8963
jwakelee@uab.edu

Matthew M. Fifolt, PhD
Associate Director, EAU
(205) 500-1878
mfifolt@uab.edu