Evaluating Popular AAC Tools and Strategies for Children with ASD

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The prevalence of autism spectrum disorder is 1/59 (Centers for Disease Control, 2018)

33-50% of these children will never develop functional speech (National Research Council, 2001)

These children are strong candidates for AAC intervention (Blom & Light, 2006; Minnick, 2003; Sigafoos, O’Reilly, & Green, 2007; Sigafoos, Schlosser, & Sutherland, 2013)
AAC

Habilitate Language
Rehabilitate Language
Augment Speech

AAC

Aided
Unaided

Selection-based

AAC

Aided
Unaided

Topography-based

AAC

Aided
Unaided

Low-tech
What is “best” for my child?

Schlosser and Sigafoos (2006)
- 21 single-subject studies
  - Non-electronic aided vs. electronic aided (3)
  - Unaided vs. aided (7)
  - Unaided + vocal vs. aided + vocal vs. vocal only (11)

Gevarter et al. (2013)
- 28 single-subject studies
  - Non-electronic picture system vs. SGD (10)
  - Aided vs. unaided (sign) (10)
  - AAC vs. vocal speech interventions (10)
Challenging Behavior and Acquisition: Izaak

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Treatment</th>
<th>Δ</th>
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</thead>
<tbody>
<tr>
<td>Izaak</td>
<td>44.33</td>
<td>8.54</td>
<td>-35.79</td>
</tr>
<tr>
<td>Brandon</td>
<td>3.33</td>
<td>2.10</td>
<td>-1.23</td>
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Gesturing: Brandon and Izaak

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<tr>
<th></th>
<th>Baseline</th>
<th>Treatment</th>
<th>Δ</th>
</tr>
</thead>
<tbody>
<tr>
<td>Izaak</td>
<td>0.00</td>
<td>0.09</td>
<td>+0.03</td>
</tr>
<tr>
<td>Brandon</td>
<td>0.00</td>
<td>0.20</td>
<td>+0.20</td>
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“What augmentative communication tools and strategies will best meet the needs of the individual?” (Gosnell, Costello, & Shane, 2011)

“As experienced AAC interventionists well know, the real gains come from well-designed and consistently implemented intervention, not just in having access to specific tools.” (Zangari, 2014)

“Although the type of display and level of technology is an important factor in AAC interventions, it is likely that the particular strategies used to implement the communication mode are more critical.” (Ganz et al., 2017)
Response Prompts

<table>
<thead>
<tr>
<th>Standard Hierarchy</th>
<th>Graduated Guidance</th>
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<tbody>
<tr>
<td>Verbal</td>
<td>Light Touch</td>
</tr>
<tr>
<td>Model</td>
<td>Shoulder</td>
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<tr>
<td>Gesture</td>
<td>Elbow</td>
</tr>
<tr>
<td>Partial Physical</td>
<td>Wrist</td>
</tr>
<tr>
<td>Full Physical</td>
<td>Hand</td>
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MO: (____): S^D (____): R (____)→Sr+/SR+ (____)

PROMPT - instructions, gestures, touches, or other things that increase the likelihood that the child will make a correct response (McClannahan & Krantz, 1999)

Single-Subject Experimental Designs

To what extent do you use SSEDs in your practice?

1 – FREQUENTLY
2 – RARELY
3 – NEVER
4 – NOT APPROPRIATE

Single-Subject Experimental Designs

To what extent do you use SSEDs in your research?

1 – FREQUENTLY
2 – RARELY
3 – NEVER
4 – NOT APPROPRIATE
Evidence-Based Practice

“Although there is broad consensus about what EBP means conceptually, that is, an intervention supported by research evidence of efficacy, there is disagreement about how to operationalize this definition.”
(McGrew, Ruble, & Smith, 2016)

What does EBP mean to you?

How often do you contact empirically-supported literature to solve a practical question?
1 – FREQUENTLY
2 – RARELY
3 – NEVER
4 – NOT APPROPRIATE

Strong clinical repertoires are often a result of experience. These experiences are often idiosyncratic, and may produce a lack of continuity between providers. What are the pros and cons of this?
Evidence-Based Practice

Is this beneficial or detrimental to EBP? Is this beneficial or detrimental to interprofessional collaboration?

Interprofessional Collaboration

“The most innovative research and technical developments often occur at the intersections among multiple disciplines.” (Light et al., 2019)

Interprofessional Collaboration

What has been your experience with collaboration in practice?

Interprofessional Collaboration

What has been your experience with collaboration in research?
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Thank you

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