


**State of the Science and Future Directions in  
Communication Interventions for People with ASD**

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Handout



**Uniqueness of  
Communication  
Deficits in ASD**

- Compounded by deficits in:
  - Social connectedness/  
orientation toward other  
humans
  - Understanding/using  
nonverbal communication
  - Responding restricted to  
particular stimuli
- Complex communication needs



**Access to Communication as a Basic Civil Right**

- Communication is ubiquitous



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Difficulty communicating leads to...

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**Evidence-Based Communication Interventions**

- Behavioral interventions (prompts, task analysis, time delay, reinforcement)
- Augmentative and alternative communication interventions
- Functional communication training
- Naturalistic behavioral interventions (PRT, Incidental teaching)
- Modeling (video and in vivo)
- Peer-mediated interventions
- Visual scripts



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**Research Support:  
Skills Taught**

- Supports limited communicative functions
  - **Behavior regulation**
    - Information exchange
    - Social Interaction
- Supports early phases of communication instruction
- Unfounded concerns regarding AAC and speech
- Rote contexts/scenarios



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**Research Support:  
Participant Characteristics**

- Primarily preschool and elementary ages
- More support with people with ASD without co-occurring conditions
- Girls/women tend to be underrepresented
- Little support for use of interventions with culturally and linguistically diverse learners



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**Research Support**

- Small scale:
  - Much of the research has been conducted with small numbers of participants
- Limited contexts:
  - Only limited research has been conducted in natural settings/contexts
  - Instructional strategies tend to be didactic
  - Researcher implemented
- Mobile tech revolution...



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### High-Tech Versus No- or Low-Tech

- Limited research
- Little apparent difference in results between high- and low-or no-tech
  - Exception: unaided AAC (such as sign language)
- This is an emerging area of research



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### Apparent Strengths of High-Tech Interventions

- Social validity/ acceptability
- Portability
- Affordability
- Increasingly intuitive
- Flexibility and just-in-time use
- Integrate communication with other tech tools



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### Mobile Tech-Based Interventions May Not be Suited for Everyone

- Preference
- Distractions on the device
- Difficulties with funding
- Future research on mobile tech...



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<b>Future Directions</b> <ul style="list-style-type: none"><li>• Characteristics of participants<ul style="list-style-type: none"><li>• Large group studies</li><li>• Adolescents and adults</li><li>• Matching participant characteristics to interventions or components of them</li></ul></li><li>• Communicative functions<ul style="list-style-type: none"><li>• Behavior regulation</li><li>• Information exchange</li><li>• Social Interaction</li></ul></li></ul>	
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<b>Future Directions</b> <ul style="list-style-type: none"><li>• Intervention packages<ul style="list-style-type: none"><li>• Overlap between intervention components across packages</li><li>• Same thing, different name</li><li>• Multimodal communication interventions</li><li>• Incorporating mobile technology</li></ul></li></ul>	
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	<b>Future Directions: Feasibility</b> <ul style="list-style-type: none"><li>• Ease of use and to program</li><li>• Likelihood of adoption and maintenance</li><li>• Implementation across contexts for generalization and maintenance</li><li>• Social validity/acceptability</li><li>• Treatment fidelity among natural communicative partners</li><li>• Costs (money and time for implementation and training)</li><li>• Preference of individual with ASD and caregivers</li></ul> 
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### Future Directions

- Improving standards in single-case research
  - Procedural integrity/treatment fidelity
- Description of interventionists
- Measures of social validity
- Consistency with assessments of participants



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### Future Directions

- \*Addressing unestablished/controversial treatments accepted by the public\*



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### Final Points

- Success of an intervention has more to do with the intervention techniques than materials/technology
- Communicative competence: People with ASD deserve access to the full range of communicative functions and broad vocabularies



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