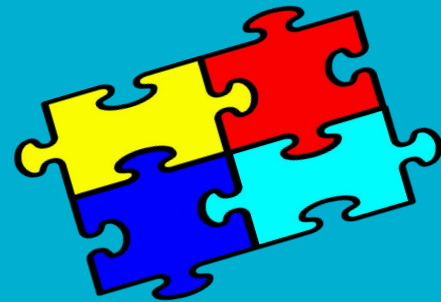


An Analysis of the Effects of Early Intervention Practices on the Spoken Language Skills of Minimally Verbal Children with ASD

Darian Beahan



Background



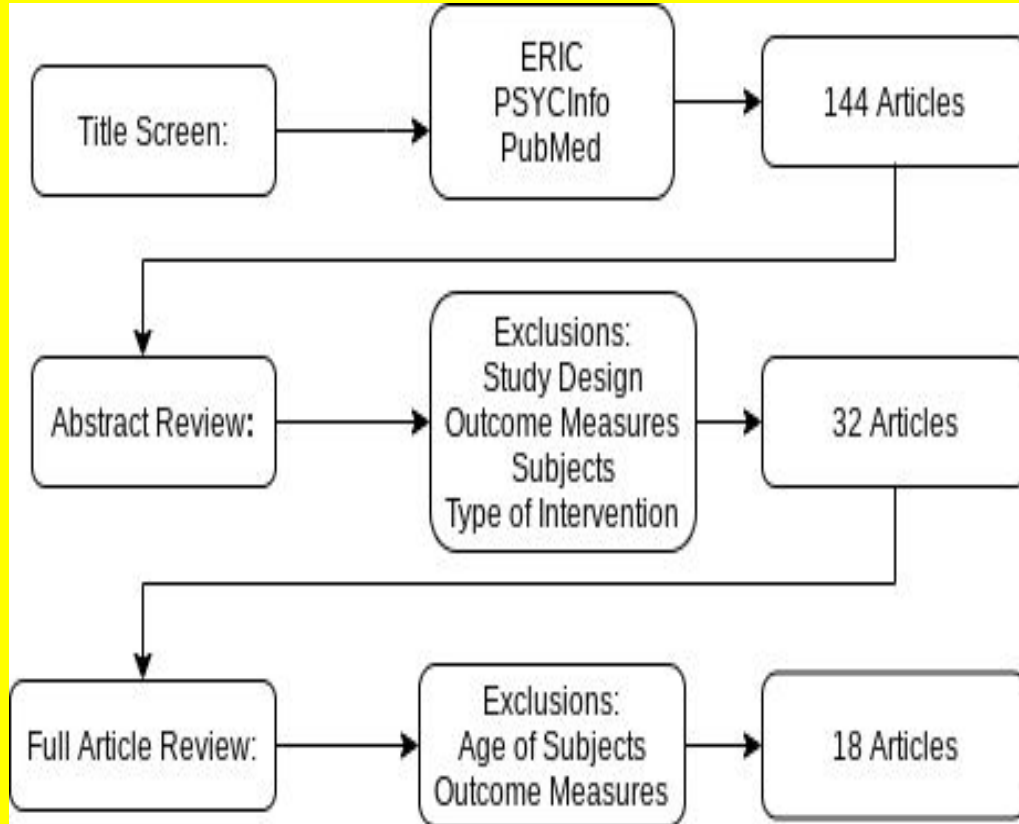
- Children with ASD are likely to:
 - Have spoken language delay
 - Remain minimally verbal or non-verbal throughout their lives.



Inspiration for this Review

- Hampton & Kaiser 2016:
 - Review detailed the existing literature on various intervention protocols & effects on spoken language outcomes of children with ASD
- Findings included:
 - Early intervention practices could potentially increase spoken language by ~4 points on standardized measures
 - Highest increase in spoken language with parent & clinician jointly delivered therapy
- Need for updated research:
 - Increased technological advances (Speech-Generated Devices)
 - Changes in diagnostic criteria for ASD
- This review explores early intervention studies targeting spoken language from 2014-2019

Methods



Inclusionary Criteria:

Subjects >8 Years

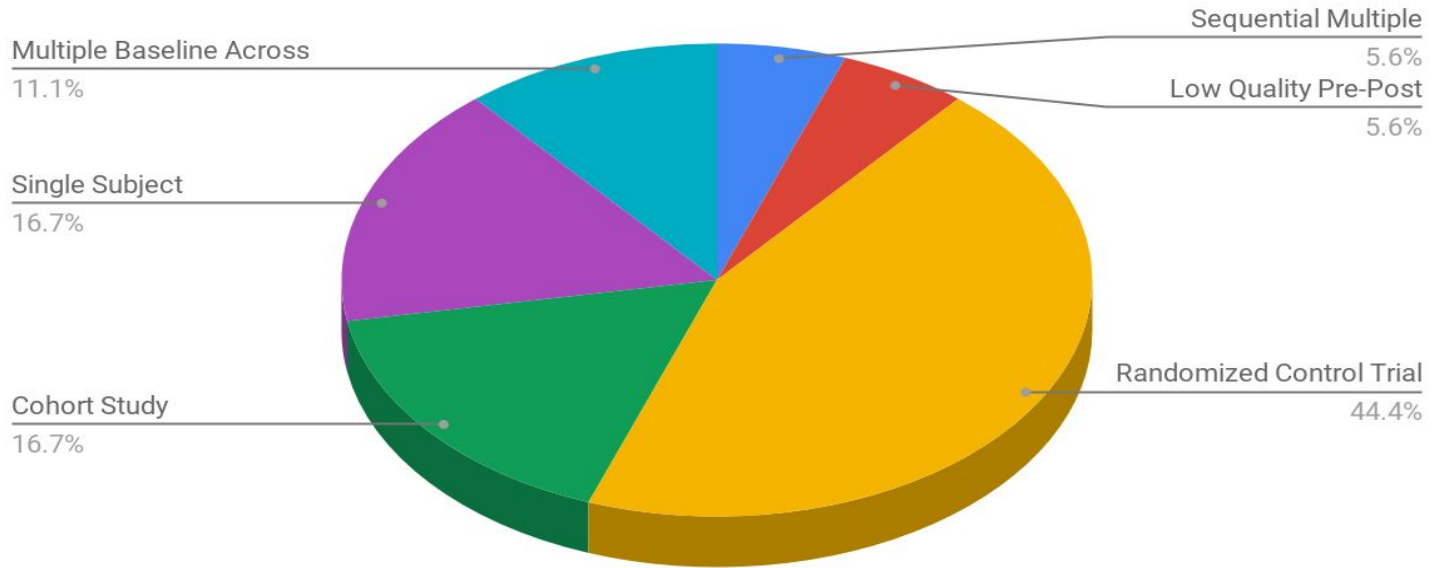
English Speakers

Behavioral/Early Intervention

Measured Spoken Language

Evidence Quality

Study Design



Results!

Manding Interventions

Increasing spoken language through requests

- Can modestly increase MLU and frequency of verbal requests
- SGD interventions can *increase*, not hinder, a child's spoken language

TOBY

iPad app designed to increase language & social skills

- 20 minutes per day can modestly increase developmental skills
- Mixed efficacy regarding effect on expressive language



Results!

Parent-Mediated Interventions

Interventions administered by parents/JASPER

- Significant increases of independent initiations, responses and vocabulary words.
- Increase of MLU

Peer-Mediated Interventions

Children learn through modeling by typically developing (TD) peers

- Strongest results when TD peers were coached on how to interact with the child
- Can increase initiations, responses to peers, and vocabulary



Results!

Pivotal Response Treatment

Designed to increase social motivation & response

- Increases in total # of independent utterances, vocalizations per minute, and expressive language scores on standardized assessments

Miscellaneous

- Physical and computerized spacing boards can assist with multisyllabic words
- Music therapy can potentially increase independent verbalizations
- Minimal results through behavioral intervention



Key Findings

- H & K's 2016 findings remain relatively unchallenged by recent literature
 - Evidence supports H & K's conclusions of efficacy of parent and clinician jointly delivered therapy
 - Strongest evidence from measurement of multiple aspects of spoken language (i.e. TTR, MLU, initiations, responses, standardized measures)
 - Strong evidence with peer-mediated interventions when TD peers are coached
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Future Research

- Only one study in this review controlled for gender effects
 - Ratio of boys to girls with ASD is 4:1
- Children with ASD can appear to be more verbal than they actually are
 - Initiations vs. reciprocal conversation.
 - The *content* of a child's language is of equal importance as total # of words said
- Studies using a standardized test should include:
 - Informal observational evaluation
 - Naturalistic language evaluation
 - Content of the language

Content!



What Should SLPs Take Away?

If the goal is to increase
spoken language...

- Involve the parents
 - Coach typically
developing peers
 - Focus on the **QUALITY** of
the child's language, not
QUANTITY
-

Special Shout Outs!

Amanda Van Horne, for guiding me and keeping me motivated while completing this project

Hampton & Kaiser for inspiring this review

My brother, **Nicholas John Beahan**, who always inspires me to become the best SLP I can be to help children with ASD!





Questions?

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