

Table 1. Articles Used to Make the Evidence-Based Decision

Citation	Participants	Research Aim(s)	Procedures	Results	Relevance to PICO Question
Santarcangelo & Dyer (1988)	Study 1 N = 6 children Ages = 8–16 years old 2 groups divided into functioning below and above 3-year-old level	Does use of the vocal prosody typical of motherese improve the responsiveness of children with severe developmental delays? Do infants' preferences for IDS versus ADS change when auditory information is removed?	Study 1 Performed 10-minute observations of teaching interactions with the students Measured gaze shift toward the teacher Measured correct responses to teacher directives	Study 1 Children functioning below 3 years had higher responses to motherese versus conversational tone. Children functioning above 3 years did NOT show preference for motherese.	The children who were functioning below a 3-year-old level had increased eye gaze, which is a component of joint attention, when the teacher used motherese.
	Study 2 N = 4 Ages = 7–9 years old Functioning at 3-month-old level		Study 2 1:1 sessions for 10 minutes where teacher spoke at random alternating conversational and motherese tones Measured eye gaze and direction-following abilities for different registers	Study 2 Order of presentation of different registers did not make a difference. The children used eye gaze and followed directives better when the teacher used a motherese register.	
Schachner & Hannon (2010)	Study 1 N = 20 infants Age = average of 5 months 10 boys & 10 girls	What are the effects of an adult's infant-directed speech (IDS) versus adult-directed speech (ADS) on 5-month-old infants? Do infants' preferences for IDS versus ADS change when auditory information is removed?	Study 1 Recorded four 60-second videos of 2 different speakers, each using IDS and ADS Infants watched the videos Infants were shown a pair of women (one from video and one new) Measured which image infant preferred	Study 1 Infants watched the IDS and ADS videos for the same amount of time. For the IDS video, infants looked at the woman who spoke IDS significantly longer. For the ADS video, infants looked at the stranger significantly longer.	Five-month-old infants looked at the women who spoke motherese longer than the women who spoke with ADS. Looking at objects of interest is a skill involved in joint attention.
	Study 2 Same population		Study 2 Same recordings presented without sounds Same procedures as Study 1, but did not use sounds	Study 2 Infants had NO significant preferences for the person who spoke IDS or ADS when sound was removed. For the ADS video, infants had significant preference for the ADS person compared to the stranger.	

Table 1. Articles Used to Make the Evidence-Based Decision (continued)

Citation	Participants	Research Aim(s)	Procedures	Results	Relevance to PICO Question
Roberts et al. (2013)	<p><i>N</i> = 264 families with infants</p> <p>Observed parent-child interactions with children at 6 months and 12 months of age</p>	<p>Does parents' infant-directed speech during interactions centered around an object facilitate development of infants' joint attention skills?</p>	<p>Measured the context of the parents' speech at 6 months and assessed for correlation to joint attention skills at 12 months</p> <p>Measured the pitch of mother's speech at 6-month visit and assessed for correlation to joint attention at 12 months</p>	<p>Maternal talk of mental states of infant at 6 months was predictive of joint attention skills at 12 months</p> <p>Mother's pitch of speech at 6-month visit was predictive of joint attention skills at 12 months</p>	<p>Constructs used to define joint attention were gaze following, gaze alternation, and pointing</p> <p>When a mother spoke to her child with a higher pitch characteristic of motherese at 6 months, the child had better joint attention skills at 12 months.</p>
Droucker, Curtin, & Vouloumanos (2013)	<p><i>N</i> = 50</p> <p>36 typically developing infants with at least one older typically developing sibling (SIBS-TD)</p> <p>14 typically developing infants with one older sibling diagnosed with autism spectrum disorders (ASD; SIBS-A)</p>	<p>Do early speech and face preferences differ in infants at risk for ASD?</p> <p>To what extent do early differences in preferences predict language delays and risk-group (ASD) membership?</p>	<p>At 6 and 8 months, infants saw 40-second samples of IDS and ADS, each paired with an image of a female face or a black and white checkerboard.</p> <p>At 12 and 18 months, parents completed a developmental inventory, and the infants viewed the same video samples again.</p>	<p>At 6 and 8 months, infants looked significantly longer at IDS than at ADS.</p> <p>At 6 and 8 months, infants looked significantly longer at the female face than at the checkerboard.</p> <p>At 18 months, the SIBS-TD group scored significantly higher than SIBS-A on measures of communication.</p> <p>At 18 months, the less time the child looked at the checkerboard was significantly correlated with a higher language outcome.</p>	<p>When hearing motherese, at-risk infants had different eye gaze abilities than a group of typically developing infants. Eye gaze is an early skill associated with joint attention.</p>

Table 2. Appraisal of Study Quality from Dollaghan (2007) – CATE

Criteria	Studies			
	Santarcangelo & Dyer (1988)	Schachner & Hannon (2010)	Roberts et al. (2013)	Droucker, Curtin, & Vouloumanos (2013)
1. Rationale for the study?	Yes	Yes	Yes	Yes
2. Evidence from an experimental study?	Yes (Study 2)	Yes	No	Yes
3. Control group or condition?	No	No	No	Yes
4. Randomization used to complete groups?	No	No	No	No
5. Methods and participants specified prospectively?	Yes	Yes	Yes	Yes
6. Recognizable participants from beginning to end?	Yes (both)	Yes	Yes	Yes
7. Was the treatment described clearly?	Yes (both)	Yes	N/A	Yes
8. Measures valid?	Yes (both)	Yes	Yes	Yes
Measures reliable?	Yes (both)	No	Yes	Yes
9. Outcome evaluated with blinding?	Yes (both)	Yes	Unknown	Yes
10. Could nuisance variables influence findings?	Yes (both)	Yes	Yes	Yes
11. Was the finding statistically significant?	Did not calculate	Yes	Yes	Yes
12. If 11 was no, was power adequate?	No	No	Yes	Yes
13. Practical significance/ Effect size?	Did not calculate ES	Did not calculate ES	Did not calculate ES	Did not calculate
14. Precise/ Confidence intervals?	No	Yes	Unknown	Unknown
15. Cost-benefit advantage?	N/A	Yes	Yes	Yes
Overall Validity (Questions 1–10)	Compelling to Suggestive	Compelling to Suggestive	Suggestive to Equivocal	Compelling to Suggestive
Overall Importance (Questions 11–15)	Suggestive	Suggestive	Compelling to Suggestive	Suggestive