Spectral Ripple Discrimination Thresholds in Normal Hearing Infants with a Two Alternative Forced Choice Method

Adrienne Grey
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LEND Mentor: Lisa Mancl, MS
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Background

- Measuring Spectral Resolution
  - Why?
    - Necessary for Speech Discrimination & Understanding
    - Predictor of Speech Perception
    - Provide insight to Speech & Language Outcomes
  - How?
    - Spectral Ripple Discrimination
      - Non-linguistic discrimination task
Background

Single Interval Observer Based Psychophysical Procedure

• Response Bias
• Attention Span
Two Alternative Forced Choice (2AFC)

Baby anticipates video by looking to “change” side

Slide provided by Mariana Perez Saaibi
Research Questions

1. Is an adaptive 2AFC method a feasible method to measure spectral ripple discrimination in 7 month old infants with normal hearing?

2. Do the measured spectral ripple discrimination thresholds vary as expected with ripple depth?
Results

10 infants completed testing
2 infants provided SRD thresholds

1. Is an adaptive 2AFC method a feasible method? No

2. Do the measured SRD thresholds vary as expected? Not analyzed
Future Work

Different method of Stimuli presentation with 2AFC

- **Method of Constant Stimuli**
  - **Benefits:**
    - Ripple densities are varied at random
    - Potentially eliminate impact of attention span
    - No patient anticipation
  - **Limitations:**
    - Often very time consuming