Categorization of Synchronous Infant-Directed Speech by 4- and 6-Month-Old Infants

Kristin Kuhlman Atchison, Melanie J. Spence and Emily W. Touchstone

The University of Texas at Dallas - School of Behavioral and Brain Sciences

Previous research reported divergent outcomes between 4- and 6-month-old infants’ ID speech categorization depending on the presence of faces and the presence of meaning. Children in both age groups showed longer looks at novel stimuli compared to 6-month-olds, which is consistent with differences in information processing between 4- and 6-month-olds. However, 4-month-old infants categorized ID speech in the presence of a female face, whereas 6-month-old infants categorized ID speech in the presence of a male face. This is consistent with differences in the processing of ID speech. For infants with no prior exposure to ID speech, the presence of a face may help to distinguish between ID and non-ID speech.

Methods

Participants: 4-month-olds: $N = 13$; M = 116.94 days; Range = 106 – 135 days
6-month-olds: $N = 23$; M = 181.48 days; Range = 168 – 201 days

Stimuli: 40 videos taken from 10 female talkers, each producing 2 comforting and 2 approving utterances.

Procedure:
- Each infant sat on parent’s lap approximately 1 meter from 65” Sony HD TV

Results

Table 1: Mean looks (seconds)

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<tr>
<th>Stimulus Class</th>
<th>4-month-olds</th>
<th>6-month-olds</th>
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</thead>
<tbody>
<tr>
<td>Approvals</td>
<td>Mean 1 = 12.38</td>
<td>Mean 1 = 16.03</td>
</tr>
<tr>
<td>Comforts</td>
<td>Mean 2 = 14.99</td>
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Discussion

When viewing synchronous stimuli both 4- and 6-month-old infants categorized approving and comfortable ID speech. Infants in both age groups looked significantly longer to novel exemplars from the novel category than new exemplars from the habituation category. This result is consistent with previous research showing that infants categorize ID speech in novel contexts.

Conclusions

Infant categorization of ID speech may be determined by the presence of faces. Additional research is needed to further understand the role of faces in ID speech categorization.

References


Acknowledgements

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