The Ability of Speaking Rate to Influence Infants’ Preferences for Infant-Directed Speech

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(Abstract)

Much research has examined how rate affects visual preferences in human infants and auditory preferences in avian infants. In the visual domain, it seems that human infants prefer stimuli (e.g., flashing displays) presented at faster relative rates. Research using avian species has shown that ducklings, for example, prefer their species-specific maternal call only when it is presented at values close to the species-typical mean. These studies have shown that experience affects ducklings’ preferences for rate in auditory events. Researchers in the areas of human infant preferences for visual rate and avian infant preferences for auditory rate have suggested that an effective window of frequencies exists for which infants show maximal attention. Unlike these two areas, little research has addressed how rate affects human infants’ preferences for auditory events. A study by Cooper and Cooper (1997) was the first to find that infants attend to rates of speaking infant directed (ID) speech. Specifically, infants preferred ID speech at its normal rate to ID speech at a faster rate. The present study was intended to further investigate how rate of speaking affected infants’ preferences for ID speech. More specifically, this study sought to determine whether a window of effective rates also exists for infant preferences for rate in ID speech. Using an infant-controlled preference procedure, 20 six- to eight-week old infants were presented with ID-normal speech (ID speech as its normal rate) and ID-slow speech (ID speech slowed to half the normal rate). It was found that infants looked longer to a visual display when it was paired with ID-slow speech than when it was paired with ID-normal speech. How these results relate to research and theory on visual rate preferences in human infants and auditory rate in avian species is discussed, as well as future directions for this line of research.