Introduction:
The “bouba-kiki” effect reveals associations between auditory and visual stimuli, where nonsense sounds are consistently associated with certain abstract shapes (round vs. spikey, respectively). Previous research has found consistent sound-shape correspondences within the visual and auditory domains. In our study, we aim to investigate (1) if the “bouba-kiki” effect is replicable across the auditory and somatosensory modalities, and (2) compare the strength of crossmodal associations for the audio-tactile and audio-visual “bouba-kiki” effect.

We predict that the “bouba-kiki” effect is replicable across the auditory and somatosensory modalities, and that the strength of association for the audio-tactile effect will be similar to that of the audio-visual “bouba-kiki” effect.

Methods: What Does “Baba” Feel like?

Stimuli
Tactile Stimuli
- Auditory Stimuli
  - /Kiki/
  - /Baba/
  - /Titi/
  - /Gaga/

Procedure
Judging Shape Tactile: 32 Trials
- Tactile stimuli presented
- 4 Tactile stimuli
- Participant cued to touch stimuli
- 2 Repeats of each pair
- 16 Audio-tactile pairs

Analysis:
Quantifying Choice for Judge Shape Tactile: We calculated the proportion of trials round shapes were chosen over spikey shapes for a given sound.

Quantifying Choice for Judge Shape: We calculated the proportion of trials round shapes were chosen over spikey shapes for a given sound.

Results:

Is Association Strength Similar for Feeling vs Seeing?

Audio-Tactile
Proportion choosing round over spikey shapes

Audio-Visual
Proportion choosing round over spikey shapes

Is the Trend Across Development Similar for Feeling vs Seeing?

Audio-Tactile
Proportion choosing round over spikey shapes

Audio-Visual
Proportion choosing round over spikey shapes

Conclusions:
1) The sound-shape correspondence known as the “bouba-kiki” effect is evident in both the audio-visual and audio-tactile sensory modalities.
2) The “bouba-kiki” effect shows a similar association strength across the visual and tactile sensory modalities and a similar trend across development.