

Title: Does pitch height influence tonal priming?

Description: Musically primed (expected) events are processed more efficiently, because listeners have formed long-term cognitive expectations from years of listening to music, not simply due to the immediate musical context. However it is also important to investigate the role of pitch height (how high or low a note is), because models of musical expectation collapse across octave, yet it is possible that pitch height may modulate how effective musical priming is. We tested this issue by varying the pitch height of an expected or less-expected event (chord) following a musical context. Participants with little to no musical training (N=30) judged as fast as possible if this last event was dissonant (an extra “bad” note was added) or consonant (no extra “bad” notes). Musically expected chords did better in accuracy and speed of responses for all octaves. A second experiment increased the size of the pitch height shift to two octaves and compressed the chords so that there were no shared pitches between the target and previous chords, and the same results emerged. These findings are important for behavioural study of musical expectations tonal priming, and theoretical/computational models of music cognition.

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