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The effect of binaural beats on inhibition

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Abstract: A binaural beat is the perceptual experience that occurs when two tones of slightly different frequencies are presented dichotically, creating the experience of a third tone corresponding to the difference in frequencies. Many temporary cognitive effects have been linked to the presentation of a binaural beat, including increased working memory capacity. In the present study, a version of the flanker test was used to investigate the effect of short-term alpha wave binaural beat stimulation on inhibition processes specifically. Participants were presented with 10 minutes of either mid-alpha range binaural beats combined with a recording of waves or only the sound of waves. After this, participants completed a flanker test. The difference between reaction times of congruent and incongruent trials on the flanker task was significantly lower in the binaural beats condition than the wave condition, suggesting that even brief exposure to binaural beats aids in the inhibition of irrelevant stimuli.