

Abstract Submitted
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Investigating the Link Between Music and Brain Activity NANFU

WEN, Marietta College — I am focused on investigating the relationship between electroencephalograph (EEG) signals and sound waves. Electrodes were connected to the heads of a few subjects and EEG potential difference signals were collected at 200 Hz for 300 seconds. Each sample contained alternating periods without stimulus (background) and periods with stimulus. In some samples, the stimulus is while people listen to a sinusoidal sound (listening), while in others they are singing the same pitch (singing). I looked for significant differences in the fast fourier transforms (FFTs) of the different periods in each sample: between background and listening as well as between background and singing. From this data, no statistically significant differences between background and listening or between background and singing were found.

Craig Howald
Marietta College

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