Unlocking Your Genius: Increasing Alpha Waves in the Brain with Forgiveness Meditation

Wood-Soloff, Samuel (School: The Head Royce School)

The objective of this research was to determine the effectiveness of forgiveness meditation on increasing alpha brain waves. Alpha waves are associated with creativity, so, if shown to be effective, the forgiveness meditation may be used to overcome creative blocks and unlock bursts of ingenuity. Twenty participants, male and female, ranging from ages 11 to 55 were used. Brainwaves were recorded via an EEG headset and stored online for aggregation and analysis. Each participant performed a two-minute eyes open baseline recording, and then a five-minute control meditation, where they followed Vipassana style instructions, focusing on the sensation of breath. After a three-minute break, each participant performed a six-minute forgiveness meditation directed by a standard narration, focusing first on wrongs suffered, and then forgiving the perpetrator. The highest alpha wave spike in each recording was used as the main metric of measurement, (studies show that alpha wave spikes are associated with eureka moments). On average, across the participants, the highest alpha wave spike value increased 293.31% from the baseline to the forgiveness meditation (SEM = 108.6%); and 91.59% from the control meditation to the forgiveness meditation (SEM = 32.6%) ($p = 0.02$ among all 3 groups). The alpha wave readings indicate that performing a forgiveness meditation can triple alpha wave spike amplitudes when compared to normal waking levels, and can double them when compared to classic Vipassana meditation, thus strongly supporting the use of forgiveness meditation to overcome creative and performance blocks. Further research may include exploring how forgiveness meditation affects other brainwaves; and its effectiveness on certain age and meditation-experience groups.

Awards Won: