

Appendix A

Table 1

Hypotheses and Null Hypothesis for the Current Study

	Brainwave Entrainment	Stress
Hypothesis	The presence of 8Hz alpha isochronic tones will increase absolute overall alpha cortical band activity in participants.	The presence of 8Hz alpha isochronic tones will decrease stress in participants as measured by the ESRQ.
Null Hypothesis	The presence of 8Hz alpha isochronic tones will have no effect on absolute overall alpha cortical band activity in participants.	The presence of 8Hz alpha isochronic tones will have no impact on stress in participants as measured by the ESRQ.

Note. The present table displays all hypotheses and null hypothesis as it relates to the current study.

Appendix B

Table 2

Materials Used in Current Study

Device	Use
Ableton Live 10 Suite	To create isochronic tones and song.
Apple earbuds attached to a Macbook Pro	To present auditory stimuli to participants.
Muse 2 Bluetooth EEG paired with Muse Direct EEG app via an iPhone 6s.	To record and store participant EEG readings.
Emotional Stress Reaction Questionnaire (ESRQ) Paper Survey w/ various pens	To record participant stress levels.
Links to auditory stimuli	Song containing isochronic tones: https://soundcloud.com/ikela-lewis/song-with-8hz-alpha-isochronic-tones/s-QUOCM Song without isochronic tones: https://soundcloud.com/ikela-lewis/song-without-8hz-alpha-isochronic-tones1/s-p6lqB

Note. The present table displays all materials used in the completion of the current study.

Appendix C

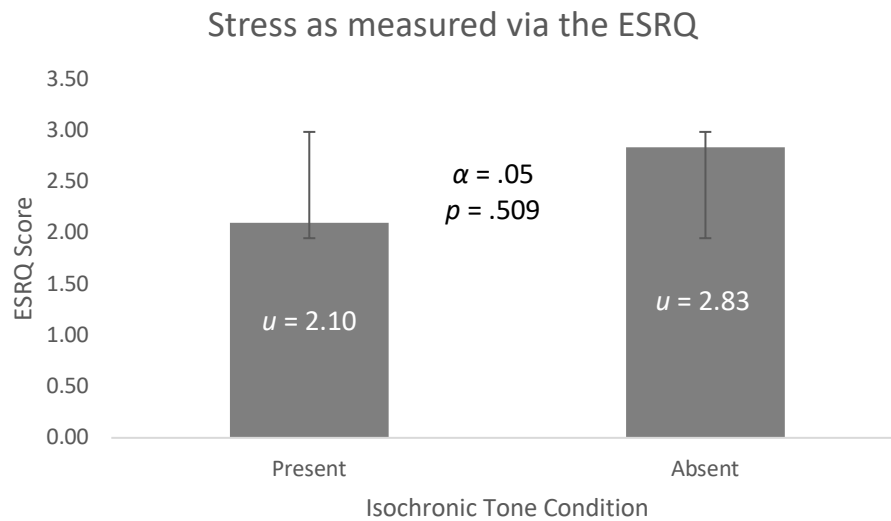


Figure 1. Graph of average change on Emotional Stress Reaction Questionnaire (ESRQ) responses between pre and post measures (pre – post). The average stress measure change in the present condition (containing isochronic tones) was 2.10, indicating a decrease in stress. The average stress measure change in the absent condition (not containing isochronic tones) was 2.83, also indicating a decrease in stress. The ESRQ is scored from -21 to +21 where a lower number indicates a greater stress level, and conversely a higher number indicates a lower stress level. $p > .05$, therefore no significant difference was found between conditions.

Appendix D

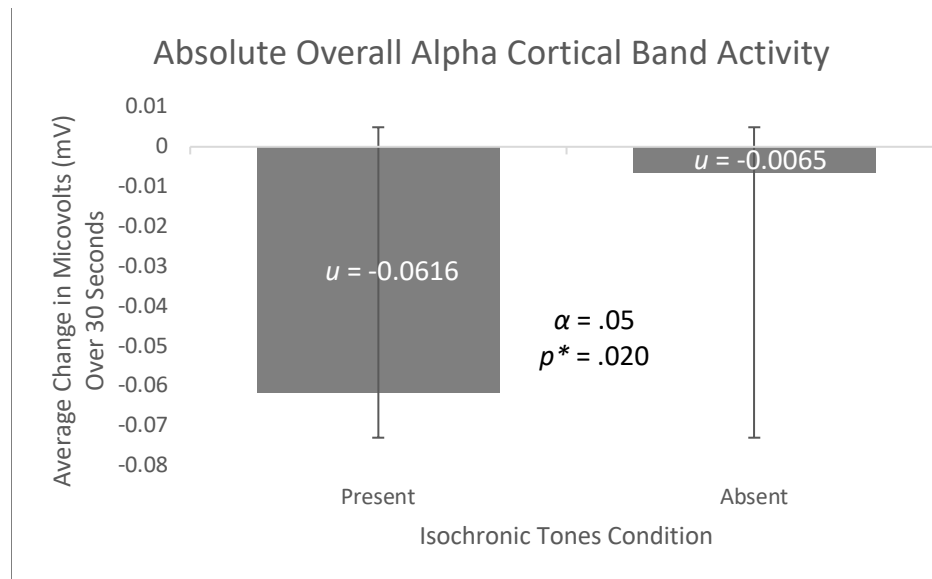


Figure 2. Graph of average change in absolute overall alpha cortical activity between pre and post measures (pre – post). The average change in the present condition (containing isochronic tones) was -0.0616 mV, indicating a decrease in absolute overall alpha. The average change in the absent condition (not containing isochronic tones) was -0.0065mV, indicating a decrease in absolute overall alpha. $p^* < .05$, therefore a significant difference was found between conditions, with the presence condition having a significantly greater decrease in absolute overall alpha than the presence condition.

Appendix E

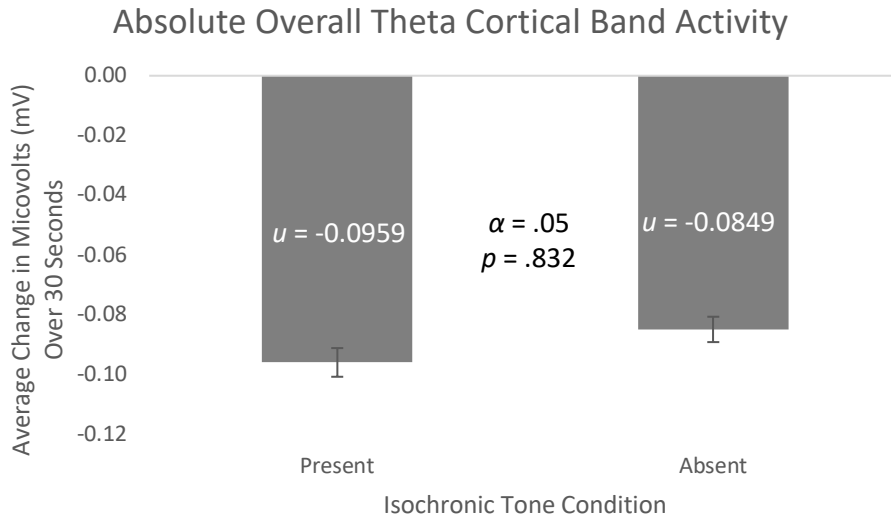


Figure 3. Graph of average change in absolute overall theta cortical activity between pre and post measures (pre – post). The average change in the present condition (containing isochronic tones) was -0.0959mV, indicating a decrease in absolute overall theta. The average change in the absent condition (not containing isochronic tones) was -0.0849mV, indicating a decrease in absolute overall alpha. $p > .05$, therefore no significant difference was found between conditions.