Quranic Recitation Listening Relate to Memory Processing, Language Selectivity and Attentional Process

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Abstract : Holy Quran, a rhymed prosed scripture has a complete literary structure that exemplifies the peak of literary beauty. Memorizing of its verses could enhance one's memory capacity and cognition while those who are listening to its recitation it is also believed that the Holy Quran alter brainwave producing neuronal excitation engaging with cognitive processes. 28 normal healthy subjects (male = 14 & female = 14) were recruited and EEG recording was done using 128-electrode sensor net (Electrical Geosics, Inc.) with the impedance of $\leq 50 \text{k}\Omega$. They listened to Sura Fatiha recited by Sheikh Qari Abdul Basit bin Abdus Samad. Arabic news and no sound were chosen as positive and negative control, respectively. The waveform was analysed by Fast Fourier Transform (FFT) to get the power in frequency bands. Bilateral frontal (F7, F8) and temporal region (T7, T8) showed decreased power significantly in alpha wave band in respondent stimulated by Sura Fatihah recitation reflects acoustic attention processing. However, decreased in alpha power in selective attention to memorized, and in familial but not memorized language, reveals the memorial processing in long-term memory. As a conclusion, Quranic recitation relates both cognitive element of memory and language in its listeners and memorizers.

Keywords: auditory stimulation, cognition, EEG, linguistic, memory, Ouranic recitation

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