

EEG activity in Muslim prayer: a pilot study

ABSTRACT

Almost all religions incorporate some form of meditation. Muslim prayer is the meditation of Islam. It is an obligatory prayer for all Muslims that is performed five times a day. Although a large body of literature exists on EEG changes in meditation, to date there has been no research published in a peer-reviewed journal on EEG changes during Muslim prayer. The purpose of this pilot study is to encourage further investigation on this type of meditation. Results of EEG analysis in twenty-five trials of Muslim prayer are reported. Some of the findings are consistent with the majority of the previous meditation studies (alpha rhythm slowing, increased alpha rhythm coherence). However, Muslim prayer does not show an increase in alpha and/or theta power like most of the results of other meditation studies. The possible cause of this discrepancy in meditation-related studies is highlighted and a systematic and standardised roadmap for future Muslim prayer EEG research is proposed.

Keyword: EEG; Muslim prayer; Meditation; Brainwaves