

## ABSTRACT:

EEG data were collected between two conditions, relax wakefulness (close-eyes) and non-relax (IQ test). Data segmentation and linear regression model is used to extract the EEG features and to obtain the slope and the mean relative power from 43 participants. All of the data were then normalized and classified using Fuzzy C-Means (FCM) clustering. Results shown that there are different of activities exist in the EEG which proved that the feature extraction using linear regression model manage to discern between two different brain behaviors.