

ANALYZING THE ALPHA STATE OF BRAINWAVE USING
ELECTROENCEPHALOGRAPH (EEG) AND
MOTION TECHNOLOGY SYSTEM

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ABSTRACT

This project is basically a study on alpha state brainwave pattern among UiTM students throughout the whole semester. An analysis of the student brainwave pattern was done during the beginning, middle, and the end of the semester using the electroencephalograph (EEG).

A study on the effect of motion technology system on the pattern of brainwave of UiTM students was also done. The study is a continuous surveillance of their brainwave pattern for a straight 6 months.

EEG signal were captured using two channels bipolar connection for 32 UiTM students before and after underwent the motion therapy. The alpha states were filtered and graphs were plotted. Furthermore paired T-test was used to show the correlation between the left and right hemisphere for verification of brainwave balancing.

It was observed that the alpha brainwave amplitude was reduced during the therapy and the therapy did synchronize the alpha brainwaves wave of the samples.

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