ABSTRACT

In the current era of globalization, there are many changes in people's perspectives on Indonesian cultural values. One of the factors causing the decline in cultural values today is the lack of interest of the next generation to learn and inherit their own culture. One of the other factors is that Indonesian cultural values have now been contaminated by a western culture which significantly affects people's lifestyles, such as dress code, culture, food, and drink. This has led to the fading of awareness of regional cultures that are passed down from one generation to the next such as culture, traditional dances, folk songs, food, and drinks in Indonesia.

This study was conducted on 14 respondents who came from the city of Bandung during the data collection process, the respondents were given a visual stimulus in the form of Cirebon culture. The results of data acquisition obtained through a total of 14 respondents, processed through the preprocessing stage are divided into 2 processes, namely data through normalization and filtering using butterworth bandpass filters and cutting signals that have gone through the normation and filtering process. The data is then processed using spatial selection and common active channels so that it can be analyzed through EEG measurements.

In EEG measurements obtained from all respondents that the brain parts in the Frontal Lobe and Temporal Lobe have the highest activity during the data collection process. In EEG measurements obtained based on sub-bands that Alpha signal waves have activity in the Frontal Lobe and Ocipital Lobe while Beta signals have activity in the Frontal Lobe and Central Sulcus. In EEG measurements based on the questionnaire that 64% of respondents experienced (Increased a lot) knowledge, 22% of respondents experienced (Increased) knowledge, and 14% of respondents experienced (Increased a little) knowledge about culture related to the stimulation provided.

Keywords: *Electroencephalography, Spatial Selection, Culture, Common Active Channel.*