ABSTRACT

The heart is one of the most important organs in the human body and has the size of a human fist. Indicators of human health can be seen from the heart rate. In this study, heart rate monitoring was carried out on the effects of listening to murottal Al-Qur'an and classical music using an ECG prototype based on Raspberry Pi. Data collection was carried out on 15 respondents. Respondents were divided into three clusters, namely the cluster that often interacted with the Qur'an, music, and both. In this study, the Einthoven Triangle method was used as a method of placing the ECG electrode. The heart rate of each respondent will be measured before, during, and after listening to murottal Al-Qur'an and classical music. The results showed that in the first cluster, the BPM value decreased in the conditions before and after listening to the Qur'an by 18.89% as many as five respondents. In the second cluster, there was a decrease and increase in the BPM value in the before-after condition of 4%, as many as three out of five respondents experienced a decrease in the BPM value. In the third cluster, there was an increase and decrease in the BPM value for listening to the Qur'an by 8.46% in the before-after conditions, as many as four out of five respondents experienced a decrease in the BPM value. Meanwhile, from before-after listening to classical music, the BPM value increased and decreased by 0.87% as many as four of the five respondents experienced an increase in the BPM value.

Kata Kunci: Electrocardiograph, Heart, Recitation Al-Qur'an, Classical Music, Raspberry Pi.