

THE EFFECT OF EMOTIONS ON ELECTROCARDIOGRAM

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ABSTRACT

This paper reports the effect of emotions on human electrocardiogram (ECG). The overall goal was to study changes in ECG while the subject is in emotional state. The subjects were provided with some questions which can induce a particular emotional state and measured the subject's ECG with BIOPAC system. Then the ECG signal was analysed with the help of BIOPAC AcqKnowledge software. The Power Spectral Density (PSD) and Standard Deviation (SD) were calculated for the ECG signal under normal condition and during emotional state. The results obtained are encouraging. The assessment of the data suggests that ECG can be used to study emotional states of a person.

Keywords: ECG, emotions, BIOPAC, Power Spectral Density (PSD), Standard Deviation (SD)