COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

Quantifying Conventional Electroencephalogram Recordings and Examining its Output Computation with a Quantitative Electroencephalogram

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ABSTRACT

Quantitative electroencephalogram enables mathematical analysis of neurological recordings while conventional electroencephalogram lacks the mathematical output; hence, its usage is limited to neurological experts. This study was to determine if quantified conventional electroencephalogram recordings were compatible and comparable with quantitative electroencephalogram recordings. A group of post-call doctors was recruited and subjected to an EEG recording using a conventional electroencephalogram followed by a quantitative electroencephalogram device. The patterns and quantified recording results were compared. A comparative analysis of the two recording sets did not find differences in the recording patterns and statistical analysis. The findings promoted the use of a readily available conventional electroencephalogram in quantitative brain wave studies and have cleared potential compatibility bias towards data merging.

Keywords: quantitative electroencephalogram, conventional electroencephalogram, comparison, pattern, data merging

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