

Evaluation of Cognitive Benefits among Differently Abled Subjects with Video Game as Intervention

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Abstract : In this study, the potential benefits of playing action video game among congenitally deaf and dumb subjects is reported in terms of EEG ratio indices. The frontal and occipital lobes are associated with development of motor skills, cognition, and visual information processing and color recognition. The sixteen hours of First-Person shooter action video game play resulted in the increase of the ratios $\beta/(\alpha+\theta)$ and β/θ in frontal and occipital lobes. This can be attributed to the enhancement of certain aspect of cognition among deaf and dumb subjects.

Keywords : cognitive enhancement, video games, EEG band powers, deaf and dumb subjects

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