

Event Related Potentials in Terms of Visual and Auditory Stimuli

Authors : Seokbeen Lim, KyeongSeok Sim, DaKyeong Shin, Gilwon Yoon

Abstract : Event-related potential (ERP) is one of the useful tools for investigating cognitive reactions. In this study, the potential of ERP components detected after auditory and visual stimuli was examined. Subjects were asked to respond upon stimuli that were of three categories; Target, Non-Target and Standard stimuli. The ERP after stimulus was measured. In the experiment of visual evoked potentials (VEPs), the subjects were asked to gaze at a center point on the monitor screen where the stimuli were provided by the reversal pattern of the checkerboard. In consequence of the VEP experiments, we observed consistent reactions. Each peak voltage could be measured when the ensemble average was applied. Visual stimuli had smaller amplitude and a longer latency compared to that of auditory stimuli. The amplitude was the highest with Target and the smallest with Standard in both stimuli.

Keywords : auditory stimulus, EEG, event related potential, oddball task, visual stimulus

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