

## Neural Correlates of Arabic Digits Naming

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**Abstract :** In the present study, we explored electrophysiological correlates of Arabic digits naming to determine semantic processing of numbers. Participants named Arabic digits grouped by category or intermixed with exemplars of other semantic categories while the N400 event-related potential was examined. Around 350-450 ms after the presentation of Arabic digits, brain waves were more positive in anterior regions and more negative in posterior regions when stimuli were grouped by category relative to the mixed condition. Contrary to what was found in other studies, electrophysiological results suggested that the production of numerals involved semantic mediation.

**Keywords :** Arabic digit naming, event-related potentials, semantic processing, number production

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