

# THE USE OF EVENT-RELATED POTENTIALS IN THE INVESTIGATION OF COGNITIVE PERFORMANCE IN PEOPLE WITH MULTIPLE SCLEROSIS

Robin Vlieger, Duncan Austin, Artem Lensky, Hanna Suominen,

Deborah Apthorp, Elena Daskalaki, Christian J. Lueck



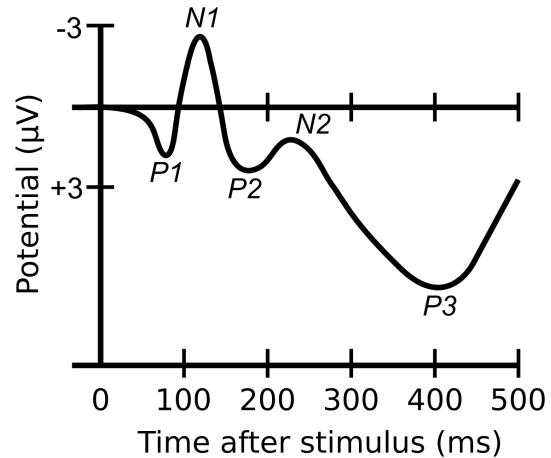
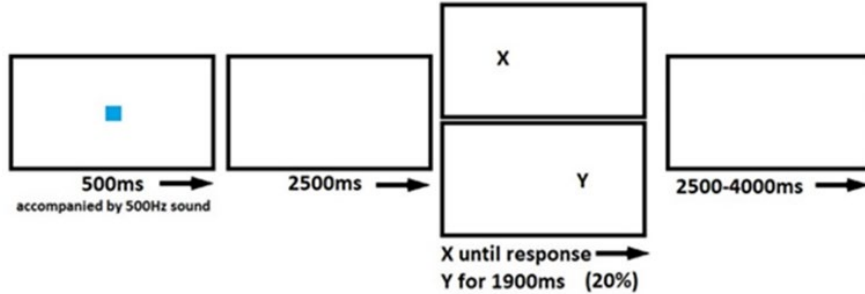
Australian  
National  
University

# Why event-related potentials?

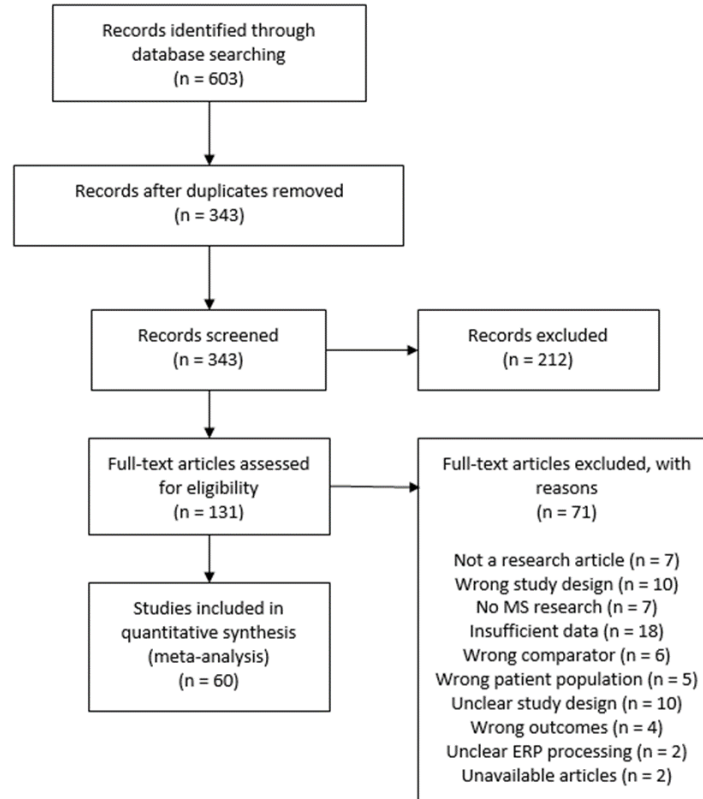
- Cognitive deficits are reported in 43% - 70% of people with MS
- Many people with cognitive impairment experience significant reduction in their quality of life
- Cognitive deficits can occur independently of physical disability
- A clinically useful measure of cognitive function would help provide a more holistic assessment of disease status



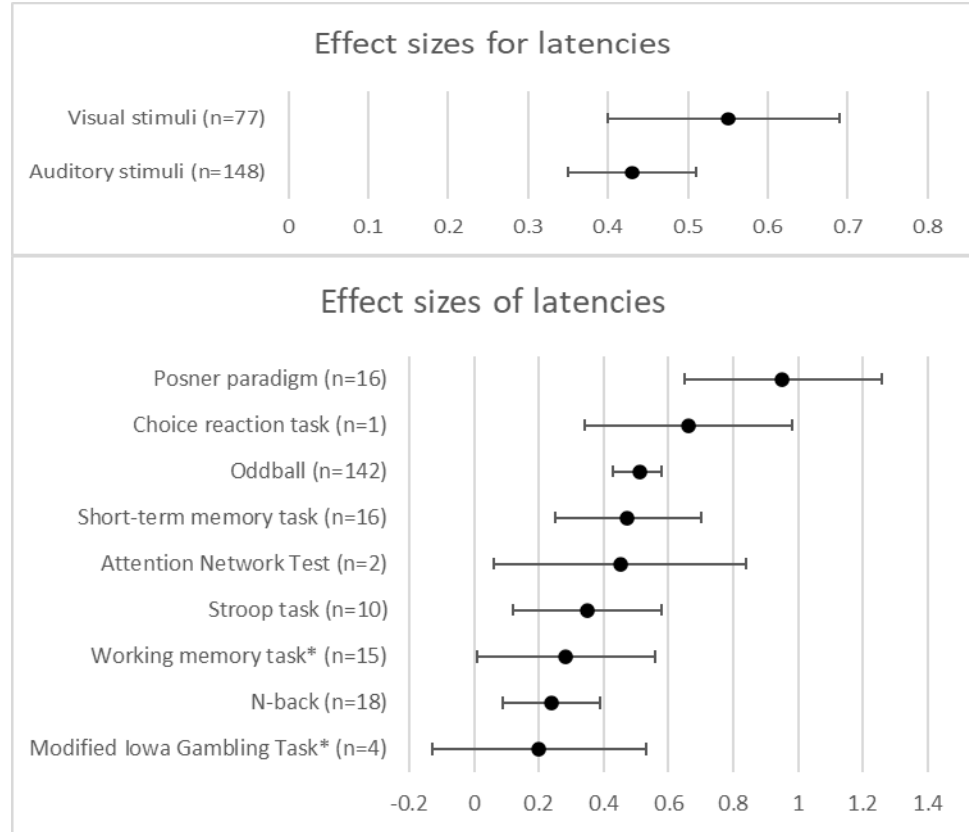
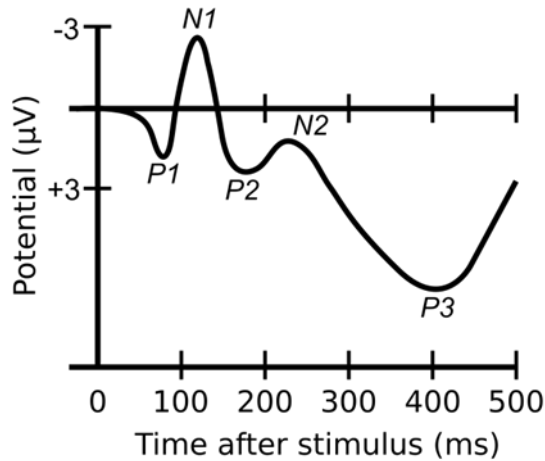
# What is an ERP and how is it measured?



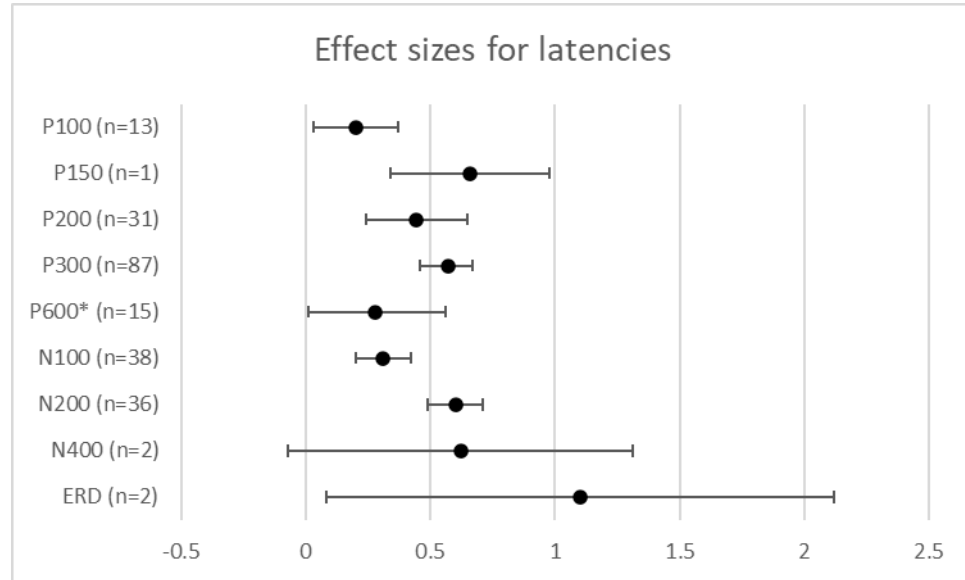
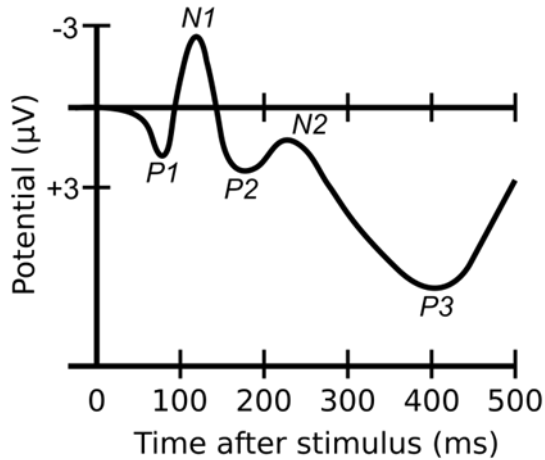
# The literature review: data extraction



# The literature review: results



# The literature review: results



# The literature review: take-aways

- ERPs are an interesting research venue to assess cognition in MS
- When assessing ERPs in terms of latency differences, visual experiments seem to come out on top
- Many paradigms seem to show potential, but suffer from a small number of studies investigating them
- Research could benefit from investigating other experimental paradigms



# THANK YOU



Australian  
National  
University