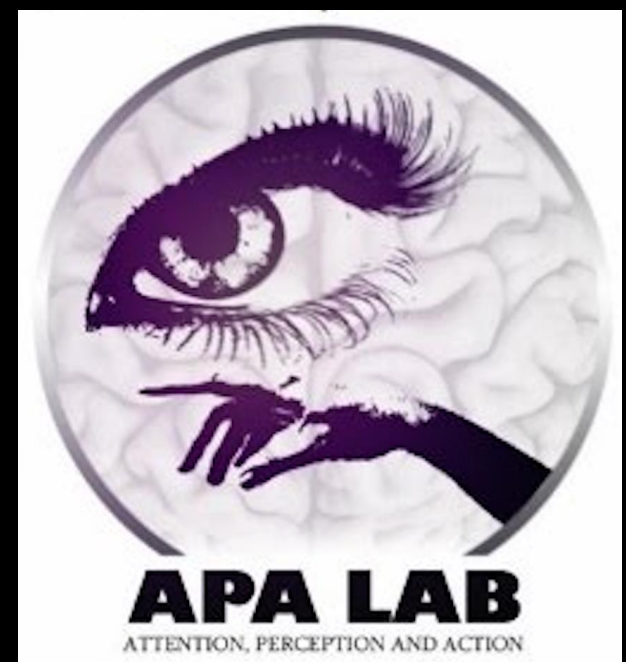


The Effects of Cerebellar Transcranial Direct Current Stimulation (tDCS) on Voluntary Covert Attention

Nadia Botha

Supervisor: Dr. Chris Striemer



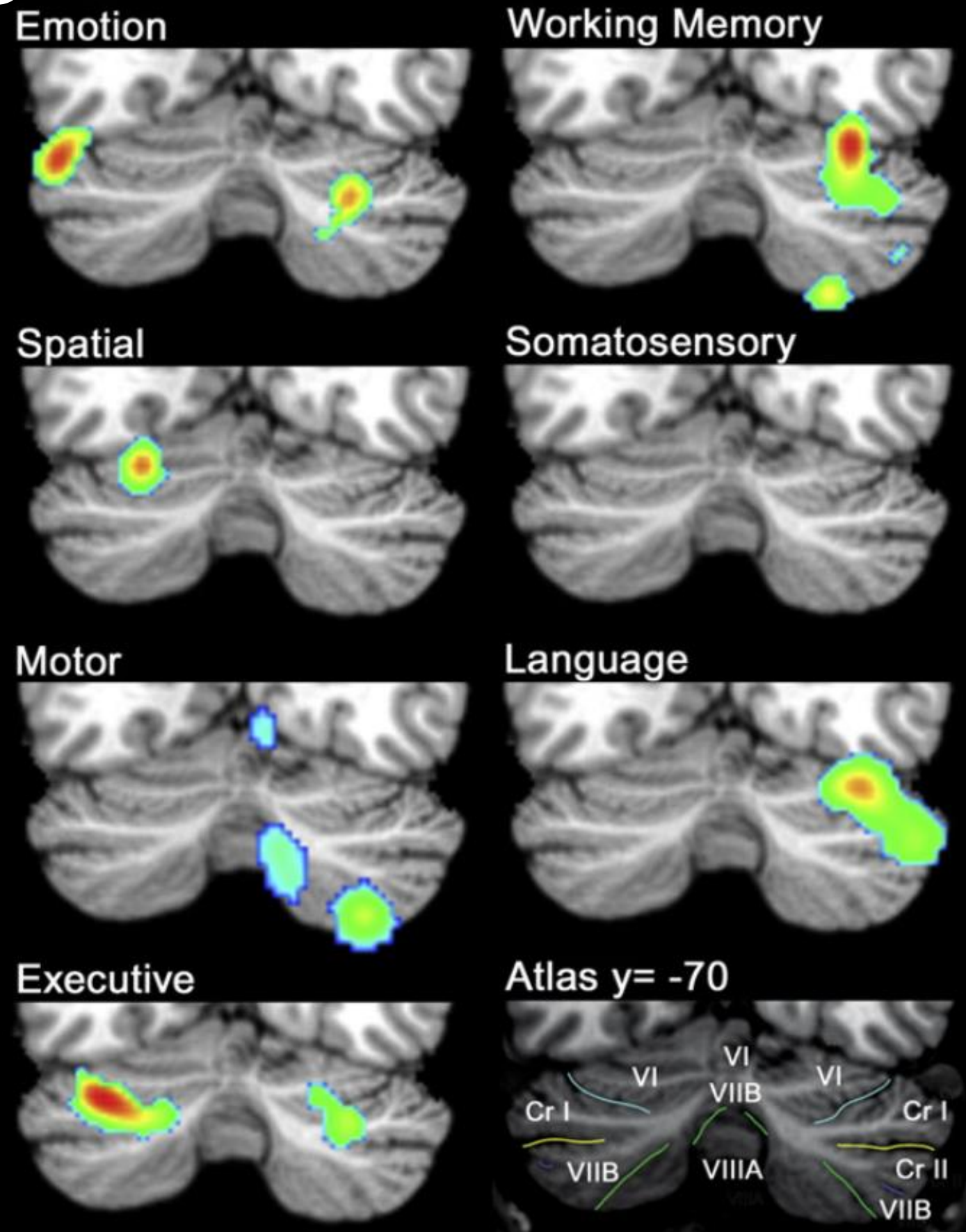
The Cerebellum



Imaging Studies

- Functional topography of higher cognitive functions

Stoodley & Schmahmann (2008)



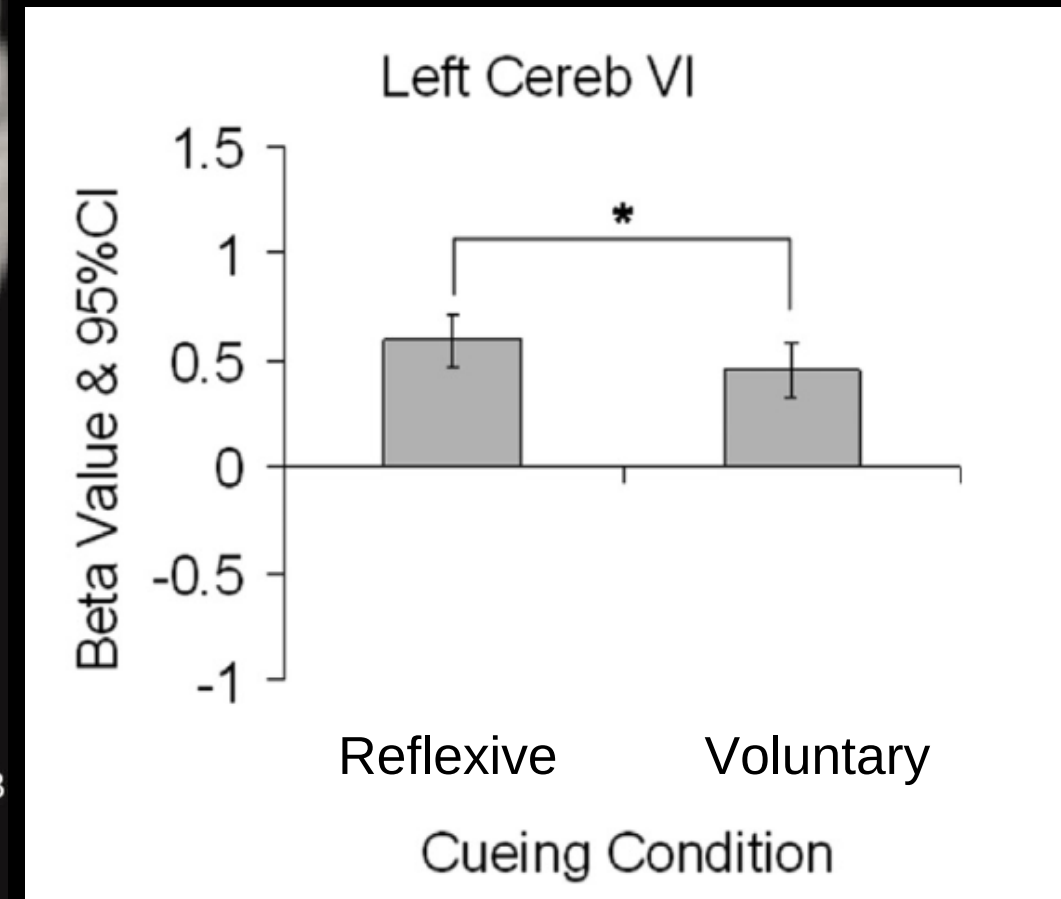
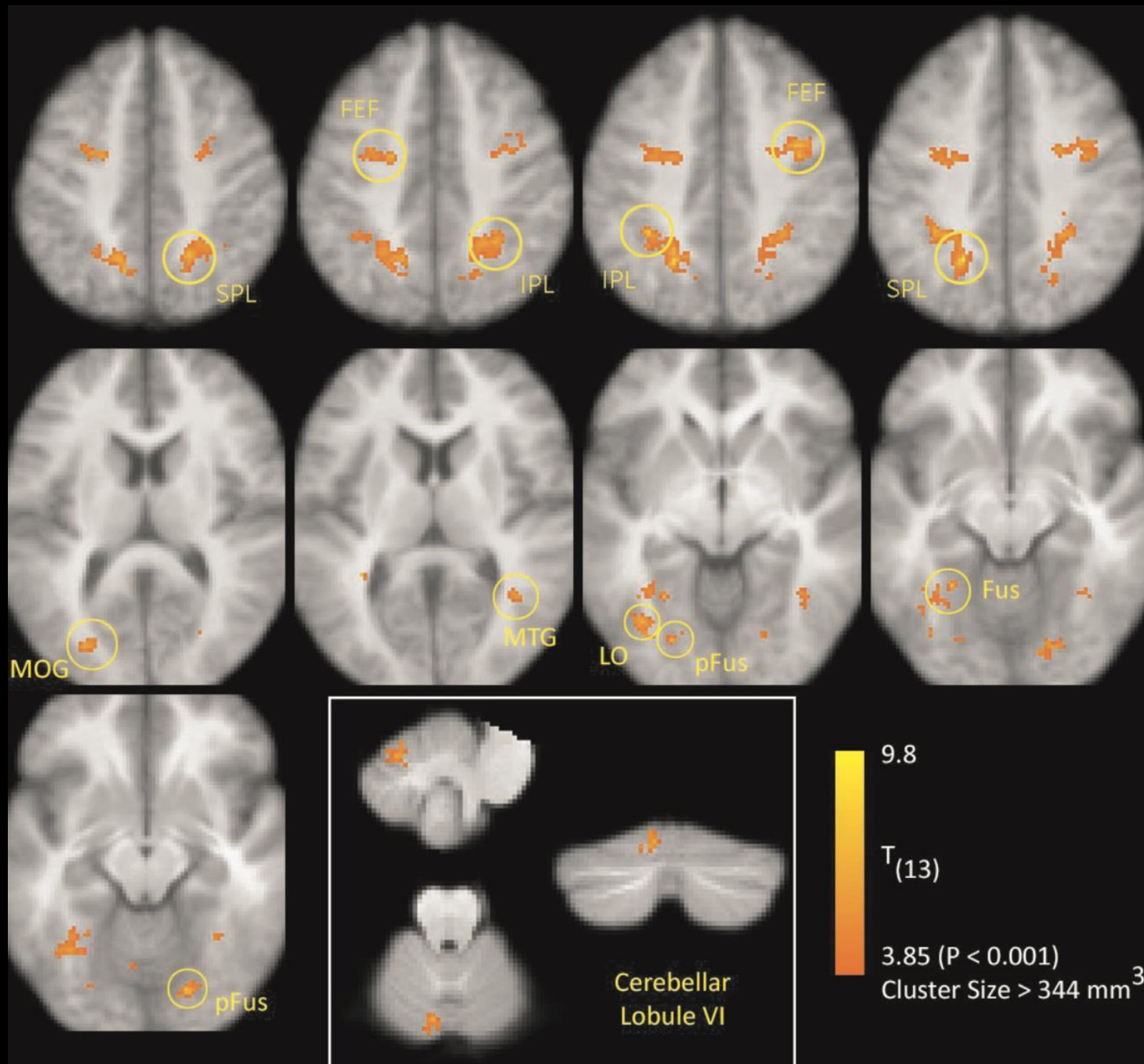
Voluntary Covert Attention

- Overt vs.
Covert
- Voluntary vs.
Reflexive



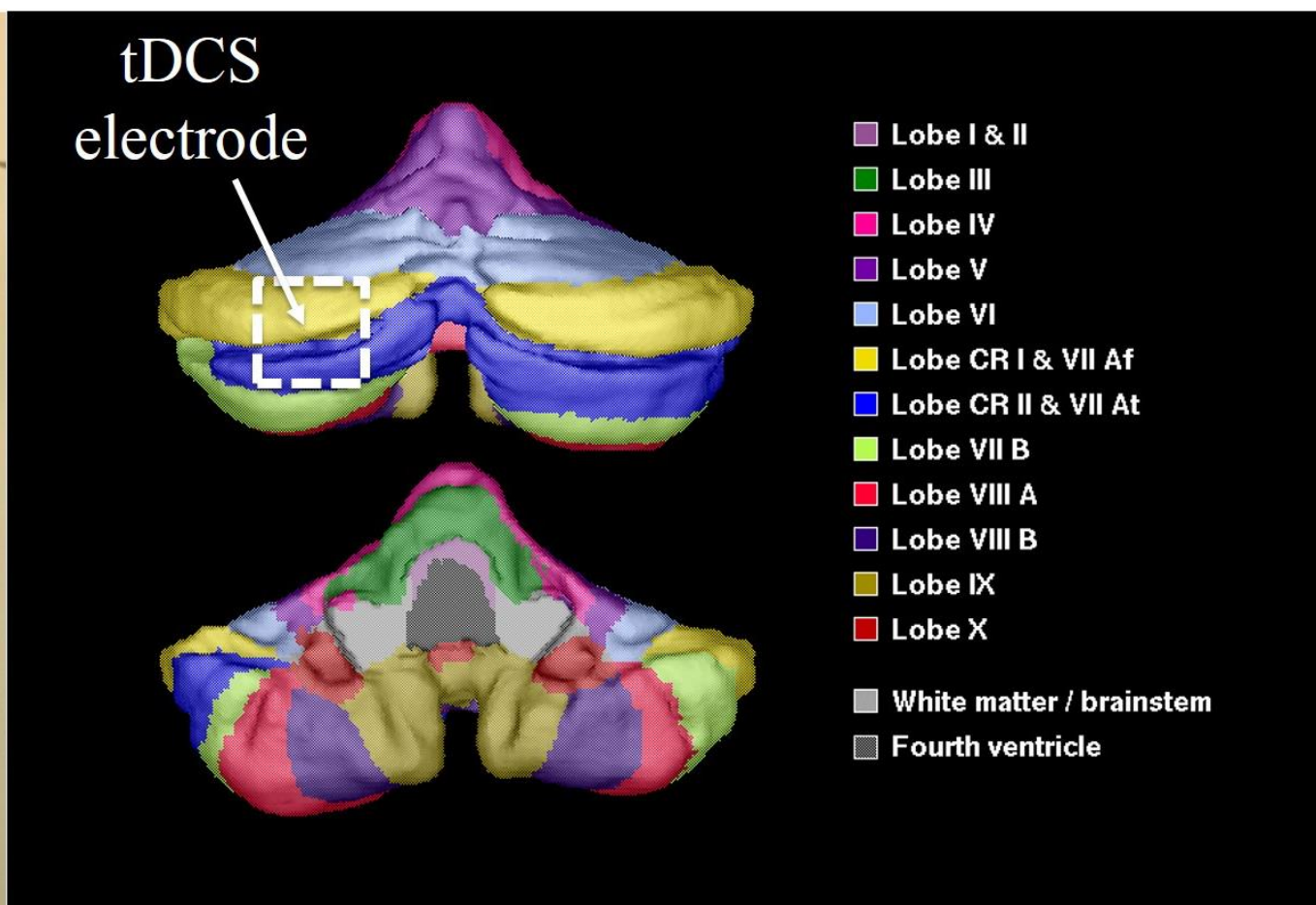
Imaging Studies

Strierner, Chouinard, Goodale & de Ribaupierre (2015)

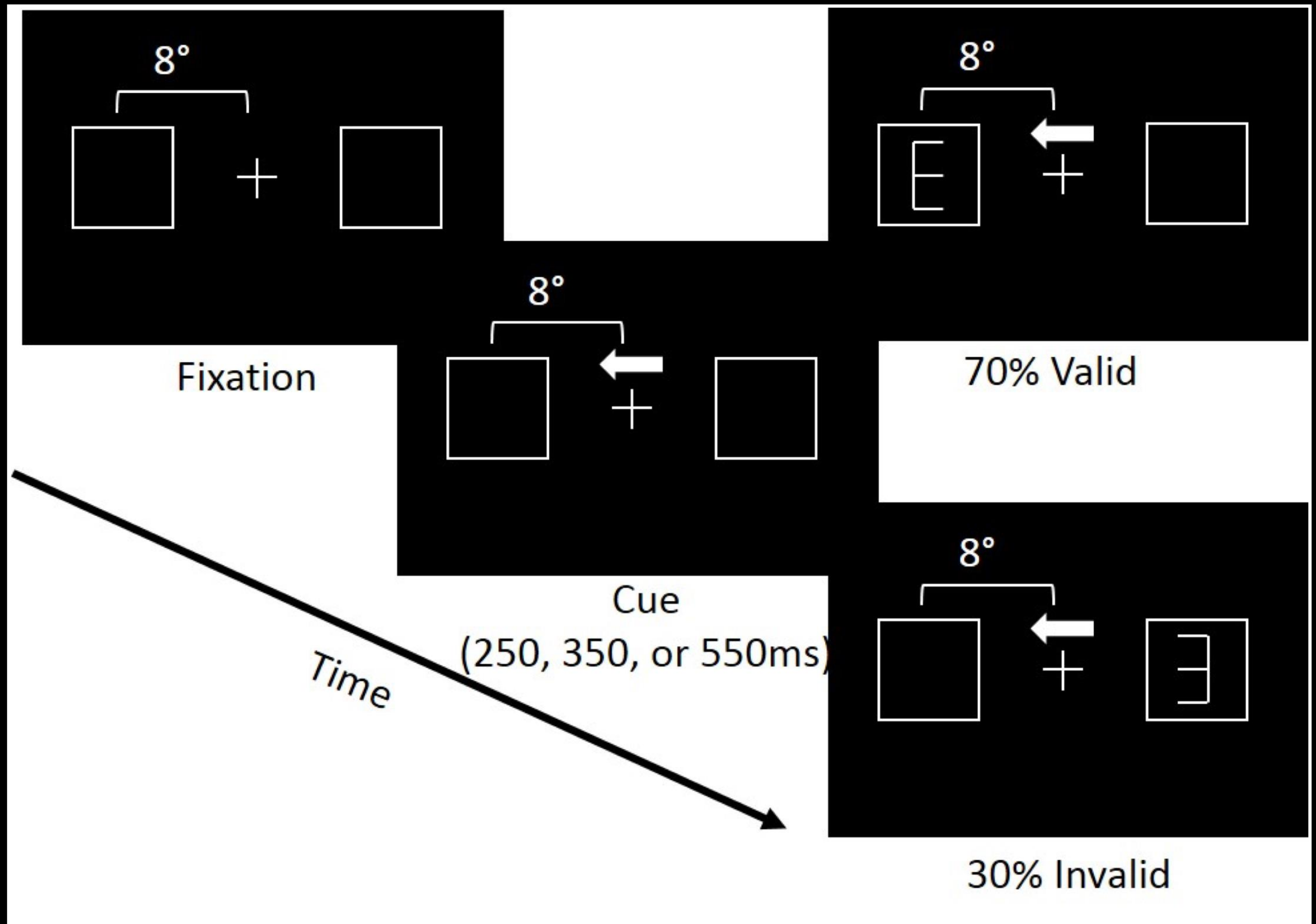


tDCS and the Cerebellum

- Anodal (+), Cathodal (-), Sham
- 20 minutes, 2mA (Pope, 2015)



Voluntary Covert Attention Task

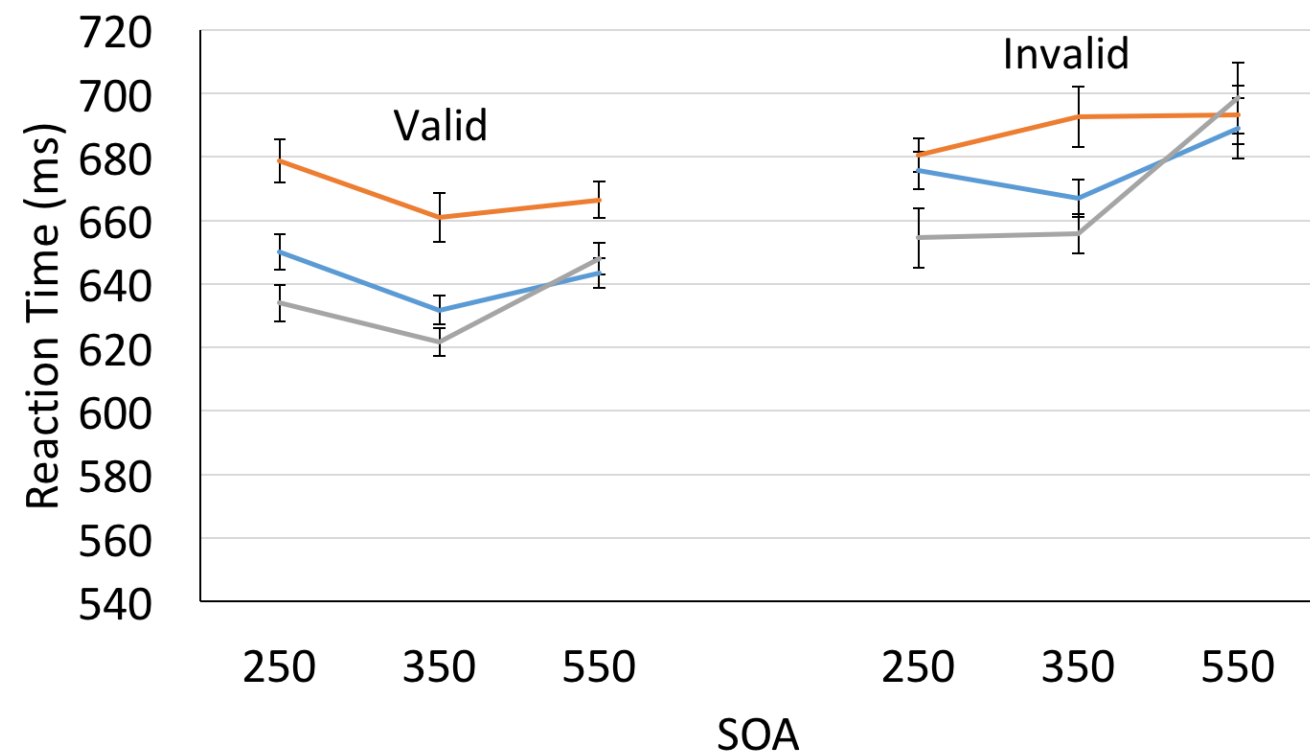


Results

- 21 participants

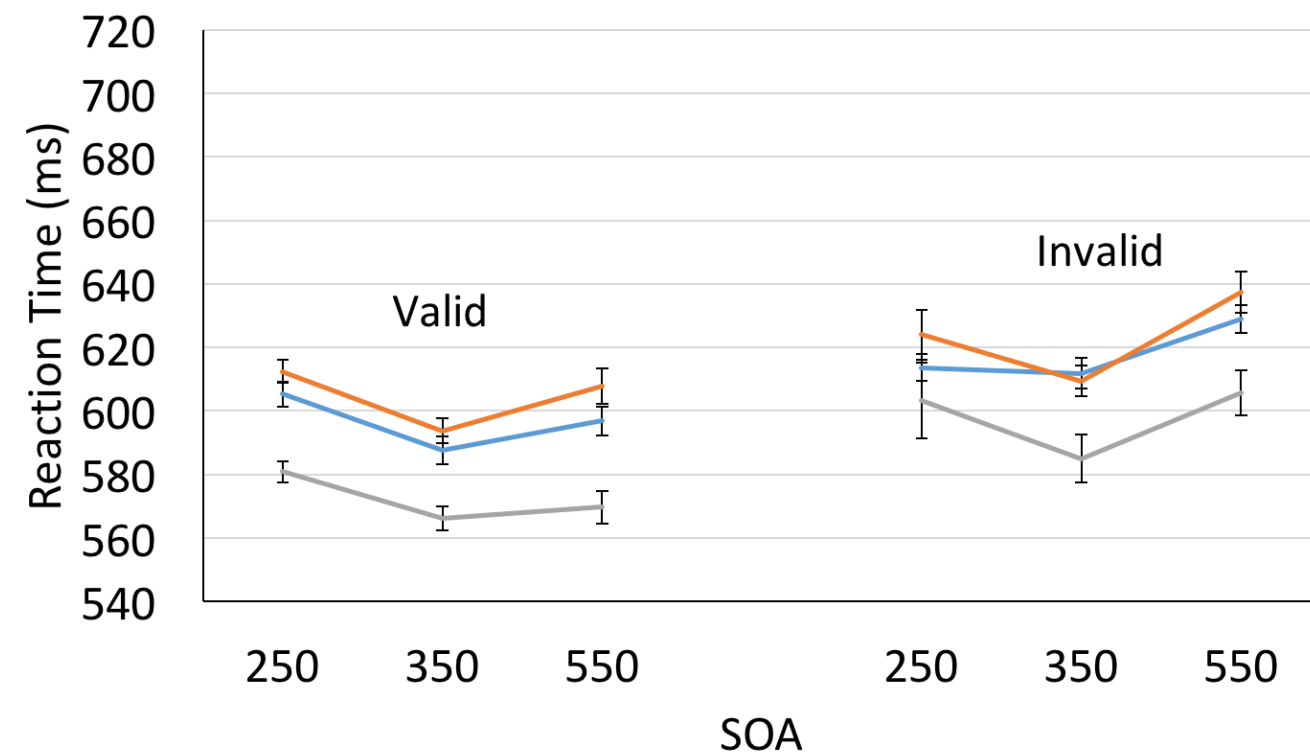
Pre: tDCS x Cue x SOA

— Sham — Anodal — Cathodal



Post: tDCS x Cue x SOA

— Sham — Anodal — Cathodal



Future Considerations

- Cerebellum involvement in voluntary versus reflexive attention
- Measuring performance *during* tDCS

Thank you 😊