# AGE-RELATED CHANGES IN THE INTERFERENCE BETWEEN COGNITIVE TASK Nottingham Trent COMPONENTS AND CONCURRENT SENSORIMOTOR COORDINATION

S. Mitra, C. Boatman, J. Baker, M. Newton, G. Bell, J. Kennaway, A. Hardy, C. Howard

Grant # 86/20

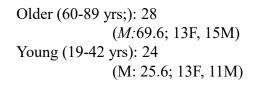
Bial

FOUNDATION

#### Participants

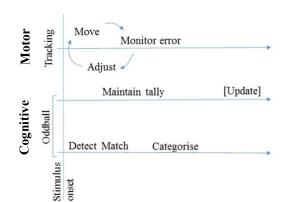
University

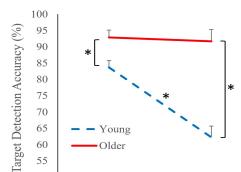
NTU



Task





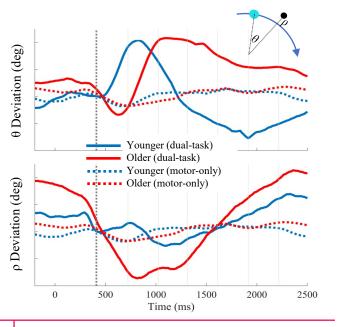


Single Task Dual Task

### Task Performance

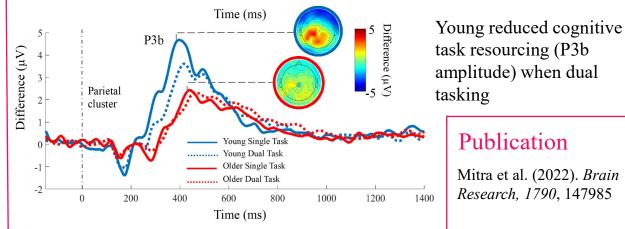
COGNITIVE: Young, but not older, participants reduced accuracy when dual tasking

> MOTOR: Both angular (θ) and radial (ρ) error was greater and longer lasting for older participants



## Cortical correlates

50



# Conclusions

Attenuation of motor task prioritisation may negatively affect mobility and independent living in old age

٠

Practice/training in multi-tasking may help retain cognitive-motor flexibility