

# YOUR BRAIN AND YOU: FROM VIDEO GAMES TO COGNITION

Part of Science UK - 2021

(Uni of Lincoln)

Action Video Games in the spotlight

→ Julia Fischer

how attention is improve

(ex)

Attention → objects, space + time

useful field of UTAs

Training studies - won glyer - tetris

play tetris / other (control)  
Action game

then

Useful field of VMS

Action video game → ④ ↑ focus and divide attention  
↑ capacity to attend to multiple stimuli



fast detection / recognition of relevant events

Underlying mechanism?

→ Top-down attention-control?

↓  
goal-directed attention

how does this change between groups? (in the brain)  
frontal / middle frontal gyrus (attentional net.)  
parietal / superior parietal lobe  
reticular

how do these interact w/ each other?

dynamic reconfiguration of top-down and stimulus dom.  
control network in video game players

recognition of video game players being faster  
in focused attention condition?

→ faster ✓

↓  
"enhanced anterior N1"

Education  
Rehabilitation  
Learning

Cognitive Dais)

challenge:

→ ↑ prevalence of dementia

→ more → caregivers → recursion for grown assisted-care

cognitive



cognitive associated w/ dementia are worse  
from group to group

challenge for care home staff

Cognitive dais is a user friendly system designed  
to give care staff an instant snapshot  
of a person's cognitive abilities and  
problems

- Seeing
- Understanding
- Communicating
- Remembering
- Attention

# Colors