ITHACA COLLEGE

THE MINI GAMES

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CORSI BLOCK TAPPING TASK

Task Goal:

- train working memory
- recreate & manipulate the longest sequence possible

Game Theme Adaption:

- crime investigation board
- connecting sequence of events to catch a criminal

Young Adult Adaption:

- changing story/visual events for each trial provides greater distraction
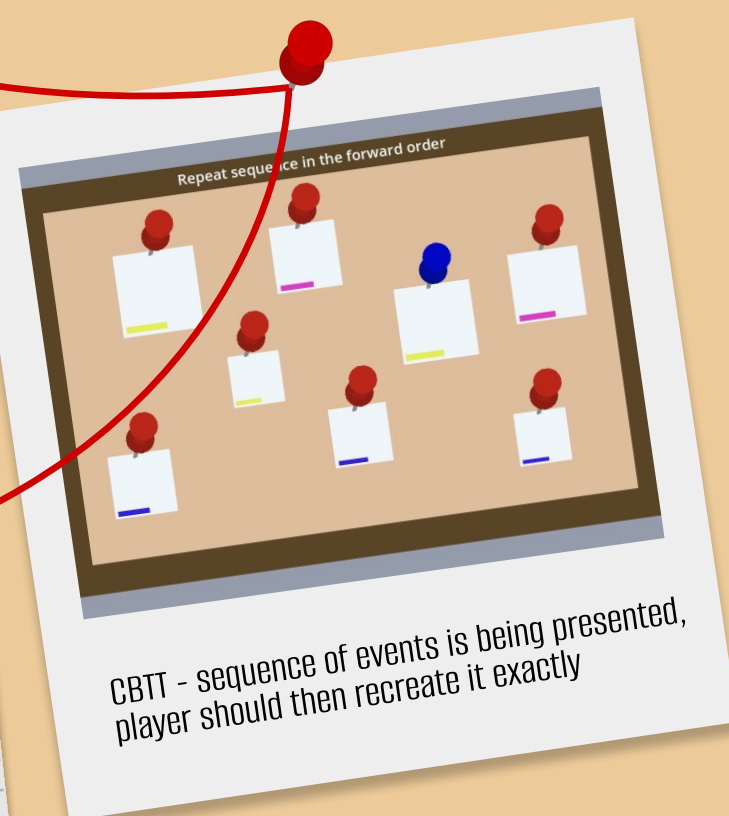
Adaptive Difficulty:

- sequence length adjusts based on previous trial of same type
- session length adjusts based on past session performance

Report:

- sequences correct by type
- accuracy

Game Structure:

- 2D point and click environment
- Model-View-Controller

Repeat sequence in the forward order

CBTT - sequence of events is being presented, player should then recreate it exactly

STOP GO TASK

Task Goal:

- train inhibition
- respond quickly to cue but inhibit response when stop signal presented

Game Theme Adaption:

- collect evidence while following suspect, some are safe but some may expose player's cover

Young Adult Adaption:

- auditory/visual distractors
- moving through world while playing - higher cognitive load

Adaptive Difficulty:

- stop signal delay: increases for greater difficulty
- session length adjusts based on past session performance

Report:

- probability of successful inhibition
- go reaction time
- stop signal reaction time
- accuracy

Game Structure:

- 2D HUD for displaying trials
- 3D environment for tailing suspect between trials
- Model-View-Controller

Stop Go Task - 'key' evidence being presented, player should collect evidence to their right as quickly as possible

CRIME SCENE DO NOT CROSS

WISCONSIN CARD SORTING TASK

Color   Trial: 4   Score: 25
             Best RT: 745   Phase: 2

Good work!

WCST - player should sort the active card to the second pile as quickly as possible because they have the same color

Task Goal:

- train cognitive flexibility
- sort cards based on a changing rule

Game Theme Adaption:

- quickly sort through evidence to solve the crime

Young Adult Adaption:

- comparisons greater than just color, shape, etc.
- ex: origin, type, etc.

Adaptive Difficulty:

- rule block length changes based on previous adaption rate

Report:

- accuracy
- reaction time
- adaption rate

Game Structure:

- 2D point and click environment
- Model-View-Controller