The Butterfly Task – Outline

# Task instructions

* + Similar to Davidow et al. (2016) – we can copy the Matlab code

# Pre-task practice

* + 1 run, 8 trials
  + Same as Learning phase, but different stimuli

# Learning trials

* + 6 runs, 96-180 trials (Parkinson’s patients vs healthy young adults)
  + Present one of four butterflies and two flowers (flowers always appear in the same location)
    - Same stimuli as in Davidow et al. (2016)
  + Participants pick one flower
    - Include max response time (6 sec?) and reminder to make a response (4 sec?)
  + Butterfly and chosen flower stay on the screen for 1 sec, then
    - If selection was correct, positive feedback in 80% of trials, negative otherwise
    - If selection was incorrect, negative feedback
    - Concurrently with the feedback, a random novel picture is shown (2sec)
  + The next trial starts after an ITI

# Test trials

* + 1 run, 24-32 trials
  + Same as Learning trials, but without feedback

# Memory test

* + 10-30 minutes after initial task
  + All the pictures shown during feedback and an equal number of novel pictures are shown
  + Participants rate if for each picture if it is old or new; after that, they rate their confidence on a 4-point scale