Description of Task Files for "CardTask_Speer2014"

Used in publications:

Speer, M.E., Bhanji, J.P., & Delgado, M.R. (2014). Savoring the past: Positive memories evoke value representations in the striatum. Neuron, 84: 1-10. doi: 10.1016/j.neuron.2014.09.028

Important Filenames:

CardTaskRP_Speer2014_displayupdatedA.es2 - e-prime, randomized order used for half of participants

CardTaskRP_Speer2014_displayupdatedB.es2 - e-prime, randomized order used for half of participants

**.png* - images needed for the e-prime presentation

File Descriptions

CardTaskRP_Speer2014_displayupdatedA and CardTaskRP_Speer2014_displayupdatedB:

Experimental Design: 2 conditions (Reward, Punishment) within subjects

Timing Information:

Structured for one 9min 20s scan (does not include practice trials)

Event Timing (each trial) -

1. Input guess: 2s ("?" remains onscreen for 2s regardless of response time)
2. Inter-stimulus-interval: 2/4s (50%/50%)
3. Outcome: 2s - Reward/Punishment (50%/50%), or "no response" on missed response trials
4. Inter-trial interval: 6/8s (50%/50%)

Trial Counts and other details:

3 practice trials at beginning (skip by setting weight to zero in "practice" list)

40 experimental trials, 2 pseudorandom orders (*_displayupdatedA and *_displayupdatedB)

Keyboard input: accepts "1" or "b" for "lower" guess, "2" or "y" for "higher" guess. Initial screens accept "t" to advance. "trigger" expects "t" to begin experiment.

How to interpret fields in output files:

"wait8.OnsetTime" stores clocktime of experiment start time (8s blank screen starts at this time)

"input.Resp" stores response for each experimental trial (low="1" or "b", high="2" or "y"). Empty if no response

"input.RT" stores response time for each trial. 0 if no response.

"procedure" stores trial condition (reward/punishment)

Also see (e.g., similar tasks described elsewhere):

Delgado, M.R., Nystrom, L.E., Fissell, C., Noll, D.C., & Fiez, J.A. (2000). Tracking the hemodynamic responses to reward and punishment in the striatum. Journal of Neurophysiology, 84(6): 3072-77. doi: 10.1152/jn.2000.84.6.3072