

Description of Task Files for “CardTask_Speer2014”

Used in publications:

Task is very similar (differences in trial numbers) to the one used in: May, J. C., Delgado, M. R., Dahl, R. E., Stenger, V. A., Ryan, N. D., Fiez, J. A., & Carter, C. S. (2004). Event-related functional magnetic resonance imaging of reward-related brain circuitry in children and adolescents. *Biological psychiatry*, 55(4), 359-366.

Important Filenames:

CardTaskRPN.es2 - e-prime main file

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

File Descriptions

CardTaskRPN.es2:

Experimental Design: 3 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
2. Outcome: 1s, Reward/Punishment/Neutral (24/24/16 trials), or “no response” on missed response trials
3. Inter-trial interval: 4/6/8s (50%/25%/25%)

Trial Counts and other details:

64 experimental trials, random trial order

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/neutral)

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