

README for *chinch* code (for subjects)

Run *chinch.m* (in *chinchCODE* folder)

- OK welcome
- In GUI
 - o Pick subject in "ID" (upper left)
 - o Type in weight (use 999 for human - not relevant, but needed)
 - o Pick condition from drop down: Run name (NP)
 - Run 3 blocks of each of the 3 conditions
 - Use the following order to mix-up order effects
 - RCA CAR ARC (*9 total blocks, ~10 min each*)
 - Where R: REF, C: CORR, A: ACORR
 - o Specify output file name according to following convention:
 - **H3_D1a_CMR3H_REF_test30_1365**
 - Where
 - **H3** = your subject ID
 - **D1** = Day # (increase by 1 for each new day you collect data)
 - **a** = block on that **day** (i.e., a, b, c, ... increase by one for each block you run today)
 - o i.e. D1a, D1b, D1c for Day 1, D2a, D2b, D2c for day 2 (irrespective of condition)
 - **CMR3H_REF_test30_1365**: Condition name
 - *This naming convention is used to sort data for analysis, where chins have hundreds of days*
 - o Press "Accept"
 - o Press "Run"
 - OK if asked about turning device panel on
 - "No" pellet test.
 - o 64 trials will run: follow instructions in the **command window. Please minimize the GUI and only look at command window.**
 - **BEFORE 1st trial, set your headphones (WIRED, in QUIET ROOM) to typical comfortable volume**
 - *DURING 1st trial, make any adjustment required to volume – you will hear many tones in each trial so should be enough time to adjust if needed.*
 - <Enter> starts (and ends) a trial
 - Trials are a random number of standard stimuli, with the last 4 being either:
 - o <SIG STD SIG STD> – if you hear SIG (tone), press <Enter>
 - o <STD STD STD STD> – If you do not hear SIG, only press <Enter> once sound has stopped.
 - Where (STD: noise only; SIG: tone and noise)
 - You will receive "partial reinforcement" in the same manner the chinchillas do (they get food pellets as rewards, you get a message – sorry!)
 - "reward" for *Hit* or *Correct Rejection* is seeing the word "CORRECT"
 - o This occurs only 90% of the time (same as for the chins).
 - *This partial reinforcement is used in operant conditioning to resist extinction of a learned behavior, although it take longer to learn.*
 - All other trials receive no feedback, just like the chins not getting a pellet.
- At end, two data files are created
 - o *.mat
 - o *.DAT (text file with trial by trial recap of scores:
 - Ab – abort (answering before response window (final 4 sounds: BABA or AAAA)
 - Ht – Hit: detected tone when present
 - Ms – Miss: Missed tone when present
 - CR – Correct Rejection: correctly did not respond when tone not present
 - FA – False Alarm: responded when tone was not present
- "Exit" to end, or run new condition.