

COHORT SUMMARY

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Subject	Is subject data present for cohort	Yes No
Clinical Records	Are clinical records present for cohort	Yes No
DMTP	Are delayed match-to-place (DMTP) records present for cohort	Yes No
EPM	Are elevated plus maze (EPM) records present for cohort	Yes No
Estrus	Are Estrus images present for cohort	Yes No
Frailty Index	Are frailty index records available for cohort	Yes No
HCS	Are home cage scan (HCS) records present for cohort	Yes No
2-Choice RT	Are 2-choice serial reaction time task records present for cohort	Yes No
ORM	Are odor recognition memory (ORM) records present for cohort	Yes No
WM-LI	Are water maze learning index (WM-LI) records present for cohort	Yes No
MRI	Are magnetic resonance imaging (MRI) records present for cohort	Yes No

RAW DATA AVAILABLE

None - All cohort level data is present in the summary

SUBJECT

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Battery	Test Battery	Alpha numeric describing cohort and main testing, examples: Cohort 1, WM DMTP Cohort 6, Naïve
Birth Date	Birth Date	MM/DD/YYYY
Death/Exit Date	Death/Exit Date	MM/DD/YYYY
Death/Exit Reason	Death/Exit Reason	Character string
Notes	Notes	Character string
WM Learning Index Score	Composite score of spatial memory, lower scores indicate better performance.	Valid integer value
Clinical Cases	Number of clinical case records associated with the Rat ID. Each rat can have more than one file or none. Files have the format: <Rat ID>_<Date>-Clinical Case.pdf.	Valid number
Health Records	Number of health records associated with the Rat ID. Each rat can have one file or none. Files have the format:<Rat ID>_NIA_Database_Health_Notes.PNG	Valid number

Pathology Reports	Number of pathology reports associated with the Rat ID. Each rat can have more than one file or none. Files have the format: <Rat ID>_RT<number sequence>-<[PathFinal PathPrelim Bacteriology]><possible version number>.pdf	Valid number
Necropsy Form	Number of necropsy forms associated with the Rat ID. Each rat can have one file or none. Files have the format: <Rat ID>_Necropsy.pdf	Valid number
FRAILITY - E	Indicates if the frailty index was performed at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
FRAILITY - M	Indicates if the frailty index was performed at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
FRAILITY - O	Indicates if the frailty index was performed at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
MRI - E	Indicates if the MRI was performed at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
MRI - M	Indicates if the MRI was performed at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
MRI - O	Indicates if the MRI was performed at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
ESTRUS - M	Indicates if the estrus images were recorded at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
ESTRUS - O	Indicates if the estrus images were recorded at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
EPM - E	Indicates if the elevated plus maze (EPM) was performed at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
EPM - M	Indicates if the elevated plus maze (EPM) was performed at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No

EPM - O	Indicates if the elevated plus maze (EPM) was performed at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
HCS - E	Indicates if the home cage activity (HCS) was recorded at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
HCS - M	Indicates if the home cage activity (HCS) was recorded at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
HCS - O	Indicates if the home cage activity (HCS) was recorded at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
DMTP - S	Indicates if the water maze delayed match to place (DMTP) was performed at the shaping timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
DMTP - E	Indicates if the water maze delayed match to place (DMTP) was performed at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
DMTP - M	Indicates if the water maze delayed match to place (DMTP) was performed at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
DMTP - O	Indicates if the water maze delayed match to place (DMTP) was performed at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
ORM - E	Indicates if the odor recognition memory (ORM) was performed at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
ORM - M	Indicates if the odor recognition memory (ORM) was performed at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
ORM - O	Indicates if the odor recognition memory (ORM) was performed at the old timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
2-CHOICE RT - E	Indicates if the two-choice serial reaction time task (2-Choice RT) was performed at the early timepoint (1=Yes/ 0=No)	1 = Yes 0 = No
2-CHOICE RT - M	Indicates if the two-choice serial reaction time task (2-Choice RT) was performed at the middle timepoint (1=Yes/ 0=No)	1 = Yes 0 = No

2-CHOICE RT - O	Indicates if the two-choice serial reaction time task (2-Choice RT) was performed at the old timepoint (1=Yes/0=No)	1 = Yes 0 = No
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RAW DATA AVAILABLE

None - All cohort level data is present in the summary

CLINICAL RECORDS

Summary Variables		Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Clinical Cases	Number of clinical case records associated with the Rat ID. Each rat can have more than one file or none. Files have the format: <Rat ID>_<Date>-Clinical Case.pdf.	Valid number
Health Records	Number of health records associated with the Rat ID. Each rat can have one file or none. Files have the format:<Rat ID>_NIA_Database_Health_Notes.PNG	Valid number
Pathology Reports	Number of pathology reports associated with the Rat ID.Each rat can have more than one file or none. Files have the format: <Rat ID>_RT<number sequence>-<[PathFinal PathPrelim Bacteriology]><possible version number>.pdf	Valid number
Necropsy Form	Number of necropsy forms associated with the Rat ID. Each rat can have one file or none. Files have the format: <Rat ID>_Necropsy.pdf	Valid number

RAW DATA AVAILABLE PER RAT

Clinical case data, health records, pathology reports and necropsy forms are available as described. Also available is the body weight and temperature file and housing history file.

WM-LI

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, exam Cohort 1 Control Cohort 1
Test Date	Date of Test	MM/DD/YYYY
Notes	Notes	Character String
WM Learning Index Score	Main dependent variable. Defined in the operations manual	Valid integer value
Search Error Trial 1 (m.s)	Cumulative distance from the goal in the first acquisition trial corrected for start location and swim speed.	Valid search error value, missing values
AQ, BLock 1 Cumulative Search Error (m.s)	Average cumulative distance from the goal in the first block of 5 acquisition trials corrected for start location and swim speed.	Valid search error value, missing values
AQ, BLock 2 Cumulative Search Error (m.s)	Average cumulative distance from the goal in the second block of 5 acquisition trials corrected for start location and swim speed.	Valid search error value, missing values
AQ, BLock 3 Cumulative Search Error (m.s)	Average cumulative distance from the goal in the third block of 5 acquisition trials corrected for start location and swim speed.	Valid search error value, missing values
AQ, BLock 4 Cumulative Search Error (m.s)	Average cumulative distance from the goal in the fourth block of 5 acquisition trials corrected for start location and swim speed.	Valid search error value, missing values
Cue Mean Latency (sec)	Average latency to reach a visible goal over 6 trials.	Valid number of seconds, missing value possible

Cue Fail Flag	Identifies when the Cue Mean Latency is above 25 seconds.	Fail = Failed <blanks> = Not a fail
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RAW DATA AVAILABLE PER RAT

Anymaze video and data files

FRAILITY INDEX

Summary Variables	Definition	Format
Rat ID	Rat ID	Seven character alpha-numeric string
Time Point	Time Point of Frailty Index Assessment (Early, Middle, Old, Necropsy)	Early Middle Old Necropsy
Frailty Index Date	Frailty Index Assessment Date	MM/DD/YYYY
Alopecia	Index to Assess Frailty - Alopecia (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Dermatitis	Index to Assess Frailty - Dermatitis (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Coat Condition	Index to Assess Frailty - Coat Condition (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Tumors	Index to Assess Frailty - Tumors (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Distended Abdomen	Index to Assess Frailty - Distended Abdomen (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Hunched Posture	Index to Assess Frailty - Hunched Posture (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe

Body Condition Score	Index to Assess Frailty - Body Condition Score (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Gait Disorder	Index to Assess Frailty - Gait Disorder (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Tremor	Index to Assess Frailty - Tremor (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Hearing Loss	Index to Assess Frailty - Hearing Loss (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Cataracts	Index to Assess Frailty - Cataracts (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Chromodacryorrhea / Porphyrin	Index to Assess Frailty - Chromodacryorrhea / Porphyrin (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Exophthalmos	Index to Assess Frailty - Exophthalmos (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Microphthalmos	Index to Assess Frailty - Microphthalmos (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Corneal Opacity	Index to Assess Frailty - Corneal Opacity (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe

Head Tilt	Index to Assess Frailty - Head Tilt (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Malocclusions	Index to Assess Frailty - Malocclusions (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Diarrhea	Index to Assess Frailty - Diarrhea (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Jaundice	Index to Assess Frailty - Jaundice (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Penile / Vaginal Prolapse	Index to Assess Frailty - Penile / Vaginal Prolapse (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Rectal Prolapse	Index to Assess Frailty - Rectal Prolapse (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Breathing Rate / Depth	Index to Assess Frailty - Breathing Rate / Depth (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Piloerection	Index to Assess Frailty - Piloerection (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
Unusual Sounds	Index to Assess Frailty - Unusual Sounds (0 = absent 0.5 = mild 1 = severe)	0 = Absent 0.5 = Mild 1 = Severe
TOTAL SCORE	Total of assessment scores	Valid number

TOTAL SCORE / MAX SCORE	Percentage of total assessment score out of max score	Valid percentage
Notes	Notes Regarding Assessment	Character String

RAW DATA AVAILABLE

None - All frailty index data is reflected in the summary.

EPM

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Early, Middle, Old)	Early Middle Old
Test Date	Date of Test	MM/DD/YYYY
Notes	Notes	Character string
Total Distance Traveled (m)	Total distance travelled (meters)	Valid number of meters
Open Arm Entries	Number of entries into open arms of platform	Valid number
Time Spent in Open Arms (s)	Time spent in open arms (seconds)	Valid number of seconds
Closed Arms Entries	Number of entries into closed arms of platform	Valid number
Time Spent in Closed Arms (s)	Time spent in closed arms (seconds)	Valid number of seconds
Percent Time Spent in Open Arms	Percent time spent in open arms: (time in open arms) / (time in open arms + time in closed arms)	Valid percentage

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

Anymaze video and data files

HCS

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Early, Middle, Old)	Early Middle Old
Test Date	Date of Test	MM/DD/YYYY
Notes	Notes	Character String
Cabinet	Identifies the Cabinet (out of 4 (1,2,3,4)) containing the rat.	Valid cabinet number
Box	Identifies the box (out of 4 in each cabinet (A,B,C,D)) containing the rat.	Valid box number
Video Quadrant	Identifies the quadrant containing the rat (in the 2X2 array) when viewing the video.	Lower Left Lower Right Upper Left Upper Right

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

Home Cage Scan activity tracking data and video files.

Alternatively just the video (.mpg) files can be requested.

ESTRUS

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Middle, Old)	Middle Old
Day 1 image available	Day 1 image available (Y/N)	Y = Yes N = No <blank> = Not Applicable
Day 1 Notes	Day 1 image notes	Character string
Day 2 image available	Day 2 image available (Y/N)	Y = Yes N = No <blank> = Not Applicable
Day 2 Notes	Day 2 image notes	Character string
Day 3 image available	Day 3 image available (Y/N)	Y = Yes N = No <blank> = Not Applicable
Day 3 Notes	Day 3 image notes	Character string
Day 4 image available	Day 4 image available (Y/N)	Y = Yes N = No <blank> = Not Applicable
Day 4 Notes	Day 4 image notes	Character string

		Y = Yes N = No <blank> = Not Applicable
Day 5 image available	Day 5 image available (Y/N)	
Day 5 Notes	Day 5 image notes	Character string

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

Stained vaginal lavage sample image (.tif) files are available

DMTP

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Shaping, Early, Middle, Old)	Shaping Early Middle Old
Test Date	Date of Test	MM/DD/YYYY
Notes	Notes	Character string
Day 1 Trial 1 (Search Error, m.s)	Day 1 Trial 1 Search Error score reflecting deviation from the optimal path to the goal. Details in the operational manual.	Valid numeric value, missing is possible
Day 1 Trial 2 (Search Error, m.s)	Day 1 Trial 2 (Search Error, m.s)	Valid numeric value, missing is possible
Day 1 Trial 3 (Search Error, m.s)	Day 1 Trial 3 (Search Error, m.s)	Valid numeric value, missing is possible
Day 1 Trial 4 (Search Error, m.s)	Day 1 Trial 4 (Search Error, m.s)	Valid numeric value, missing is possible
Day 1 Trial 5 (Search Error, m.s)	Day 1 Trial 5 (Search Error, m.s)	Valid numeric value, missing is possible
Day 1 Retention Trial (Search Error, m.s)	Day 1 Retention Trial. Search Error score after 6 hr. delay	Valid numeric value, missing is possible
Day 2 Trial 1 (Search Error, m.s)	Day 2 Trial 1 (Search Error, m.s)	Valid numeric value, missing is possible
Day 2 Trial 2 (Search Error, m.s)	Day 2 Trial 2 (Search Error, m.s)	Valid numeric value, missing is possible
Day 2 Trial 3 (Search Error, m.s)	Day 2 Trial 3 (Search Error, m.s)	Valid numeric value, missing is possible
Day 2 Trial 4 (Search Error, m.s)	Day 2 Trial 4 (Search Error, m.s)	Valid numeric value, missing is possible

Day 2 Trial 5 (Search Error, m.s)	Day 2 Trial 5 (Search Error, m.s)	Valid numeric value, missing is possible
Day 2 Retention Trial (Search Error, m.s)	Day 2 Retention Trial (Search Error, m.s)	Valid numeric value, missing is possible
Day 3 Trial 1 (Search Error, m.s)	Day 3 Trial 1 (Search Error, m.s)	Valid numeric value, missing is possible
Day 3 Trial 2 (Search Error, m.s)	Day 3 Trial 2 (Search Error, m.s)	Valid numeric value, missing is possible
Day 3 Trial 3 (Search Error, m.s)	Day 3 Trial 3 (Search Error, m.s)	Valid numeric value, missing is possible
Day 3 Trial 4 (Search Error, m.s)	Day 3 Trial 4 (Search Error, m.s)	Valid numeric value, missing is possible
Day 3 Trial 5 (Search Error, m.s)	Day 3 Trial 5 (Search Error, m.s)	Valid numeric value, missing is possible
Day 3 Retention Trial (Search Error, m.s)	Day 3 Retention Trial (Search Error, m.s)	Valid numeric value, missing is possible
Day 4 Trial 1 (Search Error, m.s)	Day 4 Trial 1 (Search Error, m.s)	Valid numeric value, missing is possible
Day 4 Trial 2 (Search Error, m.s)	Day 4 Trial 2 (Search Error, m.s)	Valid numeric value, missing is possible
Day 4 Trial 3 (Search Error, m.s)	Day 4 Trial 3 (Search Error, m.s)	Valid numeric value, missing is possible
Day 4 Trial 4 (Search Error, m.s)	Day 4 Trial 4 (Search Error, m.s)	Valid numeric value, missing is possible
Day 4 Trial 5 (Search Error, m.s)	Day 4 Trial 5 (Search Error, m.s)	Valid numeric value, missing is possible
Day 5 Trial 1 (Search Error, m.s)	Day 5 Trial 1 (Search Error, m.s)	Valid numeric value, missing is possible
Day 5 Trial 2 (Search Error, m.s)	Day 5 Trial 2 (Search Error, m.s)	Valid numeric value, missing is possible
Day 5 Trial 3 (Search Error, m.s)	Day 5 Trial 3 (Search Error, m.s)	Valid numeric value, missing is possible
Day 5 Trial 4 (Search Error, m.s)	Day 5 Trial 4 (Search Error, m.s)	Valid numeric value, missing is possible
Day 5 Trial 5 (Search Error, m.s)	Day 5 Trial 5 (Search Error, m.s)	Valid numeric value, missing is possible

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

Anymaze video and data files

ORM

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Early, Middle, Old)	Early Middle Old
Experiment Date	Experiment Date	MM/DD/YY
Notes	Notes	Character String
Odor Pairing	Odor Pairs used in test	Character String of pairings (e.g. Vanilla/Anise)
Habituation Day 1-Total Distance (mm)	Habituation Day 1-Total Distance traveled during the test (millimeters)	Valid number of millimeters, missing possible
Habituation Day 2-Total Distance (mm)	Habituation Day 2-Total Distance traveled during the test (millimeters)	Valid number of millimeters, missing possible
Habituation Day 3-Total Distance (mm)	Habituation Day 3-Total Distance traveled during the test (millimeters)	Valid number of millimeters, missing possible
Habituation Day 4-Total Distance (mm)	Habituation Day 4-Total Distance traveled during the test (millimeters)	Valid number of seconds, missing possible
Sample-Olfactory Exploration at Position 1 (s)	Sample-Olfactory Exploration at Position 1 (seconds)	Valid number of seconds, missing possible
Sample-Olfactory Exploration at Position 2 (s)	Sample-Olfactory Exploration at Position 2 (seconds)	Valid number of seconds, missing possible

Sample-Total Distance (mm)	Sample-Total Distance traveled during the test (millimeters)	Valid number of millimeters, missing possible
Novel Odor	Identifies the Novel Odor	Character string of odor (e.g. Anise)
Video Quadrant NE/SW	Identifies the location of the familiar and novel odors in the test phase as they appear on the video (either the NE or SW quadrant)	Character string of familiar and novel odors. (e.g. Familiar/Novel)
Test-Olfactory Exploration at Novel Odor (s)	Test-Olfactory Exploration at Novel Odor (seconds)	Valid number of seconds, missing possible
Test-Olfactory Exploration Familiar Odor (s)	Test-Olfactory Exploration Familiar Odor (seconds)	Valid number of seconds, missing possible
Test-Total Distance (mm)	Test-Total Distance traveled during the test (millimeters)	Valid number of seconds, missing possible
Recognition Index Score	Recognition Index Score: novel odor exploration time/ (novel odor exploration time + sample odor exploration time)	Valid number, missing possible

RAW DATA AVAILABLE PER SUBJECT AND TIMEPOINT

TopScan video tracking data and video files

Alternatively just the video (.mpg) files can be requested.

2 CHOICE RT – CONCISE

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Early, Middle, Old)	Early Middle Old
Notes	Notes	Character string
4.0sec Stimulus % accuracy	For trials with 4 second stimulus, % of timely responses that were at correct port (50% is random chance)	Valid percentage, missing is possible
1.0sec Stimulus % accuracy	For trials with 1 second stimulus, % of timely responses that were at correct port (50% is random chance)	Valid percentage, missing is possible
0.2sec Stimulus % accuracy	For trials with 0.2 second stimulus, % of timely responses that were at correct port (50% is random chance)	Valid percentage, missing is possible
5sec Interval % premature	% of trials with 5 second interval in which rat responded before stimulus light was illuminated	Valid percentage, missing is possible
7sec Interval % premature	% of trials with 7 second interval in which rat responded before stimulus light was illuminated	Valid percentage, missing is possible
11sec Interval % premature	% of trials with 11 second interval in which rat responded before stimulus light was illuminated	Valid percentage, missing is possible

1.0sec Stimulus % omissions	% of trials with 1 second stimulus in which rat did not respond to any port at all	Valid percentage, missing is possible
# Perseverative head entries per correct trial	Additional nose pokes made at light port while there was an earned food pellet waiting in the food receptacle on opposite wall. Calculated from trials with 1 second stimulus and 5 second interval; normalized to number of correct responses.	Valid number, missing is possible
Stimulus response latency (s)	Median stimulus response latency (seconds), calculated from trials with 1 second stimulus and 5 second interval	Valid number of seconds, missing is possible
Food retrieval latency (s)	Median food response latency (seconds), calculated from trials with 1 second stimulus and 5 second interval	Valid number of seconds, missing is possible

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

Raw data files are text file (.txt) dumps of all variable arrays at the end of each test session.

2 CHOICE RT – VERBOSE

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Date	Date	MM/DD/YYYY
Experiment	Experiment Name	Character string
Start time	Start time	24 hour time HH:MM:SS
Stimulus duration (s)	Duration of stimulus light illumination (seconds)	Valid number of seconds, missing is possible
Limited hold (s)	Duration of time after stimulus light is extinguished in which rats may still perform a rewarded response (seconds)	Valid number of seconds, missing is possible
Interval (s)	Delay (seconds) to illuminate stimulus lights after rat consumes pellet or advances from time-out. Timer begins when rat removes head from food receptacle.	Valid number of seconds, missing is possible
Trials	Number of trials completed	Valid number, missing is possible
% Accuracy	% of timely responses that were at correct port (50% is random chance). Does not include premature responses performed before a stimulus light was illuminated or omission trials in which no response was performed at all.	Valid percentage, missing is possible
% Premature	% of trials in which rat performed a nose-poke response before a stimulus light was illuminated	Valid percentage, missing is possible

% Omission	% of trials in which rat did not perform any response throughout stimulus illumination and limited hold period	Valid number, missing is possible
Correct trials	Number of trials with correct response to port that was illuminated	Valid number, missing is possible
Incorrect trials	Number of trials with incorrect response to port that was NOT illuminated	Valid number, missing is possible
Premature trials	Number of trials in which rat performed nose-poke response before a stimulus light was illuminated	Valid number, missing is possible
Omission trials	Number of trials in which rat did not perform any response throughout stimulus illumination and limited hold period	Valid number, missing is possible
Perservative responses	Number of additional, inconsequential nose-poke responses performed at light aperture after rat had performed a correct response and earned a food pellet, which was at the time sitting in the food receptacle on opposite wall	Valid number, missing is possible
Food receptacle head entries	Total number of head entries performed at the food receptacle	Valid number, missing is possible
Correct LEFT responses	Number of trials with correct response when the left light aperture was the one illuminated	Valid number, missing is possible
Correct RIGHT responses	Number of trials with correct response when the right light aperture was the one illuminated	Valid number, missing is possible
MEDIAN food retrieval latency (s)	Median latency from food pellet delivery until initiation of head entry into food receptacle	Valid number of seconds, missing is possible
MEDIAN stimulus response latency (s)	Median latency from illumination of stimulus light until nose-poke response at correct port	Valid number of seconds, missing is possible

MEDIAN LEFT stimulus response latency (s)	Median latency when left light was illuminated	Valid number of seconds, missing is possible
MEDIAN RIGHT stimulus response latency (s)	Median latency when right light was illuminated	Valid number of seconds, missing is possible
MEDIAN timeout re-initiation latency (s)	Median latency for rat to perform head entry into empty food receptacle after end of a "time out" period. Time out occurs after omission, incorrect, or premature trial and results in house light extinguished for 5 seconds.	Valid number of seconds, missing is possible
Interval A (s)	Duration (seconds) of short interval used during variable interval test session	Valid number of seconds, missing is possible
Interval B (s)	Duration (seconds) of medium interval used during variable interval test session	Valid number of seconds, missing is possible
Interval C (s)	Duration (seconds) of long interval used during variable interval test session	Valid number of seconds, missing is possible
Interval A - # trials	Number of trials completed during variable interval test session with short interval	Valid number, missing is possible
Interval B - # trials	Number of trials completed during variable interval test session with medium interval	Valid number, missing is possible
Interval C - # trials	Number of trials completed during variable interval test session with long interval	Valid number, missing is possible
Interval A - Premature	Number of trials with short interval in which rat performed a nose-poke response before illumination of a stimulus light	Valid number, missing is possible
Interval B - Premature	Number of trials with medium interval in which rat performed a nose-poke response before illumination of a stimulus light	Valid number, missing is possible

Interval C - Premature	Number of trials with long interval in which rat performed a nose-poke response before illumination of a stimulus light	Valid number, missing is possible
Interval A - Correct	Number of trials with short interval in which rat performed a correct nose-poke response to port that was illuminated	Valid number, missing is possible
Interval B - Correct	Number of trials with medium interval in which rat performed a correct nose-poke response to port that was illuminated	Valid number, missing is possible
Interval C - Correct	Number of trials with long interval in which rat performed a correct nose-poke response to port that was illuminated	Valid number, missing is possible
Interval A - Incorrect	Number of trials with short interval in which rat performed an incorrect nose-poke response to port that was NOT illuminated	Valid number, missing is possible
Interval B - Incorrect	Number of trials with medium interval in which rat performed an incorrect nose-poke response to port that was NOT illuminated	Valid number, missing is possible
Interval C - Incorrect	Number of trials with long interval in which rat performed an incorrect nose-poke response to port that was NOT illuminated	Valid number, missing is possible
Interval A - Omission	Number of trials with short interval in which rat failed to perform a response throughout stimulus illumination and limited hold period an incorrect nose-poke response to port that was NOT illuminated	Valid number, missing is possible

Interval B - Omission	Number of trials with medium interval in which rat failed to perform a response throughout stimulus illumination and limited hold period an incorrect nose-poke response to port that was NOT illuminated	Valid number, missing is possible
Interval C - Omission	Number of trials with long interval in which rat failed to perform a response throughout stimulus illumination and limited hold period an incorrect nose-poke response to port that was NOT illuminated	Valid number, missing is possible
Trial-by-trial outcomes	Outcome of each trial: C=correct response, I=incorrect response, O=omission, P=premature response	Character string - Outcomes separated by semi colon
Trial-by-trial stimulus locations	Location of stimulus light for each trial: L=left, R=right	Character string - Directions separated by semi colon
Trial-by-trial stimulus response latencies (s)	Stimulus response latency for each trial in which a correct response was performed	Character string - Each latency separated by semi colon
Trial-by-trial food retrieval latencies (s)	Food retrieval latency for each trial in which a correct response was performed and food pellet was earned	Character string - Each latency separated by semi colon
Trial-by-trial interval selections	Interval times for each trial within variable interval test days	Character string - Times separated by semi colon
Filename	Filename for the raw text output file produced by MED-PC	Character string

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

Raw data files are text file (.txt) dumps of all variable arrays at the end of each test session.

MRI

Summary Variables	Definition	Format
Cohort Number	Cohort Number	Valid numeric cohort number
Rat ID	Rat ID	Seven character alpha-numeric string
Sex	Sex	Male Female
Cohort	Assigned Cohort	Alpha numeric describing cohort, examples: Cohort 1 Control Cohort 1
Timepoint	Timepoint of test (Early, Middle, Old)	Early Middle Old
Scan Date	Date of scan	MM/DD/YYYY
Weight (g)	Weight (grams)	Valid weight, missing is possible
Axial 2D RARE	Axial Geometry scan	Value corresponds to folder location of scan in subject MRI data, blanks are possible
T2W 3D RARE	Structural T2-weighted 3D Imaging of the whole brain scan	Value corresponds to folder location of scan in subject MRI data, blanks are possible
EPI Reverse	Echo-Planar Imaging in the reverse phase encoding direction scan #1	Value corresponds to folder location of scan in subject MRI data, blanks are possible
EPI Reverse Repeat	Echo-Planar Imaging in the reverse phase encoding direction scan #2	Value corresponds to folder location of scan in subject MRI data, blanks are possible

EPI Forward	Echo-Planar Imaging in the forward phase encoding direction scan #1	Value corresponds to folder location of scan in subject MRI data, blanks are possible
EPI Forward Repeat	Echo-Planar Imaging in the forward phase encoding direction scan #2	Value corresponds to folder location of scan in subject MRI data, blanks are possible
DTI EPI 30dir	Diffusion Tensor Imaging scan	Value corresponds to folder location of scan in subject MRI data, blanks are possible
Time under iso before fMRI	Total time animal is under isoflurane before the first fMRI scan is started	Valid time (HH:MM:SS), missing is possible
Time under dex before fMRI	Total time after initial dexmedetomidine injection before the first fMRI scan was started	Valid time (HH:MM:SS), missing is possible
Total Scan Duration	Total duration of scan	Valid time (HH:MM:SS), missing is possible
Notes	Notes	Character String

RAW DATA AVAILABLE PER RAT AND TIMEPOINT

DICOM, BIDS and NIFTI MRI brain image data, MELODIC principal component analysis, and physiological data recorded during MRI