

Metadata for:

*Choice-based Severity Scale (CSS): Assessing the relative severity of procedures  
from a laboratory animal's perspective*

Lauren C. Cassidy, Stefan Treue, Alexander Gail, and Dana Pfefferle

**Table 1: Variables, their definitions, and the levels or range of the variables for the condition stimuli training data (data set 1).**

Variables	Definition	Levels/Range
monkeyID	Identity of the monkey being trained (data examined separately by monkey).	<i>monkeyD</i> : monkey D <i>monkeyH</i> : monkey H <i>monkeyE</i> : monkey E
testPhase	Experimental phase of the Choice-based Severity Assessment (factor).	1: choice between the upper cage and lab conditions (same reward type in task). 2: choice between the lower cage and lab conditions (same reward type in task). 3: lower cage condition vs. lab condition (different fluid type in task).
boutNum	Number of bouts that the monkey was tested (covariate).	Range: 1 to 10.
cond1	The first of two conditions simultaneously presented to the monkey to choose between (factor).	<i>upperCage</i> : monkey moves to the upper cage to conduct the basic experimental task. <i>lowerCage</i> : monkey moves to the lower cage to conduct the basic experimental task.
cond2	The second of two conditions simultaneously presented to the monkey to choose between (factor).	<i>lab</i> : monkey is transported to the lab to conduct the basic experimental task.
cond1_rewardType	Type of reward received for correct trials during the basic experimental task of condition 1 (factor).	<i>grapeJuice</i> : correct trials were rewarded with grape juice. <i>water</i> : correct trials were rewarded with water.
cond2_rewardType	Type of reward received for correct trials during the basic experimental task of condition 2 (factor).	<i>grapeJuice</i> : correct trials were rewarded with grape juice. <i>bananaJuice</i> : correct trials were rewarded with banana juice.
rewardDifference	Difference in the number of drops of reward distributed for correct	<i>largelyFavorsLab</i> : 9 drops distributed for correct trials of

Variables	Definition	Levels/Range
	trials in the basic experimental task of each condition (factor).	the basic experimental task in the lab condition and 1 drop for correct trials of the same task in the cage condition. <i>mildlyFavorsLab</i> : 7 vs. 3 drops. <i>equallyRewarded</i> : 5 vs. 5 drops. <i>mildlyFavorsCage</i> : 3 vs. 7 drops. <i>largelyFavorsCage</i> : 1 vs. 9 drops.
cageCond_count	Number of times the monkey chose the cage condition in the bout of choice sessions (to calculate response).	Range: 0 to 3.
labCond_count	Number of times the monkey chose the lab condition in the bout of choice sessions (to calculate response).	Range: 0 to 3.
total	Total number of choice sessions completed within the bout (to calculate response).	Range: 1 to 3.
boutProp	Proportion of the bout of choice sessions (see “total”) that the lab condition was chosen (response).	Range: 0 to 1.

**Table 2: Variables, their definitions, and the levels or range of the variables for the Choice-based Severity Scale test data (data set 2).**

Variables	Definition	Levels/Range
dateTested	Date that the monkey was tested (random effect).	From 2022-04-25 to 2022-05-06
monkeyID	Identity of the monkey being tested (data analyzed separately by monkey).	<i>monkeyD</i> : monkey D <i>monkeyH</i> : monkey H <i>monkeyE</i> : monkey E
sessionNum	Number of the session that the monkey was tested (covariate).	Range: 1 to 10.
trialNum	Number of the trial within a session (covariate).	Range: 1 to 391.
choicePosition	Position of selected option on the touchscreen (factor).	<i>left</i> : selected option positioned on the left of the touchscreen. <i>right</i> : selected option positioned on the right of the touchscreen.
optionChosen	Option selected by the monkey at the beginning of the trial (response).	<i>shortHold</i> : the monkey had to hold a sensor between 1 and 4 s to receive 0.2 to 0.3 ml water reward. <i>longHold</i> : the monkey had to hold a sensor between 10 and 40 s to receive 15.2 to 15.3 ml juice reward.

**Table 3: Variables, their definitions, and the levels or range of the variables for the condition stimuli training data in preparation for the Choice-based Severity Assessment (data set 3).**

<b>Variables</b>	<b>Definition</b>	<b>Levels/Range</b>
dateTested	Date that the monkey was trained (random effect).	From 2020-11-03 to 2021-09-30.
monkeyID	Identity of the monkey being trained (data analyzed separately by monkey).	<i>monkeyD</i> : monkey D <i>monkeyH</i> : monkey H <i>monkeyE</i> : monkey E
sessionNum	Number of the session that the trial type was trained (covariate).	Range: 1 to 27.
trialType	Type of stimuli presented to the monkey (factor).	<i>upperCage</i> : upper cage condition stimulus presented simultaneously with a timeout stimulus (for monkey D and H). <i>lowerCage</i> : lower cage condition stimulus presented simultaneously with a timeout stimulus (for monkey E). <i>lab</i> : lab condition stimulus presented simultaneously with a timeout stimulus (all monkeys).
correct	Number of correct trials completed by the monkey (response).	Range: 0 to 39.
total	Total number of trials completed by the monkey (response).	Range: 2 to 44.