

Correction

Correction: McMurray et al., Brain Stimulation Reward Supports More Consistent and Accurate Rodent Decision-Making than Food Reward (eNeuro March/April 2017, 4(2) e0015-17.2017 1-13 <http://dx.doi.org/10.1523/ENEURO.0015-17.2017>)

In the article “Brain Stimulation Reward Supports More Consistent and Accurate Rodent Decision-Making than Food Reward,” by Matthew S. McMurray, Sineadh M. Conway, and Jamie D. Roitman, which appeared on e0015-17.2017 of the April 18, 2017, issue, there was a mislabeled axis on Figure 3D, which led to an inaccuracy in the figure caption and statistical table (Table 1). The y-axis of this figure was mistakenly labeled “Preference for Larger Reward” but should have been labeled “Number of Trials Completed.” This error propagated to the figure caption and statistical table but does not affect any of the conclusions or interpretations in our article. Figure 3 and associated caption and statistical Table 1 have been corrected on the online PDF version and are displayed below.

DOI:<http://dx.doi.org/10.1523/ENEURO.0265-17.2017>

Table 1. Statistical tests and values

Graph	Type of test	Statistical values	Statistical values
a. Fig. 2A, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (% difference in compared BSR frequencies)	$p < 0.001$ (25–100% difference in BSR)* $F_{(3,45)} = 13.1, p < 0.001*$	p 's < 0.001 (25–100% difference in BSR)* $F_{(3,45)} = 13.1, p < 0.001*$
b. Fig. 2B, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (individual frequency comparisons)	$p < 0.05$ (all BSR comparisons)* $F_{(10,118)} = 6.995, p < 0.001*$	p 's < 0.05 (all BSR comparisons)* $F_{(10,118)} = 6.995, p < 0.001*$
c. Fig. 2C, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (raw difference in compared BSR frequencies)	all $p < 0.001$ (all BSR comparisons)* $F_{(6,37)} = 3.61, p = 0.011*$	all p 's < 0.001 (all BSR comparisons)* $F_{(5,37)} = 3.61, p = 0.011*$
d. Fig. 2D, number of trials completed	ANOVA (individual frequency comparisons)	$F_{(10,118)} = 2.446, p = 0.011*$	$F_{(10,118)} = 2.446, p = 0.011*$
e. Fig. 2E, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (proportionate time \times % difference in BSR frequency); ANOVA (proportionate time); ANOVA (% difference in BSR frequency)	$p \leq 0.01$ (all BSR comparisons)* $F_{(27,279)} = 1.346, p = 0.133$ $F_{(9,279)} = 5.838, p < 0.001*$ $F_{(3,279)} = 20.582, p < 0.001*$	p 's = 0.01 (all BSR comparisons)* $F_{(27,279)} = 1.346, p = 0.133$ $F_{(9,279)} = 5.838, p < 0.001*$ $F_{(3,279)} = 20.582, p < 0.001*$
f. Fig. 2F, number of trials completed	ANOVA (proportionate time \times % difference in BSR frequency); ANOVA (proportionate time); ANOVA (% difference in BSR frequency)	$F_{(27,279)} = 1.242, p = 0.205$ $F_{(9,279)} = 6.320, p < 0.001*$ $F_{(3,279)} = 1.457, p = 0.259$	$F_{(27,279)} = 1.242, p = 0.205$ $F_{(9,279)} = 6.320, p < 0.001*$ $F_{(3,279)} = 1.457, p = 0.259$
g. Fig. 3A, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (difference in pellet number)	$p < 0.001$ (all pellet comparisons)* $F_{(3,39)} = 8.63, p < 0.001*$	p 's < 0.001 (all pellet comparisons)* $F_{(3,39)} = 8.63, p < 0.001*$
h. Fig. 3B, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (individual pellet comparisons within each comparison range)	$p < 0.001$ (1v2, 2v3, 1v3, 2v4, 1v4, 2v5, 1v5)* $F_{(10,118)} = 7.00, p < 0.001*$ $F_{(10,109)} = 5.40, p < 0.001*$	p 's < 0.001 (1v2, 2v3, 1v3, 2v4, 1v4, 2v5, 1v5)* $F_{(10,118)} = 7.00, p < 0.001*$ $F_{(10,109)} = 5.40, p < 0.001*$
i. Fig. 3C, number of trials completed	ANOVA (individual pellet comparisons within each comparison range)		
j. Fig. 3D, number of trials completed	Pearson correlation	$R^2 = 0.998, p < 0.0001*$	$R^2 = 0.998, p < 0.0001*$
k. Fig. 3E, preference for larger reward	z tests (50% preference; one-tailed); ANOVA (proportionate time \times % difference in pellet number); ANOVA (proportionate time); ANOVA (% difference in pellet number)	$p \leq 0.05$ (0.0–0.1 proportionate time)* $F_{(27,399)} = 1.509, p = 0.056$ $F_{(9,399)} = 25.29, p < 0.001*$ $F_{(3,399)} = 1.91, p = 0.152$	$p \leq 0.05$ (0.0–0.1 proportionate time)* $F_{(27,399)} = 1.509, p = 0.056$ $F_{(9,399)} = 25.29, p < 0.001*$ $F_{(3,399)} = 1.91, p = 0.152$
l. Fig. 3F, number of trials completed	ANOVA (proportionate time \times difference in pellet number); ANOVA (proportionate time); ANOVA (% difference in pellet number)	$F_{(27,399)} = 0.878, p = 0.64$ $F_{(9,399)} = 112.136, p < 0.001*$ $F_{(3,399)} = 1.146, p = 0.349$	$F_{(27,399)} = 0.878, p = 0.64$ $F_{(9,399)} = 112.136, p < 0.001*$ $F_{(3,399)} = 1.146, p = 0.349$
m. Fig. 4A, preference for 1 sugar pellet	z test (50% preference; one-tailed); ANOVA (proportionate BSR frequency)	$p < 0.05$ (0%, 50% BSR)* $F_{(4,24)} = 0.413, p = 0.80$	p 's < 0.05 (0%, 50% BSR)* $F_{(4,24)} = 0.413, p = 0.80$
n. Fig. 4B, preference for 2 sugar pellets	z test (50% preference; one-tailed); ANOVA (proportionate BSR frequency)	$p < 0.001$ (0%, 25% BSR)* $F_{(4,24)} = 0.963, p = 0.449$	p 's < 0.001 (0%, 25% BSR)* $F_{(4,24)} = 0.963, p = 0.449$
o. Total pellets earned	ANOVA (sugar pellet reward size \times BSR reward size); ANOVA (sugar pellet reward size); ANOVA (BSR reward size)	$F_{(4,49)} = 1.486, p = 0.253$ $F_{(1,49)} = 66.31, p < 0.001*$ $F_{(4,49)} = 1.037, p = 0.418$	$F_{(4,49)} = 1.486, p = 0.253$ $F_{(1,49)} = 66.31, p < 0.001*$ $F_{(4,49)} = 1.037, p = 0.418$
p. Fig. 4C, preference for 1 sugar pellet	z test (50% preference; one-tailed); ANOVA (proportionate time \times proportionate BSR frequency); ANOVA (proportionate time); ANOVA (proportionate BSR frequency)	all $p < 0.05$ (0.3–1.0 proportionate time)* $F_{(36,249)} = 0.928, p = 0.59$ $F_{(9,249)} = 3.987, p = 0.001$ $F_{(4,249)} = 0.82, p = 0.531$	all p 's < 0.05 (0.3–1.0 proportionate time)* $F_{(36,249)} = 0.928, p = 0.59$ $F_{(9,249)} = 3.987, p = 0.001$ $F_{(4,249)} = 0.82, p = 0.531$
q. Fig. 4D, preference for 2 sugar pellets	z test (50% preference; one-tailed); ANOVA (proportionate time \times proportionate BSR frequency); ANOVA (proportionate time); ANOVA (proportionate BSR frequency)	all $p < 0.05$ (0.6–1.0 proportionate time)* $F_{(36,249)} = 1.886, p = 0.005*$ $F_{(9,249)} = 10.60, p < 0.001*$ $F_{(4,249)} = 1.295, p = 0.314$	all p 's < 0.05 (0.6–1.0 proportionate time)* $F_{(36,249)} = 1.886, p = 0.005*$ $F_{(9,249)} = 10.60, p < 0.001*$ $F_{(4,249)} = 1.295, p = 0.314$
r. Fig. 4E, number of trials completed (1-pellet sessions)	ANOVA (proportionate time \times proportionate BSR frequency); ANOVA (proportionate time); ANOVA (proportionate BSR frequency)	$F_{(36,249)} = 0.916, p = 0.608$ $F_{(9,249)} = 3.353, p = 0.004*$ $F_{(4,249)} = 1.538, p = 0.239$	$F_{(36,249)} = 0.916, p = 0.608$ $F_{(9,249)} = 3.353, p = 0.004*$ $F_{(4,249)} = 1.538, p = 0.239$
s. Fig. 4F, number of trials completed (2-pellet sessions)	ANOVA (proportionate time \times proportionate BSR frequency); ANOVA (proportionate time); ANOVA (proportionate BSR frequency)	$F_{(36,249)} = 1.360, p = 0.105$ $F_{(9,249)} = 4.673, p < 0.001*$ $F_{(4,249)} = 0.606, p = 0.664$	$F_{(36,249)} = 1.360, p = 0.105$ $F_{(9,249)} = 4.673, p < 0.001*$ $F_{(4,249)} = 0.606, p = 0.664$

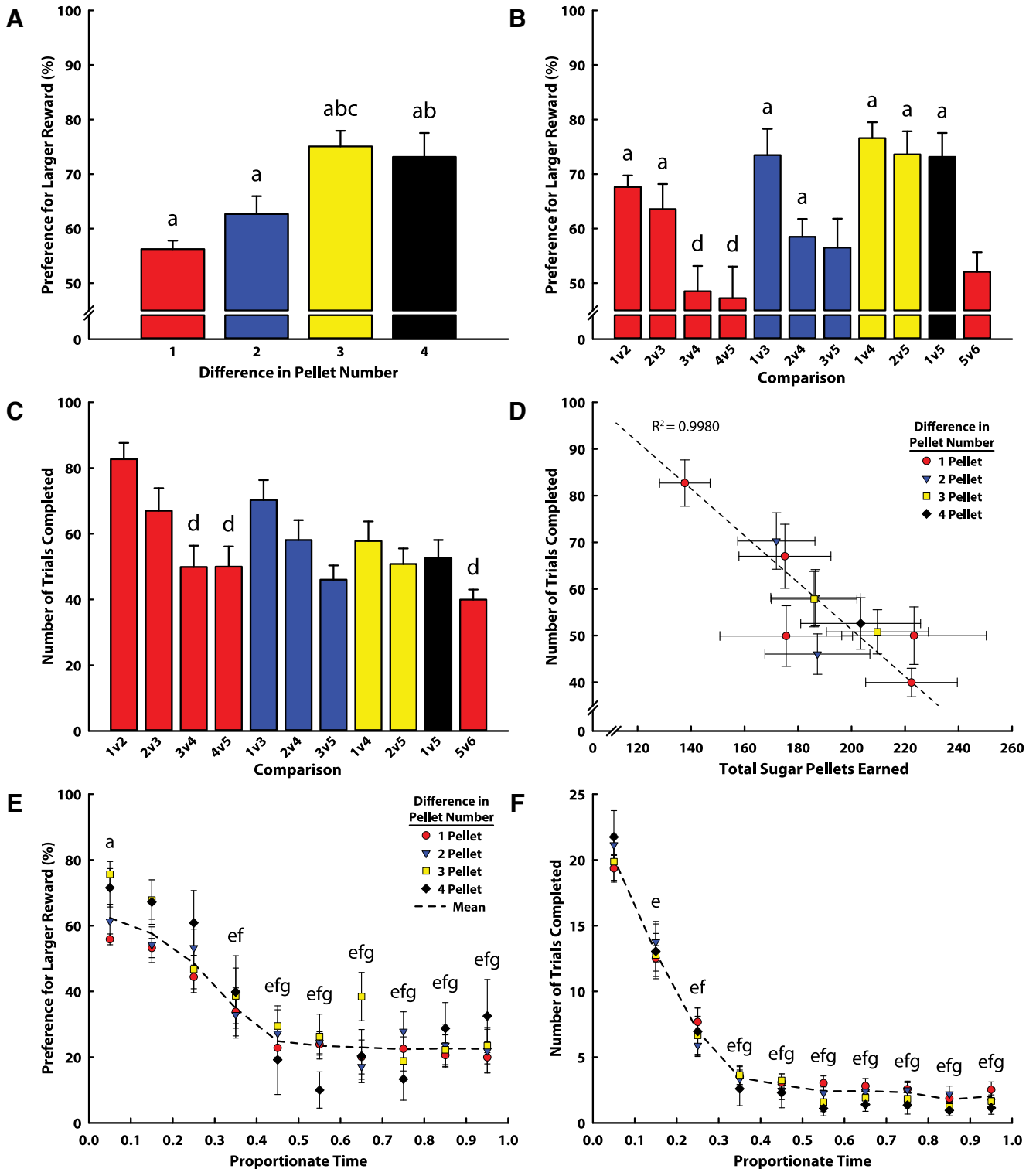


Figure 3. Results from the sugar pellet magnitude discrimination task. In all panels, a indicates significant difference from chance responding (50% preference, $p < 0.001$). **A**, Relationship between the difference in reward size (pellet number) and the animals' preference for the larger reward. b indicates significant difference from one pellet ($p < 0.01$), and c indicates significant difference from two pellets ($p < 0.05$). **B**, Preference for the larger reward at each possible reward comparison. Statistical comparisons were made only within comparison groups (e.g., within one-pellet difference). d indicates significant difference from one-versus-two comparison ($p < 0.05$). **C**, Number of trials completed in each comparison. Statistical comparisons were made only within comparison groups (e.g., within one pellet difference). d indicates significant difference from one-versus-two comparison ($p < 0.01$). **D**, Relationship between the average total number of sugar pellets earned in each comparison and the number of trials the animal completed. Dotted line denotes significant correlation between these values ($R^2 = 0.998$, $p < 0.0001$). **E**, Preference for the larger reward over the course

continued

of the average session (time normalized across sessions), at each difference in reward size. Dotted line illustrates the mean of all comparisons, and significance is denoted only for this mean (there was no significant effect of comparison). e, f, and g denote significant difference from bins 0–0.1, 0.1–0.2, and 0.2–0.3, respectively (all $p < 0.001$). **F**, Trial completion rate over the course of the average session (time normalized across sessions), at each level of proportionate difference in reward size. Dotted line illustrates the mean of all comparisons, and significance is denoted only for this mean (there was no significant effect of comparison). e, f, and g denote significant difference from bins 0–0.1, 0.1–0.2, and 0.2–0.3, respectively (all $p < 0.001$).