

Supplemental Table 1. An overview of F statistics, p values and effect sizes (partial eta squared) from the main outcomes of the 2-way ANOVA performed for each Latin square. Where applicable, the method of transformation employed is shown.

	Baclofen & Muscimol		Scopolamine		Mecamylamine	
	Treatment	Treatment × Region	Treatment	Treatment × Region	Treatment	Treatment × Region
Number of trials	$F_{(2, 26)}= 13.180$, ***$p < 0.001$, $\eta^2= 0.503$, $1-\beta= 0.994$; square root transformation	$F_{(2, 26)}= 9.449$, ***$p < 0.001$, $\eta^2= 0.421$, $1-\beta= 0.965$; square root transformation	$F_{(1.365, 16.385)}= 2.723$, $p = 0.109$, $\eta^2= 0.185$, $1-\beta = 0.391$; square root transformation	$F_{(1.365, 16.385)}= 0.267$, $p = 0.684$, $\eta^2= 0.022$, $1-\beta = 0.081$; square root transformation	-	-
% Accuracy	$F_{(2, 26)}= 23.932$, ***$p < 0.001$, $\eta^2= 0.648$, $1-\beta= 1.000$	$F_{(2, 26)}= 5.852$, **$p = 0.008$, $\eta^2= 0.310$, $1-\beta= 0.831$	$F_{(2, 24)}= 1.895$, $p = 0.172$, $\eta^2= 0.136$, $1-\beta= 0.354$	$F_{(2, 24)}= 0.317$, $p = 0.731$, $\eta^2= 0.026$, $1-\beta= 0.095$	$F_{(3, 33)}= 0.780$, $p = 0.514$, $\eta^2= 0.066$, $1-\beta= 0.199$	$F_{(3, 33)}= 1.309$, $p = 0.288$, $\eta^2= 0.106$, $1-\beta= 0.316$
% Omitted responses	$F_{(2, 26)}= 9.391$, **$p = 0.003$, $\eta^2= 0.419$, $1-\beta= 0.901$; arcsine transformation	$F_{(2, 26)}= 4.565$, *$p = 0.035$, $\eta^2= 0.260$, $1-\beta= 0.610$; arcsine transformation	$F_{(2, 24)}= 2.098$, $p = 0.145$, $\eta^2= 0.149$, $1-\beta= 0.388$	$F_{(2, 24)}= 2.446$, $p = 0.108$, $\eta^2= 0.169$, $1-\beta= 0.444$	$F_{(3, 33)}= 0.413$, $p = 0.745$, $\eta^2= 0.036$, $1-\beta= 0.123$; arcsine transformation	$F_{(3, 33)}= 0.840$, $p = 0.482$, $\eta^2= 0.071$, $1-\beta= 0.212$; arcsine transformation
% Premature responses	$F_{(2, 26)}= 4.418$, *$p = 0.022$, $\eta^2= 0.254$,	$F_{(2, 26)}= 0.616$, $p = 0.548$, $\eta^2= 0.045$,	$F_{(2, 24)}= 1.097$, $p = 0.350$, $\eta^2= 0.084$, $1-\beta= 0.220$	$F_{(2, 24)}= 1.100$, $p = 0.349$, $\eta^2= 0.084$,	$F_{(3, 33)}= 3.361$, *$p = 0.030$, $\eta^2= 0.234$,	$F_{(3, 33)}= 1.158$, $p = 0.341$, $\eta^2= 0.095$, $1-\beta= 0.282$;

	1-β= 0.709; arcsine trans- formation	1-β= 0.142; arcsine trans- formation		1-β= 0.220	1-β= 0.709; arcsine transfor- mation	arcsine transfor- mation
Perseverative responses	$F_{(2, 26)}= 10.913$, ***$p < 0.001$, $\eta^2= 0.456$, 1-β= 0.982	$F_{(2, 26)}= 5.273$, *$p = 0.012$, $\eta^2= 0.289$, 1-β= 0.789	$F_{(2, 24)}= 1.058$, $p = 0.363$, $\eta^2= 0.081$, 1-β= 0.213	$F_{(2, 24)}= 0.684$, $p = 0.514$, $\eta^2= 0.054$, 1-β= 0.152	$F_{(3, 33)}= 0.813$, $p = 0.496$, $\eta^2= 0.069$, 1-β= 0.206; arcsine transfor- mation	$F_{(3, 33)}= 1.518$, $p = 0.228$, $\eta^2= 0.121$, 1-β= 0.363; arcsine transfor- mation
Reward collection latency	$F_{(2, 26)}= 2.038$ $p = 0.151$, $\eta^2= 0.136$, 1-β= 0.381; logarithmic transfor- mation	$F_{(2, 26)}= 0.723$, $p = 0.495$, $\eta^2= 0.053$, 1-β= 0.159; logarithmic transformation	$F_{(2, 24)}= 0.836$, $p = 0.446$, $\eta^2= 0.065$, 1-β= 0.176; logarithmic transformation	$F_{(2, 24)}= 2.276$, $p = 0.124$, $\eta^2= 0.159$, 1-β= 0.417; logarithmic transformation	$F_{(3, 33)}= 1.996$, $p = 0.134$, $\eta^2= 0.154$, 1-β= 0.466; logarithmic transformation	$F_{(3, 33)}= 0.694$, $p = 0.562$, $\eta^2= 0.059$, 1-β= 0.181; logarithmic transformation
Correct response latency	$F_{(2, 26)}= 3.981$, *$p = 0.031$, $\eta^2= 0.234$, 1-β= 0.661; logarithmic transfor- mation	$F_{(2, 26)}= 2.886$, $p = 0.074$, $\eta^2= 0.182$, 1-β= 0.515; logarithmic transformation	$F_{(2, 24)}= 7.755$, **$p = 0.003$, $\eta^2= 0.393$, 1-β= 0.921; logarithmic transformation	$F_{(2, 24)}= 0.987$, $p = 0.387$, $\eta^2= 0.076$, 1-β= 0.201; logarithmic transformation	$F_{(3, 33)}= 0.502$, $p = 0.683$, $\eta^2= 0.044$, 1-β= 0.141; logarithmic transformation	$F_{(3, 33)}= 0.399$, $p = 0.755$, $\eta^2= 0.035$, 1-β= 0.120; logarithmic trans- formation
Incorrect response latency	$F_{(2, 26)}= 2.038$, $p = 0.151$, $\eta^2= 0.136$, 1-β= 0.381; logarithmic transfor- mation	$F_{(2, 26)}= 4.321$, *$p = 0.024$, $\eta^2= 0.249$, 1-β= 0.699; logarithmic transformation	$F_{(2, 24)}= 1.885$, $p = 0.174$, $\eta^2= 0.136$, 1-β= 0.353	$F_{(2, 24)}= 1.855$, $p = 0.178$, $\eta^2= 0.134$, 1-β= 0.348	$F_{(3, 33)}= 0.535$, $p = 0.662$, $\eta^2= 0.046$, 1-β= 0.147; logarithmic trans- formation	$F_{(3, 33)}= 0.298$, $p = 0.827$, $\eta^2= 0.026$, 1-β= 0.101; logarithmic trans- formation