Running speed

	control (n = 4 animals)	DG lesion (n = 10 animals)
arm end 1 (all periods)	19.0 ± 1.3 cm/s	20.3 ± 1.7 cm/s
arm end 1 (immobility)	6.3 ± 0.2 cm/s	5.8 ± 0.2 cm/s
reward	9.4 ± 0.3 cm/s	10.3 ± 2.0 cm/s
arm end 2 (all periods)	21.9 ± 2.3 cm/s	20.7 ± 2.1 cm/s
arm end 2 (immobility)	5.2 ± 0.2 cm/s	5.3 ± 0.2 cm/s
stem	47.8 ± 1.5 cm/s	44.6 ± 2.5 cm/s
arm	48.0 ± 2.9 cm/s	46.8 ± 2.7 cm/s

Total time in one trial

	control (n = 4 animals)	DG lesion (n = 10 animals)
arm end 1 (all periods)	6.8 ± 2.0 s	8.3 ± 0.9 s
arm end 1 (immobility)	0.8 ± 0.5 s	0.9 ± 0.5 s
reward	24.7 ± 2.3 s	24.5 ± 2.8 s
arm end 2 (all periods)	16.4 ± 1.3 s	18.0 ± 1.8 s
arm end 2 (immobility)	3.6 ± 0.7 s	4.2 ± 1.5 s
stem	17.3 ± 1.1 s	17.4 ± 0.5 s
arm	18.2 ± 2.3 s	20.1 ± 2.5 s

Supplementary Table 1 Neither the velocity profile nor the duration of any behavioral period differed between control and DG-lesioned animals. (Top) Mean running speed in individual behavioral periods did not differ between control and DG-lesioned animals (arm end 1 (all running speeds), $t(12) = 0.74$, $P = 0.47$; arm end 1 (immobility only), $t(12) = 1.28$, $P = 0.22$; reward, $t(12) = 1.21$, $P = 0.24$; arm end 2 (all running speeds), $t(12) = 0.10$, $P = 0.92$; arm end 2 (immobility only), $t(12) = 0.50$, $P = 0.63$; stem, $t(12) = 2.09$, $P = 0.059$; arm, $t(12) = 1.30$, $P = 0.22$). (Bottom) Total time in any behavioral period did not differ between control and DG-lesioned animals (arm end 1 (all running speeds), $t(12) = 0.85$, $P = 0.41$; arm end 1 (immobility only), $t(12) = 0.18$, $P = 0.42$; reward, $t(12) = 0.24$, $P = 0.81$; arm end 2 (all running speeds), $t(12) = 0.55$, $P = 0.60$; arm end 2 (immobility only), $t(12) = 0.25$, $P = 0.80$; stem, $t(12) = 0.09$, $P = 0.93$; arm, $t(12) = 0.47$, $P = 0.65$).