

Morris Water Maze

Mouse Strain: C57 Black 6
 Sex: Male
 Age: 3 months and 7 months
 Trial Length: 90s or time to platform
 Color Coding: Group 1: 3 months Group 2: 3 months Group 3: 7 months

Hidden Platform Training: Distance Moved (cm)

	Group 1								Group 2								Group 3							
Day 1 Trial 1	1247.12	1158.41	1168.71	1363.64	1362.89	1662.34	1723.60	1495.01	987.52	1643.47	1462.87	621.98	1430.05	1674.02	1365.02	1311.42	1499.68	1217.45	1652.11					
Day 1 Trial 2	891.56	1359.23	1127.84	1517.41	1190.59	1753.18	1876.94	1235.30	1799.90	1707.27	486.14	1825.22	2040.63	232.43	1662.02	1382.20	357.13	1314.02	1712.22					
Day 1 Trial 3	1320.42	531.60	1187.65	1716.94	1263.64	2033.06	1793.20	1579.68	333.76	1799.49	674.74	2016.91	1956.68	246.17	381.53	1613.88	1094.85	1086.13	1377.32					
Day 1 Trial 4	988.35	441.48	477.07	1204.53	739.80	196.84	1692.78	1588.34	1727.37	1680.36	602.87	913.15	468.70	1014.62	1828.46	1079.20	1991.38	1125.04	1835.54					
Total Distance Moved (cm)	4447.44	3490.72	3961.27	5802.52	4556.92	5645.42	7086.52	5898.33	4848.55	6830.59	3226.63	5377.27	5896.06	3167.24	5237.03	5386.70	4943.04	4742.64	6577.19					
Day 2 Trial 1	225.33	1090.84	1196.33	750.95	183.22	1982.07	1851.57	1223.82	1899.68	194.17	2317.32	222.46	364.50	285.26	826.55	486.61	1598.69	953.99	1578.96					
Day 2 Trial 2	1333.86	1338.83	112.68	187.08	1374.05	647.79	1499.47	1088.87	2019.48	562.89	176.61	276.45	513.18	192.08	534.07	481.10	1372.69	974.58	1660.82					
Day 2 Trial 3	1618.43	1271.44	105.42	307.86	213.67	325.54	1148.73	1012.61	139.84	1004.89	276.79	117.52	1084.52	1761.90	240.61	1806.45	202.80	1431.90	1653.95					
Day 2 Trial 4	488.52	375.02	245.96	141.46	128.93	1926.58	1168.95	414.71	1518.48	379.71	261.12	407.25	380.12	761.92	1662.15	1670.01	261.31	114.71	122.03					
Total Distance Moved (cm)	3666.13	4076.13	1660.39	1387.35	1899.87	4881.99	5668.72	3740.01	5577.48	2141.66	3031.84	1023.68	2342.32	3001.16	3263.38	4444.17	3435.49	3475.18	5015.76					
Day 3 Trial 1	622.01	232.20	1233.83	339.71	2027.77	1884.67	343.65	391.05	158.19	2011.35	376.48	373.58	211.02	449.88	1416.07	230.39	931.90	978.51	528.64					
Day 3 Trial 2	1265.18	238.20	369.15	794.56	2027.54	2043.81	476.66	1090.04	228.13	175.62	335.87	406.98	222.62	226.95	206.70	677.60	219.16	281.83	146.64					
Day 3 Trial 3	1249.55	1576.44	754.88	1453.82	1770.79	1780.91	455.59	1162.52	277.40	2008.85	598.54	762.52	346.74	259.11	442.07	124.87	132.81	120.48	1800.08					
Day 3 Trial 4	391.36	512.36	343.01	255.46	807.12	1557.86	139.08	1767.29	252.07	206.51	234.65	441.36	226.56	191.35	310.48	132.37	292.77	210.17	141.99					
Total Distance Moved (cm)	3528.11	2559.19	2700.86	2843.55	6633.22	7267.25	1414.98	4410.90	915.79	4402.32	1545.54	1984.44	1006.94	1127.29	2375.32	1165.24	1576.64	1590.99	2617.35					
Day 4 Trial 1	203.18	268.14	506.06	107.93	1170.86	358.05	789.88	1533.93	145.31	125.27	2167.08	107.15	1317.01	116.78	1807.23	211.67	2237.38	933.59	158.83					
Day 4 Trial 2	1045.97	1010.60	265.52	312.37	592.75	140.31	1032.45	490.12	455.36	498.50	1019.94	160.12	386.73	230.81	357.97	152.28	238.57	348.60	390.72					
Day 4 Trial 3	215.75	392.57	527.16	469.74	658.72	288.04	229.44	1372.83	139.85	359.24	142.00	128.22	954.36	159.14	317.30	305.95	272.02	1718.40	215.25					
Day 4 Trial 4	415.24	465.20	112.25	1216.23	274.90	326.00	822.18	402.61	1724.39	1966.93	356.34	863.58	414.06	1235.35	144.22	1763.96	186.48	1187.29	273.24					
Total Distance Moved (cm)	1880.14	2136.50	1410.99	2106.27	2697.23	1112.39	2873.96	3799.49	2464.91	2949.94	3685.35	1259.07	3072.16	1742.07	2626.72	2433.85	2934.45	4187.88	1038.04					

Hidden Platform Training: Escape Latency (s)

	Group 1								Group 2								Group 3							
Day 1 Trial 1	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	52.89	90.00	90.00	37.17	90.00	90.00	90.00	90.00	90.00	90.00	90.00					
Day 1 Trial 2	50.65	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	90.00	19.35	90.00	90.00	8.94	90.00	90.00	17.58	90.00	90.00					
Day 1 Trial 3	90.00	39.11	90.00	90.00	68.07	90.00	90.00	90.00	15.02	90.00	29.63	90.00	90.00	12.11	18.29	90.00	53.45	90.00	71.37					
Day 1 Trial 4	86.92	25.26	31.97	69.97	40.31	7.51	90.00	90.00	90.00	90.00	24.52	39.31	18.65	43.98	90.00	63.30	90.00	90.00	90.00					
Total Escape Latency (s)	317.57	244.36	301.97	339.97	288.38	277.51	360.00	360.00	247.90	360.00	163.51	256.48	288.65	155.03	288.29	333.30	251.04	360.00	341.37					
Day 2 Trial 1	11.81	90.00	90.00	37.37	8.88	90.00	90.00	69.70	90.00	10.78	90.00	7.37	14.98	14.01	48.75	32.13	90.00	90.00	90.00					
Day 2 Trial 2	64.50	90.00	4.70	7.07	67.70	27.99	90.00	50.02	90.00	26.13	7.51	10.11	19.49	8.91	32.50	26.16	57.56	71.97	90.00					
Day 2 Trial 3	90.00	76.81	3.34	14.81	9.94	15.88	90.00	57.22	5.17	46.68	10.44	3.40	43.84	90.00	18.05	90.00	8.78	90.00	90.00					
Day 2 Trial 4	36.44	34.63	12.28	9.21	5.17	90.00	80.11	23.79	77.04	17.25	10.64	16.05	14.38	41.27	90.00	90.00	12.61	5.31	6.11					
Total Escape Latency (s)	202.75	291.44	110.32	68.47	91.69	223.88	350.11	200.73	262.22	100.83	118.60	36.94	92.69	154.20	189.30	238.29	168.95	257.28	276.11					
Day 3 Trial 1	42.48	17.48	90.00	18.25	90.00	90.00	30.63	19.85	5.64	90.00	16.05	17.02	7.14	23.69	77.91	15.78	43.04	90.00	27.56					
Day 3 Trial 2	58.96	11.51	19.42	34.53	90.00	90.00	19.52	52.92	7.67	7.74	16.78	16.18	8.14	9.64	16.35	33.93	9.28	14.08	4.04					
Day 3 Trial 3	72.21	90.00	41.78	70.50	90.00	90.00	29.73	53.19	11.85	90.00	30.26	41.71	14.11	14.05	23.79	8.51	4.87	4.30	90.00					
Day 3 Trial 4	20.35	34.27	17.65	12.05	39.27	84.58	6.14	90.00	15.45	8.01	10.74	24.76	8.78	12.61	24.89	5.27	15.65	9.44	6.31					
Total Escape Latency (s)	193.99	153.26	168.85	135.34	309.27	354.58	86.02	215.96	40.61	195.75	73.84	99.67	38.17	59.99	142.94	63.50	72.84	117.83	127.90					
Day 4 Trial 1	14.25	24.52	23.79	3.90	44.08	19.05	31.97	90.00	7.04	8.44	90.00	2.90	52.72	4.74	90.00	11.85	90.00	57.02	6.37					
Day 4 Trial 2	53.09	44.54	12.81	17.42	26.13	5.37	44.34	32.47	22.59	19.29	47.01	6.84	14.58	9.98	27.13	7.34	9.61	15.88	17.45					
Day 4 Trial 3	9.54	27.23	27.73	22.06	24.56	14.61	8.54	90.00	7.01	18.35	6.37	3.60	36.30	4.50	21.05	15.92	14.25	90.00	9.04					
Day 4 Trial 4	26.56	32.27	4.10	64.90	12.75	17.32	38.94	33.30	90.00	90.00	16.85	46.51	16.42	58.59	11.24	90.00	8.21	61.39	10.78					
Total Escape Latency (s)	103.44	128.56	68.44	108.27	107.51	56.36	123.79	245.77	126.64	136.08	160.24	59.86	120.02	77.81	149.43	125.10	122.07	224.30	43.64					

Hidden Platform Training: Thigmotaxis Duration (s)

	Group 1								Group 2								Group 3							
Day 1 Trial 1	60.26	82.78	56.92	68.23	49.82	76.94	75.54	67.80	48.25	71.10	73.41	34.13	80.41	72.57	81.28	86.62	87.85	73.81	70.24					
Day 1 Trial 2	39.21	79.85	76.31	83.95	45.21	81.75	84.88	84.48	55.02	78.78	5.24	64.43	61.80	1.87	84.32	84.02	6.64	67.17	75.94					
Day 1 Trial 3	78.41	34.13	64.53	67.10	43.54	65.50	55.79	59.59	11.28	77.41	16.85	69.17	56.92	8.81	17.22	82.05	41.81	72.97	49.65					
Day 1 Trial 4	89.06	16.05	15.52	40.17	10.21	1.50	56.92	73.57	67.67	56.42	7.97	21.66	3.20	18.95	71.37	54.25	64.76	56.72	77.48					
Total Thigmotaxis Duration (s)	266.93	212.81	213.28	259.46	148.78	225.69	273.14	285.45	182.22	283.72	103.47	189.39	202.34	102.20	254.19	306.94	201.07	270.67	273.31					
Day 2 Trial 1	11.51	55.22	36.97	16.18	2.57	55.62	65.27	49.15	74.57	5.04	58.43	2.50	6.51	1.10	25.36	14.71	51.69	59.09	51.65					
Day 2 Trial 2	40.01	64.50	1.00	2.14	21.19	6.64	47.51	29.30	80.01	12.78	1.74	1.27	2.54	2.37	11.54	16.58	26.89	33.40	52.59					
Day 2 Trial 3	56.62	38.94	1.47	1.87	3.07	3.97	50.18	40.71	1.27	8.41	1.23	0.77	12.38	20.89	8.81	53.22	3.70	40.01	40.11					
Day 2 Trial 4	19.32	12.91	5.91	1.67	1.43	50.25	48.42	12.41	31.16	5.01	1.00	3.57	3.70	12.98	46.78	58.66	3.54	1.13	1.27					
Total Thigmotaxis Duration (s)	127.46	171.57	45.35	21.86	28.26	116.48	211.38	131.56	187.02	31.23	62.40	8.11	25.13	37.34 </										

Hidden Platform Training: Velocity (cm/s)

	Group 1							Group 2							Group 3						
Day 1 Trial 1	13.85	12.88	12.98	16.60	15.15	18.71	20.60	16.61	17.68	18.26	20.65	17.26	20.53	18.63	16.32	14.57	16.66	13.52	18.35		
Day 1 Trial 2	16.66	15.12	12.53	16.89	13.23	19.61	20.85	13.72	19.99	18.96	21.78	21.61	22.67	19.51	18.46	15.35	17.38	15.28	19.02		
Day 1 Trial 3	14.67	12.63	13.19	19.13	17.79	22.58	19.92	17.55	18.56	19.99	20.70	23.70	21.78	16.32	17.95	17.93	19.40	12.06	18.53		
Day 1 Trial 4	11.00	15.64	13.66	16.51	17.09	18.79	18.80	17.64	19.19	18.67	21.93	21.81	21.88	21.61	21.46	16.29	22.12	12.50	20.39		
Mean Velocity (cm/s)	14.04	14.07	13.09	17.28	15.81	19.92	20.04	16.38	18.85	18.97	21.26	21.10	21.71	19.02	18.55	16.03	18.89	13.34	19.07		

	Group 1							Group 2							Group 3						
Day 2 Trial 1	15.24	12.12	13.29	18.62	15.47	22.02	20.57	16.84	21.10	14.12	25.74	21.51	20.30	16.80	16.36	13.86	17.76	10.60	17.54		
Day 2 Trial 2	19.77	14.87	14.68	18.63	19.44	20.92	16.66	20.73	22.43	19.35	16.86	21.14	22.85	18.69	15.06	18.18	22.68	13.00	18.45		
Day 2 Trial 3	18.04	15.94	16.72	17.31	16.55	17.27	12.76	16.82	17.18	20.24	20.64	18.44	23.17	19.57	11.45	20.07	17.27	15.91	19.50		
Day 2 Trial 4	12.40	9.97	16.13	11.62	15.84	21.40	14.07	15.50	18.98	18.78	19.18	21.41	21.91	17.22	18.46	18.55	16.77	13.86	13.45		
Mean Velocity (cm/s)	16.36	13.22	15.20	16.54	16.82	20.40	16.01	17.47	19.92	18.12	20.60	20.62	22.06	18.07	15.33	17.67	18.62	13.34	17.23		

	Group 1							Group 2							Group 3						
Day 3 Trial 1	14.84	12.06	13.71	16.01	22.52	20.94	10.23	17.13	18.38	22.34	19.79	18.69	20.87	16.87	17.51	12.29	20.25	10.87	17.32		
Day 3 Trial 2	20.43	16.45	16.49	21.19	22.52	22.70	21.20	19.50	21.43	16.40	17.00	21.25	20.04	17.99	10.70	18.36	17.90	16.53	20.93		
Day 3 Trial 3	16.62	17.51	16.87	19.79	19.67	19.78	13.93	20.70	18.72	22.41	18.01	19.22	21.21	15.23	16.52	10.88	16.94	16.56	20.00		
Day 3 Trial 4	16.78	13.76	16.63	17.01	19.11	19.52	15.85	19.63	13.69	18.81	17.11	15.92	19.29	12.28	11.14	16.06	15.72	16.93	15.31		
Mean Velocity (cm/s)	17.17	14.95	15.92	18.50	20.96	20.73	15.30	19.24	18.05	19.99	17.98	18.77	20.35	15.59	13.97	14.40	17.70	15.22	18.39		

	Group 1							Group 2							Group 3						
Day 4 Trial 1	12.66	10.98	19.70	15.70	24.89	16.26	22.61	17.04	14.52	10.98	24.07	18.25	23.65	15.15	20.08	14.29	24.85	15.56	17.00		
Day 4 Trial 2	18.66	21.27	16.82	15.32	20.37	16.82	21.82	13.83	17.82	22.40	20.41	16.32	22.03	17.83	11.89	14.77	18.97	18.49	19.13		
Day 4 Trial 3	17.24	13.00	17.17	18.77	23.93	16.38	19.93	15.25	14.02	18.47	16.24	19.51	24.30	21.29	13.21	16.20	15.92	19.22	17.92		
Day 4 Trial 4	14.06	13.20	15.87	17.92	17.49	16.07	19.62	11.10	19.15	21.85	17.98	17.45	21.36	20.07	10.15	19.59	16.68	18.45	19.88		
Mean Velocity (cm/s)	15.66	14.61	17.39	16.93	21.67	16.38	21.00	14.31	16.38	18.42	19.67	17.88	22.84	18.58	13.83	16.21	19.11	17.93	18.48		

Probe (0:00:00-0:00:15): Quadrant Duration (s)

	Group 1							Group 2							Group 3						
Q2 (TQ)	0.00	3.89	11.70	8.58	6.61	6.44	4.20	0.00	0.00	9.56	8.76	6.26	6.52	11.36	6.57	0.85	12.21	1.82	7.11		
Q1	8.71	0.00	0.73	2.30	3.04	5.46	2.90	0.00	0.00	1.07	1.87	1.17	3.97	1.80	3.84	8.54	1.29	9.21	2.84		
Q3	0.00	2.80	0.00	2.45	0.00	0.00	1.19	0.00	8.06	0.77	0.57	0.00	0.00	0.00	1.22	0.00	0.00	0.00	1.92		
Q4	6.29	8.31	2.57	1.67	5.36	3.10	6.71	15.00	6.94	3.60	3.80	7.57	4.50	1.84	3.37	5.61	1.50	3.97	3.14		
Mean Non-TQ Duration (s)	5.00	3.70	1.10	2.14	2.80	2.85	3.60	5.00	5.00	1.81	2.08	2.91	2.83	1.21	2.81	4.72	0.93	4.39	2.63		

Probe (0:00:15-0:00:30): Quadrant Duration (s)

	Group 1							Group 2							Group 3						
Q2 (TQ)	13.35	6.59	11.13	7.48	4.01	7.14	2.80	1.81	4.41	7.12	8.19	13.43	10.06	7.42	6.14	11.63	5.44	8.36	5.87		
Q1	0.00	3.90	3.87	2.97	2.60	4.92	0.00	0.00	2.74	3.57	1.94	0.00	0.00	4.00	8.14	0.93	9.56	2.74	0.87		
Q3	0.57	1.17	0.00	2.75	5.44	0.63	7.39	11.98	4.25	2.60	4.87	1.57	1.94	0.00	0.72	2.44	0.00	0.87	3.65		
Q4	1.08	3.34	0.00	1.80	2.95	2.30	4.80	1.22	3.60	1.71	0.00	0.00	3.01	3.57	0.00	0.00	0.00	3.04	4.61		
Mean Non-TQ Duration (s)	0.55	2.80	1.29	2.51	3.66	2.62	4.07	4.40	3.53	2.63	2.27	0.52	1.65	2.53	2.95	1.12	3.19	2.21	3.04		

Probe (0:00:30-0:00:45): Quadrant Duration (s)

	Group 1							Group 2							Group 3						
Q2 (TQ)	10.93	12.68	8.36	10.01	3.37	6.54	5.46	3.80	5.12	6.76	3.36	4.49	4.84	7.47	9.83	5.43	0.00	0.29	7.01		
Q1	0.00	0.33	6.64	3.50	4.17	6.37	0.00	0.00	5.01	2.57	3.90	2.47	5.01	3.47	0.00	3.54	11.13	5.67	2.79		
Q3	4.07	1.60	0.00	1.49	3.06	0.63	7.40	7.20	0.00	1.97	4.27	4.20	2.30	0.00	4.20	1.97	0.00	0.33	1.17		
Q4	0.00	0.39	0.00	0.00	4.40	1.46	2.14	4.00	4.87	3.70	3.47	3.84	2.85	4.06	0.97	4.07	3.87	8.71	4.03		
Mean Non-TQ Duration (s)	1.36	0.77	2.21	1.66	3.88	2.82	3.18	3.73	3.29	2.75	3.88	3.50	3.39	2.51	1.72	3.19	5.00	4.90	2.66		

Probe (0:00:45-0:01:00): Quadrant Duration (s)

	Group 1							Group 2							Group 3						
Q2 (TQ)	8.09	6.87	3.92	6.84	5.34	3.60	7.29	7.84	6.93	7.53	4.65	1.45	4.50	7.24	5.15	5.79	9.31	5.12	8.81		
Q1	6.91	7.01	0.03	0.61	3.90	4.91	2.14	5.98	8.07	2.94	4.18	1.13	4.67	3.00	5.01	8.04	5.89	5.07	6.19		
Q3	0.00	0.00	5.34	3.11	2.59	2.54	3.34	1.18	0.00	1.53	3.70	7.41	3.78	0.00	4.84	1.17	0.00	1.94	0.00		
Q4	0.00	1.11	5.71	4.44	3.17	3.95	2.24	0.00	0.00	3.00	2.47	5.01	2.05	4.76	0.00	0.00	0.00	2.87	0.00		
Mean Non-TQ Duration (s)	2.30	2.71	3.69	2.72	3.22	3.80	2.57	2.39	2.69	2.49	3.45	4.52	3.50	2.59	3.28	3.07	1.90	3.29	2.06		

Probe (0:01:00-0:01:15): Quadrant Duration (s)

	Group 1							Group 2							Group 3						
Q2 (TQ)	12.50	1.84	10.64	10.28	4.34	3.60	14.20	0.00	2.33	5.29	3.47	5.60	3.56	5.31	8.44	4.20	1.17	6.87	1.47		
Q1	0.00	8.40	3.83	4.46	5.97	8.13	0.00	0.39	2.46	7.67	0.35	5.63	5.04	3.57	1.79	0.00	1.53	0.00	3.69		
Q3	2.50	4.76	0.53	0.26	1.80	2.64	0.80	10.24	4.90	0.00	5.27	3.30	1.39	2.29	0.00	5.81	3.40	7.64	4.54		
Q4	0.00	0.00	0.00	0.00	2.89	0.63	0.00	4.37	5.31	2.04	5.91	0.47	5.01	3.83	4.77	5.00	8.90	0.49	5.31		
Mean Non-TQ Duration (s)	0.83	4.39	1.45	1.57	3.55	3.80	0.27	5.00	4.22	3.24	3.84	3.13	3.81	3.23	2.19	3.60	4.61	2.71	4.51		

Probe (0:01:15-0:01:30): Quadrant Duration (s)

	Group 1							Group 2							Group 3						
Q2 (TQ)	0.89	4.34	11.86	3.65	3.90	5.79	11.66	3.25	5.42	2.11	4.47	3.97	15.00	0.00	0.94	4.84	7.21	0.00	4.84		
Q1	0.17	8.52	3.14	8.91	4.44	3.74	3.34	0.53	3.24	6.05	5.38	2.75	0.00	6.25	5.78	5.27	5.45	8.18	2.51		
Q3	4.44	2.14	0.00	2.44	4.37	2.40	0.00	5.01	2.37	6.84	5.15	5.54	0.00	3.01	0.00	3.91	0.80	0.00	4.80		
Q4	9.51	0.00	0.00	0.00	2.29	3.07	0.00	6.21	3.97	0.00	0.00	2.74	0.00	5.74	8.27	0.98	1.54	6.82	2.85		
Mean Non-TQ Duration (s)	4.70	3.55	1.05	3.78	3.70	3.07	1.11	3.92	3.19	4.30	3.51	3.68	0.00	5.00	4.69	3.39	2.60	5.00	3.39		

Probe: Number of Platform Crossings

	Group 1							Group 2							Group 3						
0:00:00-0:00:15	0	1	2	2	0	1	1	0	0	1	2	1	2	3	1	0	4	1	2		
0:00:15-0:00:30	3	1	1	1	1	2	0	0	0	2	2	2	4	1	2	2	1	2	2		
0:00:30-0:00:45	1	3	1	1	1	1	0	0	0	3	0	1	0	1	2	0	0	0	1		
0:00:45-0:01:00	0	1	0	0	1	1	1	2	1	1	0	1	1	0	0	1	2	1	1		
0:01:00-0:01:15	1	0	0	2	2	0	1	0	0	1	1	1	0	0	1	0	0	1	0		
0:01:15-0:01:30	0	0	1	0	1	1	3	0	1	0											