



Assessment of same-sex and opposite-sex partner preferences in guinea pigs (*Cavia porcellus*)

Ana María Romero Chacón

**Universidad del Rosario
Facultad de Ciencias Naturales
Bogotá, Colombia
2024**

Assessment of same-sex and opposite-sex partner preferences in guinea pigs (*Cavia porcellus*)

Ana María Romero Chacón

**Tesis presentada como requisito para obtener el título de:
Bióloga**

Director

Adriana A. Maldonado-Chaparro

Facultad de Ciencias Naturales

Biología

Universidad del Rosario

Bogotá, Colombia

2024

SUPPLEMENTARY INFORMATION



Figure S1. Individual pen for a small group of guinea pigs. The pen was designed following space requirements and measured 1.2 x 1.5 m. Each pen contained 4 individuals, food pellets, hay, water, a house, a stick for chewing and a tube for hiding.



Figure S2. Individual pen for a small group of guinea pigs with a smaller mesh pen for a male individual.

Table S1. Post Hoc analysis (TUKEY) test for partner preference in opposite-sex trials

Variable	Combination	Mean difference	p-adj
<i>Chamber</i>	Familiar-Novel	-1.073	0.092
	Courtship-Agonistic	7.942	0.000
<i>Behavioral category</i>	Grooming-Agonistic	2.078	0.410
	InvAno-Agonistic	7.923	0.000
	InvFacB-Agonistic	6.231	0.000
	Mounting-Agonistic	1.283	0.850
	Grooming-Courtship	-5.863	0.000
	InvAno-Courtship	-0.018	1.000

	InvFacB-Courtship	-1.710	0.626
	Mounting-Courtship	-6.658	0.000
	InvAno-Grooming	5.845	0.000
	InvFacB-Grooming	4.152	0.003
	Mounting-Grooming	-0.795	0.978
	InvFacB-InvAno	-1.692	0.637
	Mounting-InvAno	-6.640	0.000
	Mounting-InvFacB	-4.948	0.000
	NOVEL:Agonistic- FAMILIAR:Agonistic	-6.314e-01	0.999
	FAMILIAR:Courtship- FAMILIAR:Agonistic	7.790	0.000
	NOVEL:Courtship- FAMILIAR:Agonistic	7.461	0.000
	FAMILIAR:Grooming- FAMILIAR:Agonistic	3.481	0.521
	NOVEL:Grooming- FAMILIAR:Agonistic	4.414e-02	1.000
	FAMILIAR:InvAno- FAMILIAR:Agonistic	8.600	0.000
<i>Chamber:Behavioral Category</i>	NOVEL:InvAno- FAMILIAR:Agonistic	6.616	0.002
	FAMILIAR:InvFacB- FAMILIAR:Agonistic	7.545	0.000
	NOVEL:InvFacB- FAMILIAR:Agonistic	4.285	0.208
	FAMILIAR:Mounting- FAMILIAR:Agonistic	-6.314e-01	0.999
	NOVEL:Mounting- FAMILIAR:Agonistic	2.566	0.885
	FAMILIAR:Courtship- NOVEL:Agonistic	8.422	0.000

NOVEL:Courtship- NOVEL:Agonistic	8.093	0.000
FAMILIAR:Grooming- NOVEL:Agonistic	4.112	0.263
NOVEL:Grooming- NOVEL:Agonistic	6.755e-01	0.999
FAMILIAR:InvAno- NOVEL:Agonistic	9.231	0.000
NOVEL:InvAno- NOVEL:Agonistic	7.247	0.000
FAMILIAR:InvFacB- NOVEL:Agonistic	8.176	0.000
NOVEL:InvFacB- NOVEL:Agonistic	4.917	0.077
FAMILIAR:Mounting- NOVEL:Agonistic	-5.329e-15	1.000
NOVEL:Mounting- NOVEL:Agonistic	3.197	0.650
NOVEL:Courtship- FAMILIAR:Courtship	-3.292e-01	1.0000000
FAMILIAR:Grooming- FAMILIAR:Courtship	-4.309	0.202
NOVEL:Grooming- FAMILIAR:Courtship	-7.746	0.000
FAMILIAR:InvAno- FAMILIAR:Courtship	8.093e-01	0.999
NOVEL:InvAno- FAMILIAR:Courtship	-1.174	0.999
FAMILIAR:InvFacB- FAMILIAR:Courtship	-2.458e-01	1.000
NOVEL:InvFacB- FAMILIAR:Courtship	-3.504	0.510
FAMILIAR:Mounting- FAMILIAR:Courtship	-8.422	0.000

NOVEL:Mounting- FAMILIAR:Courtship	-5.224	0.044
FAMILIAR:Grooming- NOVEL:Courtship	-3.980	0.310
NOVEL:Grooming- NOVEL:Courtship	-7.417	0.000
FAMILIAR:InvAno- NOVEL:Courtship	1.138	0.999
NOVEL:InvAno- NOVEL:Courtship	-8.454e-01	0.999
FAMILIAR:InvFacB- NOVEL:Courtship	8.346e-02	1.000
NOVEL:InvFacB- NOVEL:Courtship	-3.175	0.660
FAMILIAR:Mounting- NOVEL:Courtship	-8.093	0.000
NOVEL:Mounting- NOVEL:Courtship	-4.895	0.080
NOVEL:Grooming- FAMILIAR:Grooming	-3.437	0.541
FAMILIAR:InvAno- FAMILIAR:Grooming	5.118	0.054
NOVEL:InvAno- FAMILIAR:Grooming	3.134	0.678
FAMILIAR:InvFacB- FAMILIAR:Grooming	4.063	0.280
NOVEL:InvFacB- FAMILIAR:Grooming	8.047e-01	0.999
FAMILIAR:Mounting- FAMILIAR:Grooming	-4.112	0.263
NOVEL:Mounting- FAMILIAR:Grooming	-9.149e-01	0.999
FAMILIAR:InvAno- NOVEL:Grooming	8.556	0.000

NOVEL:InvAno- NOVEL:Grooming	6.572	0.002
FAMILIAR:InvFacB- NOVEL:Grooming	7.500	0.000
NOVEL:InvFacB- NOVEL:Grooming	4.241	0.221
FAMILIAR:Mounting- NOVEL:Grooming	-6.755e-01	0.999
NOVEL:Mounting- NOVEL:Grooming	2.522	0.896
NOVEL:InvAno- FAMILIAR:InvAno	-1.984	0.980
FAMILIAR:InvFacB- FAMILIAR:InvAno	-1.055	0.999
NOVEL:InvFacB- FAMILIAR:InvAno	-4.314	0.200
FAMILIAR:Mounting- FAMILIAR:InvAno	-9.231	0.000
NOVEL:Mounting- FAMILIAR:InvAno	-6.033	0.008
FAMILIAR:InvFacB- NOVEL:InvAno	9.289e-01	0.999
NOVEL:InvFacB- NOVEL:InvAno	-2.330	0.937
FAMILIAR:Mounting- NOVEL:InvAno	-7.247	0.000
NOVEL:Mounting- NOVEL:InvAno	-4.049	0.285
NOVEL:InvFacB- FAMILIAR:InvFacB	-3.259	0.623
FAMILIAR:Mounting- FAMILIAR:InvFacB	-8.176	0.000
NOVEL:Mounting- FAMILIAR:InvFacB	-4.978	0.069

FAMILIAR:Mounting- NOVEL:InvFacB	-4.917	0.077
NOVEL:Mounting- NOVEL:InvFacB	-1.719	0.993
NOVEL:Mounting- FAMILIAR:Mounting	3.197	0.650
