

Figure	Sex	N	Test used	Test statistic	P value
1C	M + F	Lab Males=40 Lab Females=25 Wild Males=45 Wild Females=45	2-Way ANOVA with Tukey post- hoc	$F_{\text{type}(1,151)}=242.7$	$p<0.001$
1D				$F_{\text{sex} \times \text{type}(1,151)}=21.15$	$p<0.001$
1E				$F_{\text{sex}(1,151)}=59.7$ $F_{\text{type}(1,151)}=4.95$	$p<0.001$ $p=0.028$. $p_{\text{wild males-lab males}}=0.03$
2A-B	M + F	Lab Males=40 Lab Females=25	Repeated- measures ANOVA with Tukey post-hoc Repeated- measures ANOVA with Tukey post-hoc	$F_{\text{Rank} \times \text{Day} \times \text{Sex}(5,55)}=5.86$	$p<0.001$ $p_{\text{males}, \alpha\text{-submissives}}=0.0018$, day 1=1.00, day2=0.013, days3-6<0.001 $p_{\text{females}, \alpha\text{-submissives}}=0.152$, day 1=0.43, day2=0.408, day3=0.711, day 4=0.317, day5=0.352, day6=0.663
2A-B insets				$F_{\text{Rank}(\text{males},4,28)}=14.0$	$p<0.001$ $p_{\text{males}, \alpha\text{-}\beta}=0.16$, $\alpha\text{-}\gamma, \delta, \epsilon<0.001$, $\beta\text{-}\gamma=0.09$, $\beta\text{-}\delta=0.045$, $\beta\text{-}\epsilon=0.002$, $\gamma\text{-}\delta, \epsilon>0.5$
				$F_{\text{Rank}(\text{females},4,16)}=1.6$	$p=0.233$ $p_{\text{females}, \alpha\text{-}\beta}=0.481$, $\alpha\text{-}\gamma=0.255$, $\alpha\text{-}\delta=0.507$, $\alpha\text{-}\epsilon=0.244$, $\beta\text{-}\gamma, \delta, \epsilon>0.9$
2C-D	M + F	Wild Males=45 Wild Females=45	Repeated- measures ANOVA with Tukey post-hoc	$F_{\text{Rank} \times \text{Day}(5,80)}=3.83$	$p=0.004$ $p_{\text{males}, \alpha\text{-submissives}}<0.001$, days 1-6<0.001 $p_{\text{females}, \alpha\text{-submissives}}=0.0034$, day 1=0.99, day2=0.249, day3=0.076, days 4- 6<0.001
2C-D insets				$F_{\text{Rank}(\text{males},4,32)}=13.1$	$p<0.001$ $p_{\text{males}, \alpha\text{-}\beta}=0.002$, $\alpha\text{-}\gamma, \delta, \epsilon<0.001$, $\beta\text{-}\gamma=0.542$, $\beta\text{-}\delta=0.609$, $\beta\text{-}\epsilon=0.211$, $\gamma\text{-}\delta, \epsilon>0.9$
				$F_{\text{Rank}(\text{females},4,32)}=14.9$	$p<0.001$ $p_{\text{females}, \alpha\text{-}\beta}=0.007$, $\alpha\text{-}\gamma=0.003$, $\alpha\text{-}\delta, \epsilon<0.001$, $\beta\text{-}\gamma=0.99$, $\beta\text{-}\delta=0.328$, $\beta\text{-}\epsilon=0.007$, $\gamma\text{-}\delta=0.499$, $\gamma\text{-}\epsilon=0.016$, $\delta\text{-}\epsilon=0.418$
2F	M + F	Lab Males=40 Lab Females=25 Wild Males=45 Wild Females=45	Mann-Whitney (M vs. F)	$U_{\text{Lab}}=4.0$	$p=0.019$
2G				$U_{\text{Wild}}=29.5$	$p=0.34$
2H				$U_{\text{Lab}}=4.0$ $U_{\text{Wild}}=22.0$	$p=0.019$ $p=0.113$
2I				$U_{\text{Lab}}=0$ $U_{\text{Wild}}=20$	$p=0.002$ $p=0.077$
3D	M + F	Wild Males=45 Wild Females=45	Mann-Whitney (with Benjamini- Hochberg correction)	$U_{\text{Archetype.A}}=0$ $U_{\text{Archetype.B}}=3$ $U_{\text{Archetype.I}}=0$ $U_{\text{Archetype.P}}=0$	$p=0.037$ $p=0.055$ $p=0.037$ $p=0.023$
3E	M + F	Wild Males=45 Wild Females=45	Kolmogorov- Smirnov	$D_{\text{Archetype.A}}=0.333$ $D_{\text{Archetype.B}}=0.311$ $D_{\text{Archetype.P}}=0.511$	$p=0.013$ $p=0.025$ $p<0.001$

3F	M + F	Wild Males=45 Wild Females=45	Repeated randomized shuffling		$p_{\text{Archetype.A}}=0.0036$ $p_{\text{Archetype.B}}=0.078$ $p_{\text{Archetype.I}}=0.453$ $p_{\text{Archetype.P}}=0.423$
3G	M + F	Wild Males=45 Wild Females=45	Spearman correlation	$t_{(N-2)}=-2.65$	$p=0.0096$
3H	M + F	Wild Males=45 Wild Females=45	Spearman correlation	$t_{(N-2)}=2.19$	$p=0.031$
4A-B	M + F	Wild TrpC2 ^{-/-} Males=15 Wild TrpC2 ^{-/-} Females=30	Wilcoxon signed-rank	$T_{\text{Social}}=0$ $T_{\text{Individual}}=20$	$p=0.003$ $p=0.013$
4C-D	M + F	Wild TrpC2 ^{-/-} Males=15 Wild TrpC2 ^{-/-} Females=30	Repeated-measures ANOVA with Tukey post-hoc	$F_{\text{Rank (1,7)}}=36.69$	$p<0.001$ $p_{\text{males, } \alpha\text{-submissives}}=0.015, \text{ day 1}=0.003, \text{ days 2-6}<0.001$ $p_{\text{females, } \alpha\text{-submissives}}=0.013, \text{ day 1}=0.007, \text{ days 2-6}<0.001$
4C-D insets				$F_{\text{Rank (males,4,8)}}=16.6$	$p<0.001$ $p_{\text{males, } \alpha\text{-}\beta}=0.013, \alpha\text{-}\gamma=0.003, \alpha\text{-}\delta=0.0013, \alpha\text{-}\epsilon<0.001, \beta\text{-}\gamma=0.759, \beta\text{-}\delta=0.288, \beta\text{-}\epsilon=0.124, \gamma\text{-}\delta\text{-}\epsilon>0.5$
				$F_{\text{Rank (females,4,20)}}=15.14$	$p<0.001$ $p_{\text{females, } \alpha\text{-}\beta}=0.086, \alpha\text{-}\gamma, \delta, \epsilon<0.001, \beta\text{-}\gamma=0.159, \beta\text{-}\delta=0.094, \beta\text{-}\epsilon=0.003, \gamma\text{-}\delta=0.998, \gamma\text{-}\epsilon=0.315, \delta\text{-}\epsilon=0.464$
4E	M + F	Wild Males=45 Wild Females=45 Wild TrpC2 ^{-/-} Males=15 Wild TrpC2 ^{-/-} Females=30		<u>Chasing events:</u> $U_{\text{Females}}=3$ $U_{\text{Males}}=8$ <u>Despotism α:</u> $U_{\text{Females}}=7$ $U_{\text{Males}}=10$ <u>Stability α:</u> $U_{\text{Females}}=8$ $U_{\text{Males}}=10.5$ <u>Stability ϵ:</u> $U_{\text{Females}}=9$ $U_{\text{Males}}=9$	$p=0.006$ $p=0.36$ $p=0.022$ $p=0.579$ $p=0.029$ $p=0.644$ $p=0.039$ $p=0.46$
5B			Mann-Whitney (with Benjamini-Hochberg correction)	$U_{\text{Archetype.AP}}=0$ $U_{\text{Archetype.ST}}=1$ $U_{\text{Archetype.SE}}=0$	$p=0.008$ $p=0.016$ $p=0.008$
5C			Kolmogorov-Smirnov	$D_{\text{Archetype.AP}}=0.867$ $D_{\text{Archetype.ST}}=0.8$ $D_{\text{Archetype.SE}}=0.267$	$p<0.001$ $p<0.001$ $p=0.459$

S1E	M + F	Lab Males=40 Lab Females=25	Friedman's ANOVA with post-hoc pairwise signed-ranks tests	$\chi^2_{\text{males}}=20.9$ $\chi^2_{\text{females}}=6.4$	$p<0.001$ $p_{\text{males}, \alpha-\beta, \gamma, \delta, \epsilon}=0.014, \beta-\gamma=0.042, \beta-\delta=0.08, \beta-\epsilon=0.021, \gamma-\delta=0.944, \gamma, \delta-\epsilon=0.142$ $p=0.17$ $p_{\text{females}, \alpha-\beta}=0.06, \alpha-\gamma, \delta, \epsilon=0.11, \beta-\gamma=1, \beta-\delta, \epsilon=0.59, \gamma-\delta=0.59, \gamma-\epsilon=1, \delta-\epsilon=0.28$
S1F		Wild Males=45 Wild Females=45		$\chi^2_{\text{males}}=26.04$ $\chi^2_{\text{females}}=25.9$	$p<0.001$ $p_{\text{males}, \alpha-\beta}=0.018, \alpha-\gamma, \delta, \epsilon=0.009, \beta-\gamma=0.009, \beta-\delta=0.024, \beta-\epsilon=0.013, \gamma-\delta=0.058, \gamma-\epsilon=0.044, \delta-\epsilon=0.722$ $p<0.001$ $p_{\text{females}, \alpha-\beta}=0.04, \alpha-\gamma, \delta, \epsilon=0.009, \beta-\gamma=0.407, \beta-\delta=0.024, \beta-\epsilon=0.009, \gamma-\delta=0.018, \gamma-\epsilon=0.013, \delta-\epsilon=0.058$
S3D	M + F	Lab TrpC2 ^{-/-} Males=40 Lab TrpC2 ^{-/-} Females=20	Repeated-measures ANOVA with Tukey post-hoc	$F_{\text{Rank} \times \text{Day} \times \text{Sex}(5,105)}=7.8$	$p<0.001$ $p_{\text{males}}=0.001$ $p_{\text{females}}=0.057$
S3E-F	M + F	Lab Males=40 Lab Females=25 Wild Males=45 Wild Females=45 Lab TrpC2 ^{-/-} Males=40 Lab TrpC2 ^{-/-} Females=20 Wild TrpC2 ^{-/-} Males=15 Wild TrpC2 ^{-/-} Females=30	Repeated-measures ANOVA with Tukey post-hoc	$F_{\text{genotype} \times \text{day} \times \text{sex}(1,1260)}=19.94$ $F_{\text{genotype} \times \text{day} \times \text{type}(1,1260)}=7.83$	$P<0.001$ $p<0.001$
S3G-H	M + F	Lab Males=40 Lab Females=25 Wild Males=45 Wild Females=45 Lab TrpC2 ^{-/-} Males=40 Lab TrpC2 ^{-/-} Females=20 Wild TrpC2 ^{-/-} Males=15 Wild TrpC2 ^{-/-} Females=30	Repeated-measures ANOVA with Tukey post-hoc	$F_{\text{genotype} \times \text{day} \times \text{sex}(1,1260)}=11.45$ $F_{\text{genotype} \times \text{day} \times \text{type}(1,1260)}=2.89$	$P<0.001$ $P=0.013$
S4A _{up}	M + F	Lab Males=7 Lab Females=11 Wild Males=15 Wild Females=11	2-Way ANOVA with Tukey post-hoc	$F_{\text{type}(\text{Total distance}, 1,40)}=14.54$ $F_{\text{type}(\text{center visits}, 1,40)}=48.29$ $F_{\text{type}(\text{Rearing time}, 1,40)}=7.5$	$p<0.001$ $p<0.001$ $p=0.009$
S4A _{down}	F	Lab Females=11 Wild Females=11 Lab TrpC2 ^{-/-} Females=11	2-Way ANOVA with Tukey post-hoc	$F_{\text{type}(\text{Total distance}, 1,38)}=28.56$	$p<0.001$ $p<0.001$

		Wild TrpC2 ^{-/-} Females=9		F _{type(center visits, 1,38)} =65.57 F _{type(Rearing time, 1,38)} =34.7	p<0.001
S4B	M + F	Lab Males=40 Lab Females=25 Wild Males=45 Wild Females=45 Lab TrpC2 ^{-/-} Males=40 Lab TrpC2 ^{-/-} Females=20 Wild TrpC2 ^{-/-} Males=15 Wild TrpC2 ^{-/-} Females=30	2-Way ANOVA with Tukey post-hoc	F _{type(Males, 1,136)} =48.33 F _{type(Females, 1,116)} =14.29	p<0.001 p<0.001