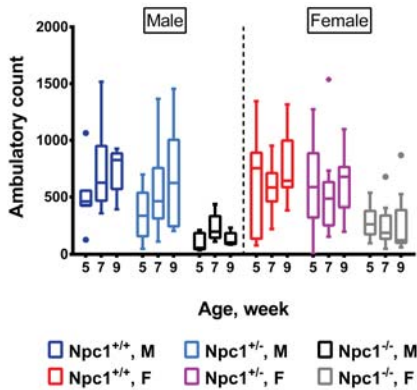


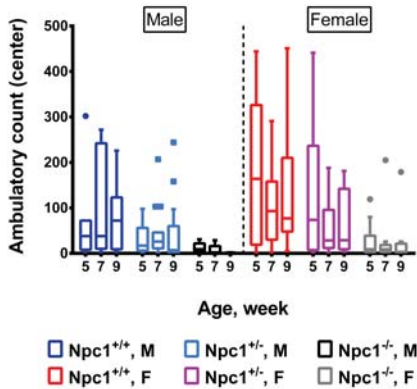
Figure S5

A.



	Square root change in ambulatory count (compared to <i>Npc1</i> ^{+/+})	SE	95% CI	p
<i>Npc1</i> ^{+/-}	-2.2	1.6	-5.3, 0.9	0.2
<i>Npc1</i> ^{-/-}	-10.6	1.6	-13.7, -7.5	<0.0001

B.



	Change in center ambulatory count incidence rate ratio (compared to <i>Npc1</i> ^{+/+})	SE	95% CI	p
<i>Npc1</i> ^{+/-}	0.6	0.1	0.4, 1.0	0.03
<i>Npc1</i> ^{-/-}	0.3	0.1	0.2, 0.5	<0.0001

	Change in center ambulatory count incidence rate ratio (compared to female)	SE	95% CI	p
Male	0.6	0.1	0.4, 0.8	0.004
<i>Npc1</i> ^{+/+} , male	0.7	0.2	0.3, 1.3	0.2
<i>Npc1</i> ^{+/-} , male	0.6	0.2	0.3, 1.0	0.04
<i>Npc1</i> ^{-/-} , male	0.6	0.2	0.3, 1.4	0.2

Figure S5 *Npc1*^{+/-} mice ($n_{\text{female}} = 15$; $n_{\text{male}} = 15$) may have increased anxiety compared with *Npc1*^{+/+} ($n_{\text{female}} = 11$; $n_{\text{male}} = 7$) mice. **(A)** The ambulatory count in the entire open-field arena showed no significant difference was detected between *Npc1*^{+/+} and *Npc1*^{+/-} mice. **(B)** However, the IRR of ambulatory count of *Npc1*^{+/-} mice entering the center of the open-field arena was $\approx 60\%$ that of *Npc1*^{+/+} mice, indicating increased anxiety. The markedly reduced total arena and center ambulatory count of *Npc1*^{-/-} mice compared to *Npc1*^{+/+} mice was due to severe motor disability. The box and whiskers plot depicts the median, IQR, and the maximum and minimum values within 1.5 times the IQR. Statistical analysis: **(A)** Data was square root transformed to ensure satisfaction of distributional assumptions. Random effects generalized least squares regression with animals as a random effect, adjusted for age and gender. **(B)** Random effects negative binomial regression with animals as a random effect, adjusted for age and gender, or genotype and age, or age only.