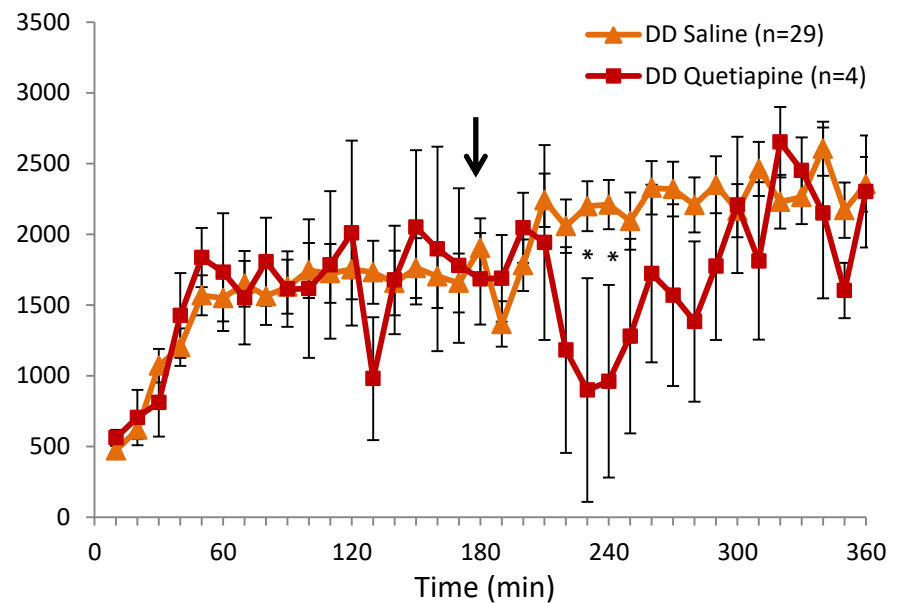
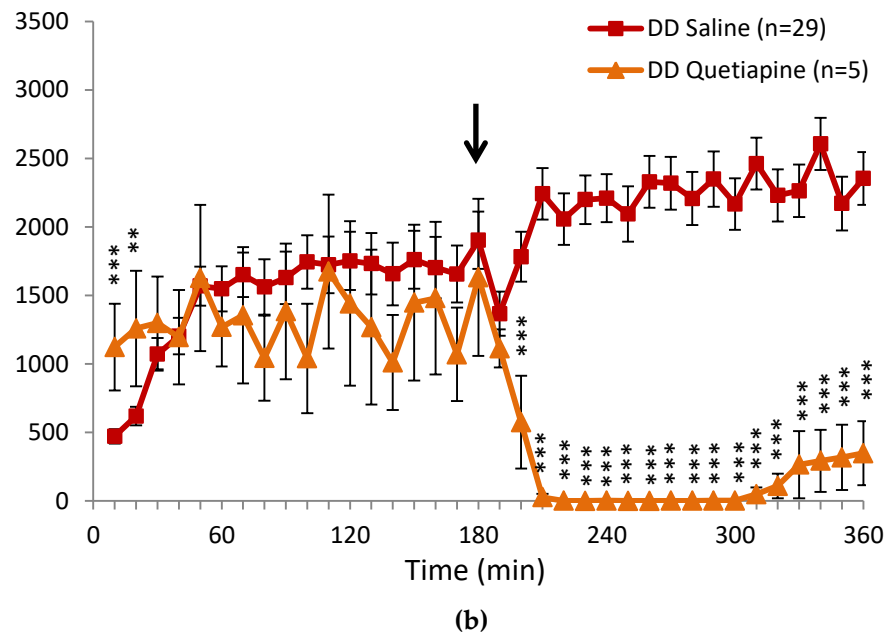
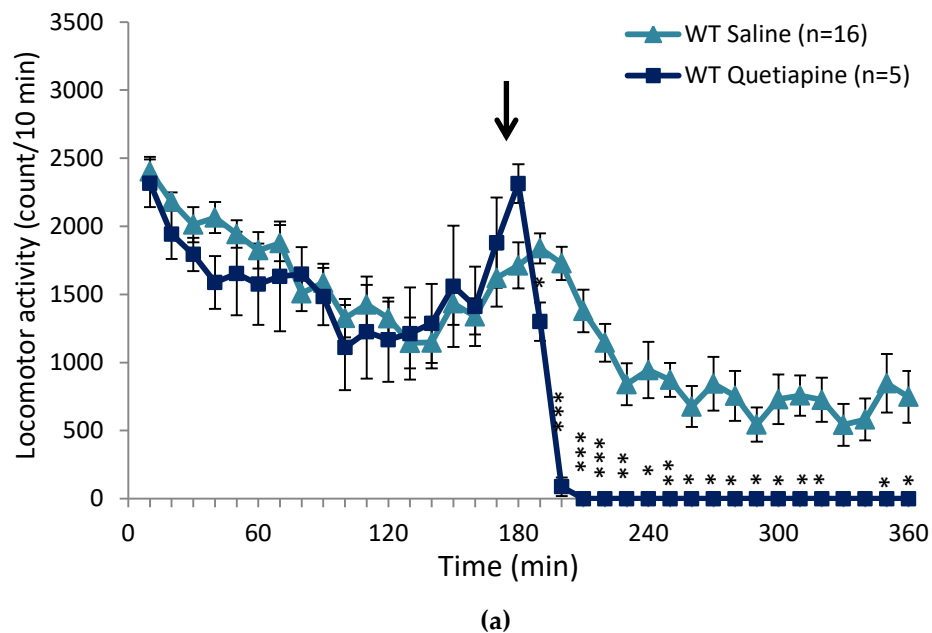


(a)

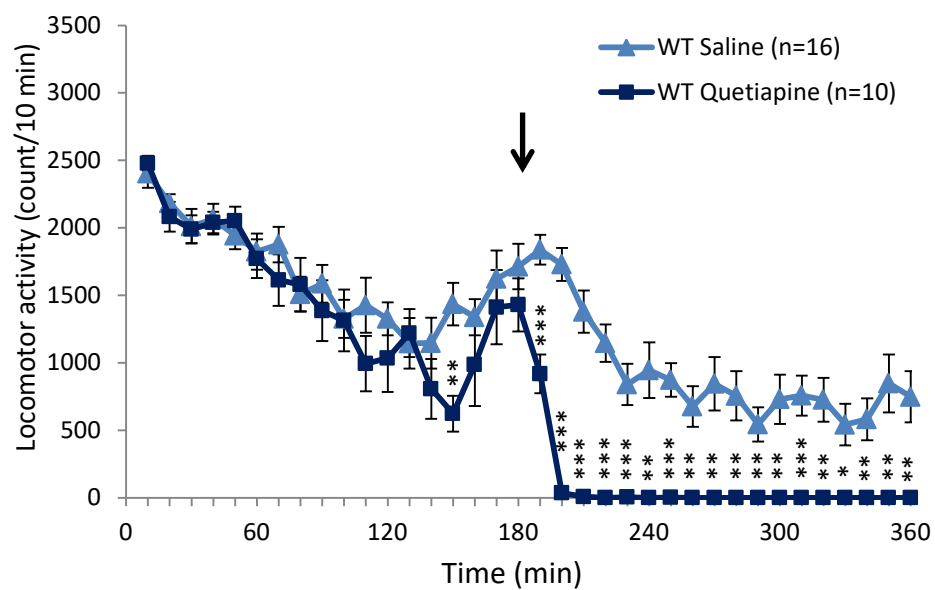


(b)

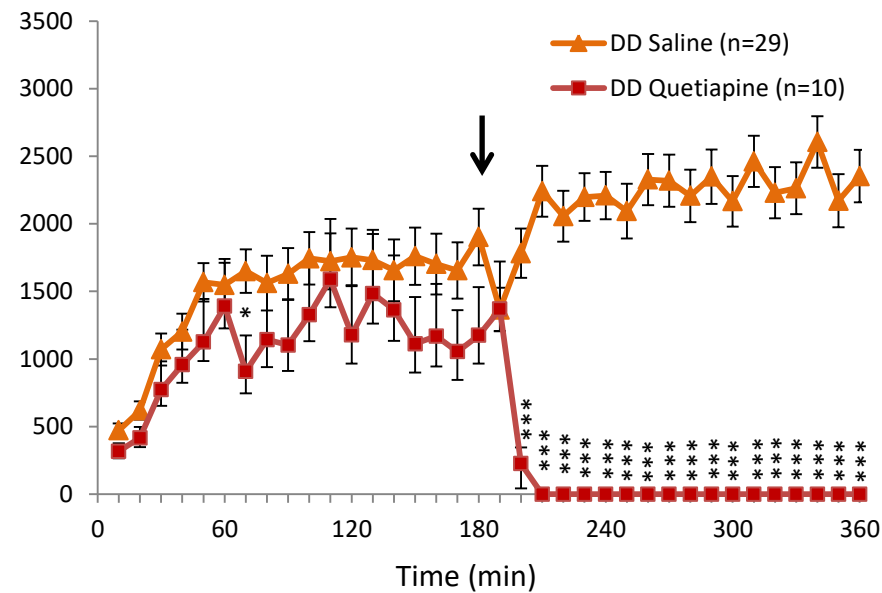
**Figure S1.** Changes in locomotor activity induced by quetiapine 10 mg/kg. (a, b) Changes in locomotor activity in (a) WT and (b) DD mice following quetiapine and saline administration. Refer to graph for number. The arrows indicate the drug injection time. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , compared with saline (Student's t-test). The data are expressed as mean  $\pm$  SEM. WT, wildtype mice; DD, dopamine-deficient mice.



**Figure S2.** Changes in locomotor activity induced by quetiapine 40 mg/kg. (a, b) Changes in locomotor activity in (a) WT and (b) DD mice following quetiapine and saline administration. Refer to graph for number. The arrows indicate the drug injection time. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , compared with saline (Student's t-test). The data are expressed as mean  $\pm$  SEM. WT, wildtype mice; DD, dopamine-deficient mice.

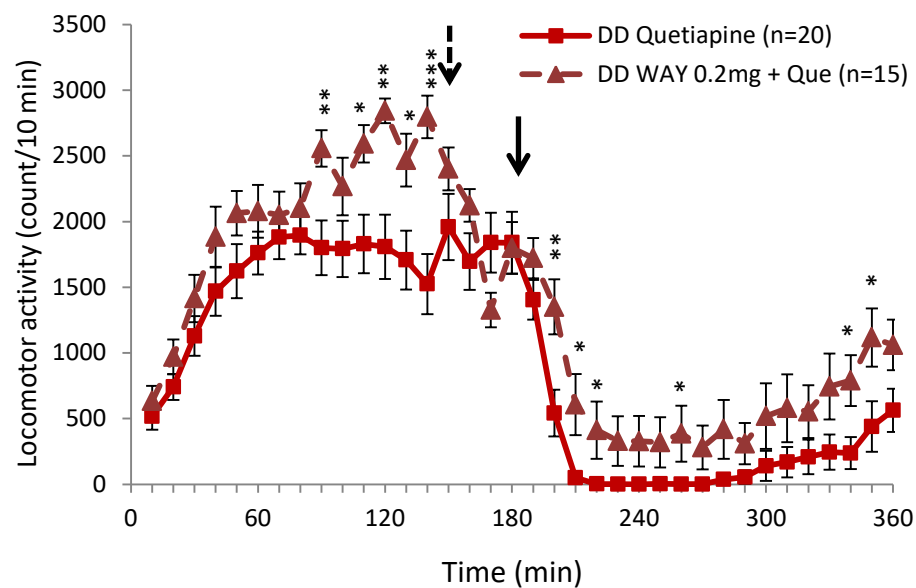


(a)

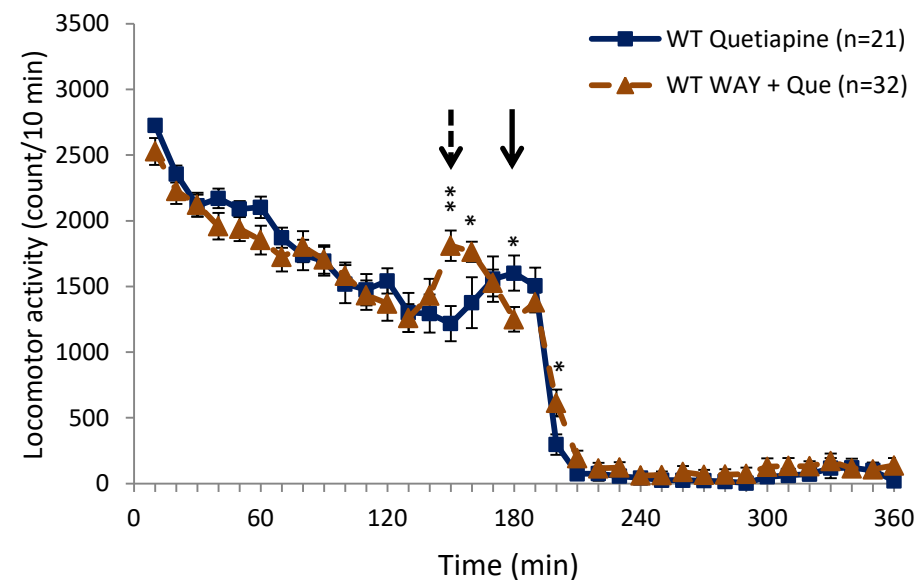


(b)

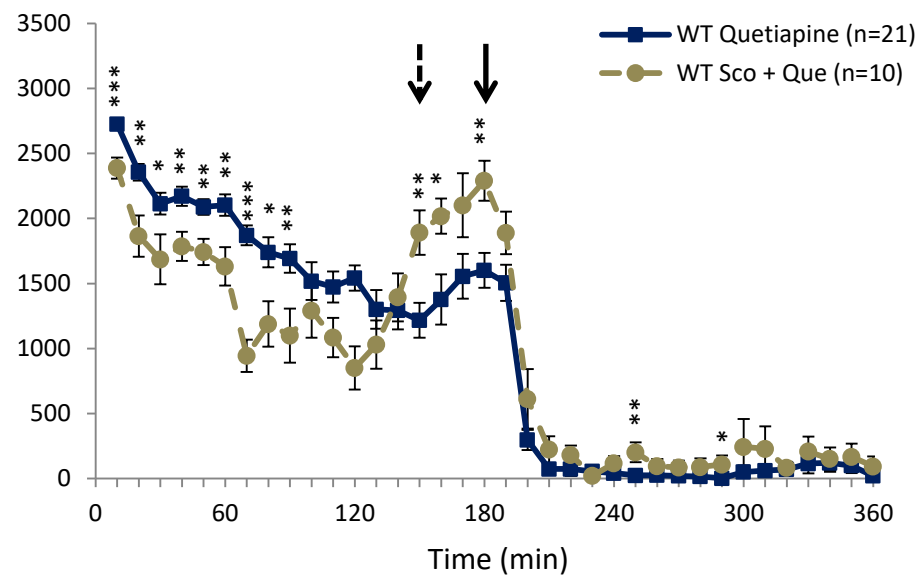
**Figure S3.** Changes in locomotor activity induced by quetiapine 80 mg/kg. (a, b) Changes in locomotor activity in (a) WT and (b) DD mice following quetiapine and saline administration. Refer to graph for number. The arrows indicate the drug injection time. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , compared with saline (Student's t-test). The data are expressed as mean  $\pm$  SEM. WT, wildtype mice; DD, dopamine-deficient mice.



**Figure S4.** Changes in locomotor activity induced by WAY100635 0.2 mg/kg in DD mice 30 min before quetiapine administration. Refer to graph for number. The solid arrows indicate the quetiapine injection time. The dashed arrows indicate the WAY100635 administration time. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , compared with quetiapine (Student's  $t$ -test). The data are expressed as mean  $\pm$  SEM. WT, wildtype mice; DD, dopamine-deficient mice.



(a)



(b)

**Figure S5.** Effects of quetiapine on locomotor activity when 5-HT<sub>1A</sub> and cholinergic receptor activity is suppressed. (a, b) Changes in locomotor activity induced by (a) WAY100635 1 mg/kg and (b) scopolamine 0.1 mg/kg in WT mice 30 min before quetiapine administration. Refer to graph for number. The solid arrows indicate the quetiapine injection time. The dashed arrows indicate the WAY100635 and scopolamine administration time. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ , compared with quetiapine (Student's *t*-test). The data are expressed as mean  $\pm$  SEM. 5-HT, 5-hydroxytryptamine (serotonin); WT, wildtype mice.