

Supplementary material

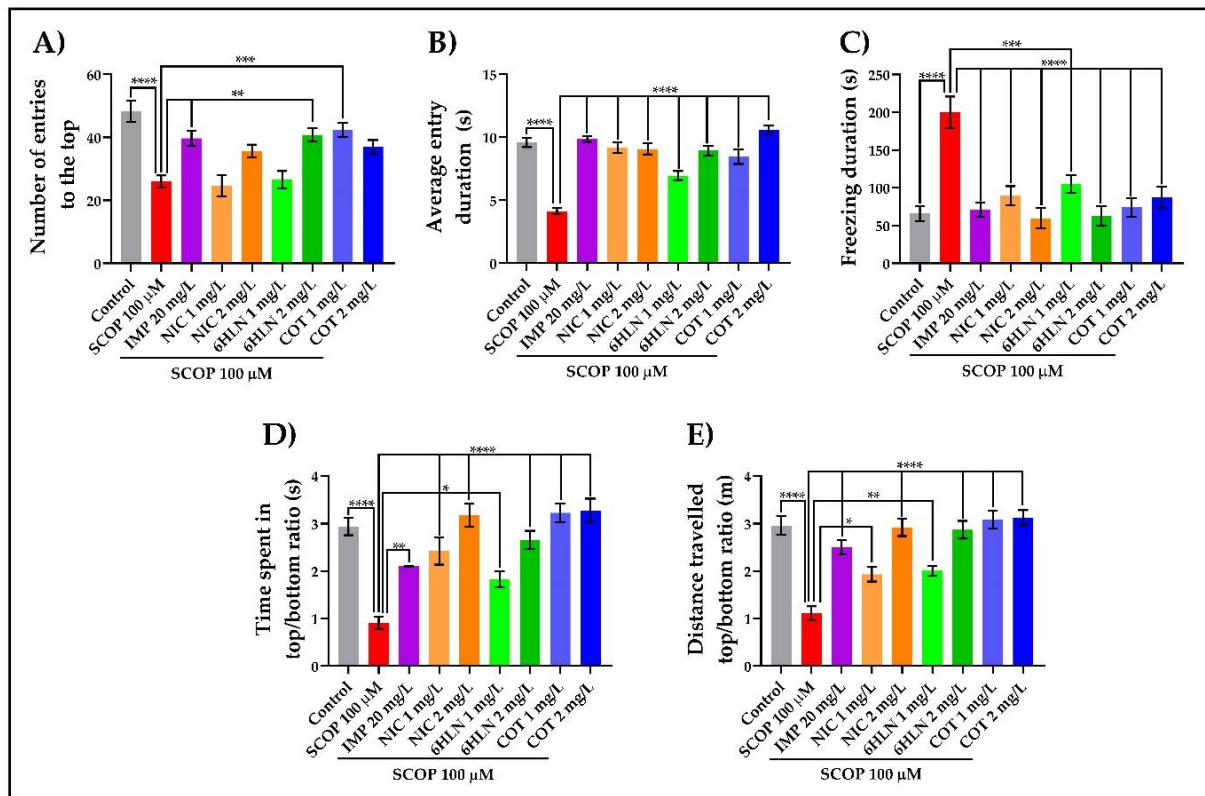


Figure S1. The effects of NIC, 6HLN and COT (1 and 2 mg/L) administration in SCOP-treated zebrafish on anxiety-like behavior evaluated within NTT. The number of entries to the top (A), average entry duration (B) freezing duration (C), time spent in top/bottom ratio (D) and distance travelled top/bottom ratio (E) were the additional parameters for measuring the anxiety like behavior. The values are expressed as means \pm S.E.M. (n=10). ANOVA analysis identified overall significant differences between the experimental groups for (A) $F(8,81)=10.41$, $p<0.0001$, (B) $F(8,81)=25.10$, $p<0.0001$, (C) $F(8,81)=10.68$, $p<0.0001$, (D) $F(8,81)=15.4$, $p<0.0001$ and (E) $F(8,81)=17.11$, $p<0.0001$. For Tukey *post hoc* analyses – **** $p<0.0001$, *** $p<0.001$, ** $p<0.01$ and * $p<0.05$.

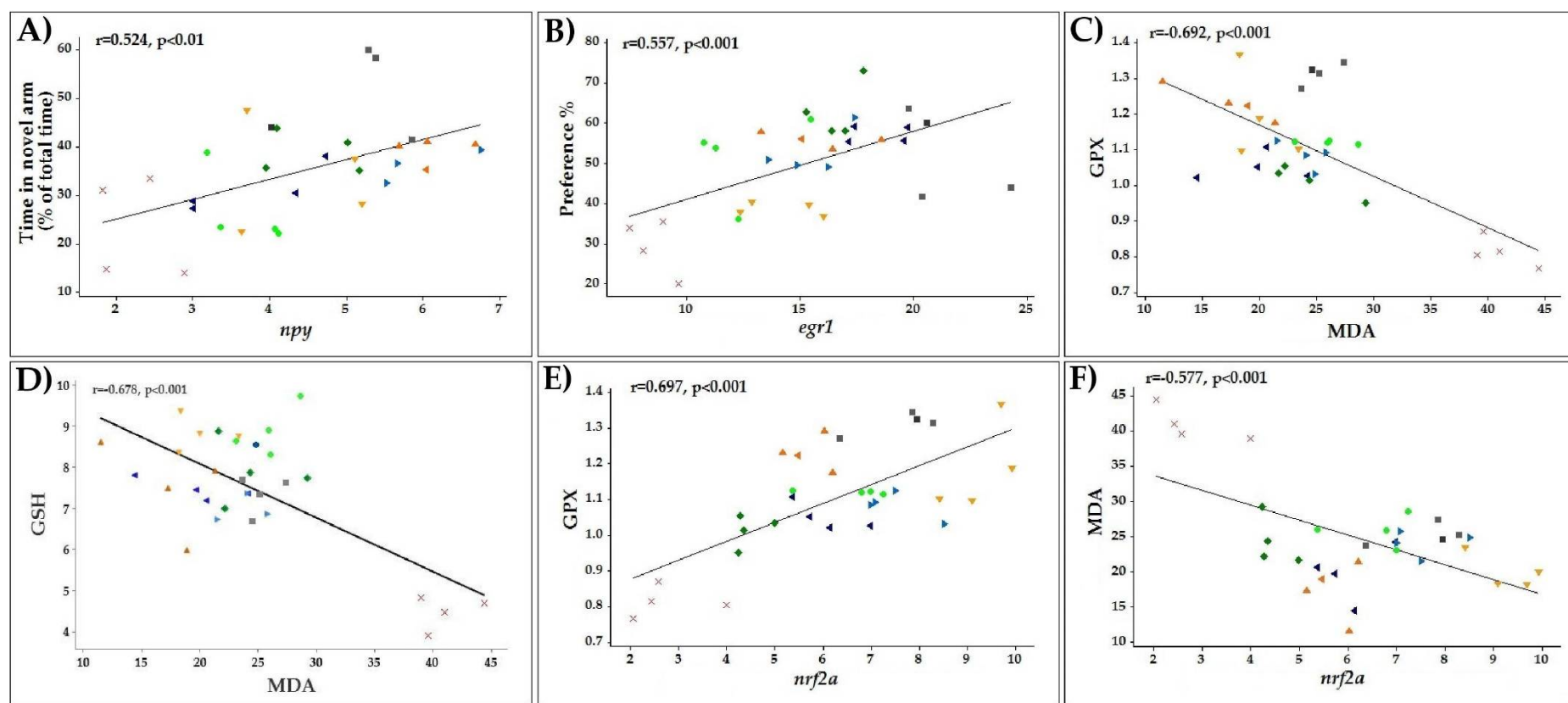


Figure S2. Pearson's correlation coefficient between behavioral or biochemical parameters and MDA or markers of gene expression (n=10 animals per group): (A) Time in the novel arm (% of total time) vs. *npy* ($r=0.524$, $p<0.01$), (B) Preference % vs. *egr1* ($r=0.557$, $p<0.001$), (C) GPX vs. MDA ($r=-0.692$, $p<0.001$), (D) GSH vs. MDA ($r=-0.678$, $p<0.001$), (E) GPX vs *nrf2a* ($r=0.697$, $p<0.001$) and (F) MDA vs. *nrf2a* ($r=-0.577$, $p<0.001$) in control (○), SCOP (×), NIC 1 mg/L + SCOP (▼), NIC 2 mg/L + SCOP (▲), 6HLN 1mg/L + SCOP (●), 6HLN 2 mg/L + SCOP (◆), COT 1 mg/L + SCOP (▶) and COT 2 mg/L + SCOP (◀). Data are expressed as follow: MDA (μmol/L), GPX (U/mg protein), GSH (μg GSH/μg protein), *nrf2a* (mRNA copy number, x10000), *egr1* (mRNA copy number, x10000) and *npy* (mRNA copy number, x10000).