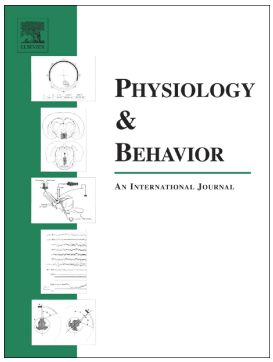

Effects of AMPA receptor antagonist, NBQX, and extrasynaptic GABAA agonist, THIP, on social behavior of adolescent and adult rats

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Effects of AMPA receptor antagonist, NBQX, and extrasynaptic $GABA_A$ agonist, THIP, on social behavior of adolescent and adult rats.

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Abstract

Adolescence is characterized by high significance of social interactions, along with a propensity to exhibit social facilitating effects of ethanol while being less sensitive than adults to the inhibition of social behavior that emerges at higher doses of ethanol. Among the neural characteristics of adolescence are generally enhanced levels of glutamatergic (especially NMDA receptor) activity relative to adults, whereas the GABA system is still developmentally immature. Activation of NMDA receptors likely plays a role in modulation of social behavior in adolescent animals as well as in socially facilitating and suppressing effects of ethanol. For instance, adolescent and adult rats differ in their sensitivities to the effects of NMDA antagonists and ethanol on social behavior, with adolescents but not adults demonstrating social facilitation at