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Ethanol Effects on Reward Value Judgement Following Infusions into the Amygdala: Implications for Emotional Processing

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Poster Presentation P4

ETHANOL EFFECTS ON REWARD VALUE JUDGMENT FOLLOWING INFUSIONS INTO THE AMYGDALA: IMPLICATIONS FOR EMOTIONAL PROCESSING

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Alcohol, when delivered systemically, leads to impaired performance on a variety of tasks, including emotionally-laden or reward value tasks. It is also known that lesions to the amygdala produce emotional or reward value deficits. However, it is unknown whether the emotional deficits observed after alcohol ingestion are due to alcohol's direct effect on the amygdala. The present study examined the effects of alcohol when infused directly into the amygdala on emotional memory and judgment. Twelve male Long-Evans rats were trained on a behavioral task to associate one sweetness level with a reward and another sweetness level with no reward. Once the rats learned to discriminate between reward and no reward stimuli, they underwent surgery to implant guide cannulae to directly infuse alcohol into the amygdala. After a week recovery period, rats were given bilateral infusions of a 1.0% solution of alcohol, a 0.1% solution of alcohol, or a saline infusion. Results will be discussed. It is predicted that rats will perform more poorly on the task with the high dose of alcohol, somewhat poorly on the task with the low dose of alcohol, and that there will be no change with the saline infusion.