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THE EFFECTS OF AMGYDALAR ALCOHOL INFUSIONS ON REWARD VALUE MAGNITUDE

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Exposure to alcohol results in deficits to attention and memory, as well as increased emotionality and risk-taking behaviors. Lesions to the amygdala also create deficits in emotional conditioning and decision-making. The present study looks at the direct effects of alcohol on the amygdala. Eight male Long-Evans rats were trained on a behavioral task to associate one stimulus with the presence of a reward and a different stimulus with the absence of a reward. A ten second delay between the stimulus presentation and the choice phase of the trial was implemented so that the rats had to remember the stimulus given. Once the rats learned to discriminate between the stimuli, guide cannulae were placed bilaterally into the amygdala. Two sets of three infusions (saline, .01% alcohol solution or 1% alcohol solution) were given immediately prior to the behavioral task. The mean differences between saline and the two alcohol infusions were compared to determine differences in performance. It was predicted that the infusions of alcohol would create deficits in memory for reward-value magnitude, but that procedural memory and motor skills would remain intact.