

Sex differences in aversive and appetitive conditioning in two strains of rats

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In order to examine sex differences in non sexual behavior, 40 rats of each sex from two strains (gray, A × C and albino, Sprague-Dawley) were trained, using different experimental procedures. In Experiment I, aversive conditioning in a one-way (easy task) and a two-way (difficult task) active avoidance task was examined. Results consistently showed that males of both strains were inferior to females in the acquisition of the two-way avoidance task. A significant interaction between sex of both strains and the difficulty of the task was found. In Experiment II, rats were trained in a Sutherland Apparatus in an easy (black vs. white) and a difficult (horizontal vs. vertical) visual discrimination task, using appetitive reinforcement; no differences between sexes were observed. A significant interaction, however, was found between strain and task, indicating a lower performance of the A × C strain in the difficult task. The results are discussed within the theoretical framework of the Ye