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### **A potential screening test for minor tranquillizing drug action.**

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Rats can be prevented from escaping from a maze by having the runways of the maze enclosed by walls or by using elevated runways with no side walls. Rats tend to explore enclosed runways more readily than elevated ones. In a Y-maze in which two arms have walls and the third is open-sided the rats avoid the open-sided arm (Montgomery, 1955).

Drugs were tested at three dose levels using thirty-two rats, eight at each dose level and eight controls. Twenty minutes after injection each rat was observed for 3 min in the maze. Entries to each arm and time spent in each arm were recorded. Exploration of the open-sided arm could be increased by minor tranquillizers (for example, chlordiazepoxide, 30 mg/kg subcutaneously) and sedatives (for example, amylobarbitone, 15 mg/kg subcutaneously). This test does not, however, detect other centrally active drugs such as chlorpromazine (2 mg/kg), imipramine (20 mg/kg), or atropine (2 mg/kg). Amphetamine (1.6 mg/kg) could increase, decrease or have no effect on time in the open arm, depending on control performance level. When measures other than time in the open arm were considered, however, amphetamine could always be distinguished from the tranquillizing drugs.

The compounds which are effective in this test are similar to those which increase bar-pressing behaviour which is simultaneously rewarded and punished (punished responding) (Geller & Seifter, 1960; Geller, Kulak & Seifter, 1962). The Y-maze has advantages over punished behaviour as a screening test for drugs similar in action to chlordiazepoxide, as it requires no complex equipment and results can be obtained quickly using untrained animals.

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### **Methods for detecting anti-anxiety drugs using baboons (*Papio cynocephalus*).**

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Brody & Rosvold (1952), Maslow (1936) and Warden Fjeld & Koch (1940) showed that spontaneous social behaviour in monkey colonies was relatively simple and could be recorded and analysed; the patterns of behaviour that emerged in such studies could be modified by the administration of drugs. Delgado (1962) described a method for