Notes and Comment

Correction of a paper by Mitchell, Scott, and Mitchell

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A paper by Mitchell, Scott, and Mitchell (1977) published in this journal states: "A general failure to appreciate the importance of nonassociative factors in delayed poisoning taste-aversion experiments is evidenced by the near universal omission of the appropriate noncontingently poisoned, or sham-injected, control groups within the various treatment conditions (cf. Garcia, Ervin, & Koelling, 1966; Revusky, 1968; Smith & Roll, 1967)." This is untrue for each of the cited papers as follows.

Garcia, Ervin, and Koelling (1966) used sham-injected controls, as is quite clear without even reading the paper, but by looking at their Figure 1. Their Figure 2 shows equally clearly that rats subjected to a 3-h delay of sickness after drinking saccharin solution did not exhibit an aversion; these rats constituted noncontingent poisoned controls.

Revusky (1968) produced sucrose aversions by means of X-irradiation; the equivalent of a sham injection in such experiments is sham irradiation. Revusky used explicit sham irradiation and noncontingent irradiation controls in Experiment 1. His Experiment 2 used only sham-irradiated controls; however, there was a weak equivalent of a noncontingent control in the failure to obtain a significant flavor aversion at the longest delay of sickness. His Experiment 3 used only noncontingent irradiated controls; in this experiment, a number of radiation doses were used and the equivalent of sham controls can be inferred from the fact that significant sucrose aversions were not obtained at the lowest dose of irradiation. Anybody can check these matters out without the bother of reading Revusky's paper simply by glancing at his clearly labeled Figures 1-3.

The paper by Smith and Roll (1967) includes the same type of sham-irradiated and noncontingent irradiated controls that are included in the paper by Garcia, Ervin, and Koelling (1966). This can be checked simply by looking at Smith and Roll's Figure 1.

In fairness to Mitchell, Scott, and Mitchell (1977), I must suggest the possibility that they were using unscholarly secondary sources. I confess to reaching conclusions on the basis of secondary sources frequently myself, and do not choose to castigate the authors for a crime I am often guilty of. Still, when the implication is so damaging to a number of scientists, primary sources ought to be consulted.

It must be added that Mitchell et al. (1977) used cyclophosphamide as the aversive drug. This drug has a very long biological life. They began testing the flavor aversions while the rats were still sick. This methodological error was explained by Revusky and Garcia (1970, pp 5-8) and invalidates their results. I could write more, but it would be superfluous.

REFERENCES

- GARCIA, J., ERVIN, F. R., & KOELLING, R. A. Learning with prolonged delay of reinforcement. *Psychonomic Science*, 1966, 5, 121-122.
- MITCHELL, D., SCOTT, D. W., & MITCHELL, L. K. Attenuated and enhanced neophobia in the taste-aversion "delay of reinforcement" effect. *Animal Learning & Behavior*, 1977, 5, 99-102.
- REVUSKY, S. H. Aversion to sucrose produced by contingent X-irradiation. *Journal of Comparative and Physiological Psychology*, 1968, 65, 17-22.
- REVUSKY, S., & GARCIA, J. Learned associations over long delays. In G. H. Bower (Ed.), *The psychology of learning and motivation: Advances in research and theory* (Vol. 4). New York: Academic Press, 1970.
- SMITH, J. C., & ROLL, D. L. Trace conditioning with X-rays as aversive stimulus. *Psychonomic Science*, 1967, 9, 11-12.

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