

QUOTATION

SPRAGG ON BEHAVIOR MODIFICATION IN THE CHIMPANZEE

Prior to receiving morphine injections, all subjects were trained to cooperate voluntarily in receiving hypodermic injections of physiological saline solution. The procedure was as follows: The hair was clipped short over the scapular region, where the skin is loose. Then the animal was trained to lean across the experimenter's leg, when he placed his foot up on the bench. ... With this injection position the experimenter had good control of the animal and—an important factor—was working on an area out of the animal's sight. Training proceeded by having the animal assume this position, scratching him lightly in the scapular region with an ordinary needle, then rewarding him with a piece of fruit. After a little experience the animals came to tolerate the scratching and pricking, even when quite vigorous, in order to obtain the fruit reward. The hypodermic needle was then substituted for the ordinary needle, and actual injections of small amounts of saline solution were made. Fruit, praise, and patting followed the injection. The animals were then trained to the point where they readily cooperated for injection with only verbal approbation as reward (or none at all), before morphine injections were given. The morphine injections were not followed by food reward.

It is the writer's contention that this preliminary adaptation to the injection situation was an important factor in the experiment; it obviated many undesirable aspects which would have appeared if it had been necessary to inject the animals by force. In fact it may very seriously be doubted whether the experiment could have been carried on at all with these chimpanzee subjects (weighing from 25 to 32 kilograms) if it had been necessary to attempt to hold them forcibly for daily injections. As a result of the preliminary training, however, the daily injections soon became a routine a matter as being put on leash, weighed, etc. (pp. 24-25).

From: Spragg, S. D. S. (1940). Morphine addiction in chimpanzees. *Comparative Psychology Monographs*, 15, 1-132.