

**REMEMBERING NATHAN H. AZRIN**  
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Short of his mentor and the discipline's founder, B. F. Skinner, it is difficult to think of anyone who has had a broader impact on both the science and application of behavior analysis than Nathan H. Azrin, whose long career spanning seven decades ended with his death on May 18, 2013. Nate's contributions to both experimental and applied behavior analysis, and the discipline's acknowledgements of these accomplishments, are a matter of record.

His dissertation, an extensive comparison of response-dependent and response-independent shocks delivered periodically or aperiodically, involved only a five pigeons (Azrin, 1956). It was the first "modern" experimental analysis of punishment, with important theoretical implications for the negative law of effect. Logically, it should have appeared in a first-tier experimental psychology journal. It was, however, published in the *Journal of Psychology*, a journal neither then nor now particularly noted for its commitment to behavior-analytic research. Its publication there reflected the rather solid resistance of the aforementioned journals to single-subject research methods (Azrin, 1987; Skinner, 1987). In retrospect, such resistance turned out to be a positive thing because it resulted in the establishment of the *Journal of the Experimental Analysis of Behavior (JEAB)*, which was dedicated to the individual-subject

research methods that Nate so effectively refined and used. Nate was one of the founders of *JEAB*, and its third Editor (from 1964-1966, following C. B. Ferster and John Boren). By 1967, Nate was pushing hard for the Society for the Experimental Analysis of Behavior to create a second journal, this one devoted to applied behavior analysis. The outcome is well known.

I was a research intern at the Behavior Research Laboratory at Anna State Hospital in Anna, Illinois during the summer of 1965, following my first year of graduate school. The animal lab, where I worked, occupied the ground floor of the same building that housed the psychiatric ward where Ted Allyon and Nate together developed the token economy (Allyon & Azrin, 1965). The whole place was a-buzz with activity. Nate assigned me to two projects related to shock-elicited aggression in squirrel monkeys and later to an additional project on stimulus control with humans.

There was so much research going on, it was hard to take it all in: Don Hake was studying vocal behavior with Mynah birds, some studies of punishment, and also human operant studies; Harry Rubin was starting studies of sexual behavior in rabbits and eye tracking by cats as an operant; Ron Hutchinson was studying different aspects of aggression in monkeys, including its physiological correlates; Keith Miller was experimenting on social behavior; and Nate and colleagues were, among other things, working on the extinction-induced aggression experiments (including a never-published one showing that the opportunity to aggress served as a reinforcer when an operant response was extinguished). Nate also had assembled a menagerie of species — bees, electric eels, nutria, rattlesnakes, and several others — which he was using to examine the generality of shock-elicited aggression and interspecies shock-elicited aggression. And, of course, there was the token economy ward upstairs! The lab was a veritable cornucopia of behavior-analytic research.

My experience with Nate was much more than just a passive exposure to a host of interesting experiments. It was a learning experience the likes of which I had never had before. Ever. That summer I became a behavior analyst, experimentally and conceptually. On the one hand, it was not an easy experience. Nate was blunt, demanding, impatient, constantly probing, and relentless in the pursuit of answers — all things that I am not sure I appreciated at the time, but certainly have come to appreciate over time. On the other hand, Nate was brilliant, always intellectually curious, incisive in isolating the controlling variables of the behavior in which he was interested, and totally committed to behavior analysis as a world view.

I learned from Nate, through example, how to formulate good experimental questions, develop appropriate methods for answering the questions, identify and then isolate critical controlling variables, always follow the data, and persist until answers were forthcoming. He taught many others in our discipline these same lessons, in the same way. His comprehensive experimental analysis of punishment that began with his dissertation and continued for some fifteen years thereafter is, for me, the single best example of a systematic investigation of a research problem in the history of the experimental analysis of behavior. That research program was, from start to end, all

about isolating and controlling environmental variables responsible for the effects of punishers on behavior. There were no ghosts in the machine as he flawlessly allowed the data to guide him to the next questions in an ever-branching array of experiments characterized by elegance in their simplicity and creativity. The tactics and strategy of his research on punishment also can be seen in his systematic analyses of other problems, such as aggression and human verbal behavior. All of this work can be summarized in a word. Brilliant.

Equally brilliant was Nate's applied research, which anticipated, and probably helped precipitate, the current emphasis on translational research in psychology. Beginning with a study, published with Ogden Lindsley, of reinforcement of cooperation by children (Azrin & Lindsley, 1956), Nate's commitment to bettering the human condition through behavior analysis gained both momentum and scope across his career. Devices for controlling smoking and improving posture helped define and develop the self-management sector of applied behavior analysis. His monumental work with Ted Allyn (Allyn & Azrin, 1965) on token economies went mainstream decades ago. Thousands, if not millions, of people have used (and experienced) the Foxx and Azrin toilet training method. Nate's equally renowned job club programs have benefitted people in many places around the world.

Nate Azrin was a peerless pioneer of behavior analysis. Through his research and professional leadership he set the course for much of what is contemporary behavior analysis. He more than earned his token.

### References

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