

CURRENT LITERATURE ON ANIMAL LEARNING

Citations of current literature are arranged in outline form so that readers may easily find the particular articles in which they are interested. The literature on Animal and Physiological Psychology is divided into two parts, with each part appearing in alternate months. The part covered here consists of Animal Learning. The part to be published next month will consist of citations on Animal Behavior (exclusive of Animal Learning) and Physiological Psychology. The principal headings used are given on the cover along with page references.

ANIMAL LEARNING AND RETENTION

METHODS

- BALL, F. M. (Connecticut Coll., New London, Conn. 06320), & DESIDERATO, O. An inexpensive dual lead slip-ring for use with tail-shock electrodes. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 179-180.
- BEAUCHAMP, J. (State Univ. of New York, Binghamton, N.Y. 13901), DONOVICK, P. J., & BURRIGHT, R. G. An automated system for long term and continuous computer compatible recording of feeding, drinking, and general activity behaviors of rodents. *Physiology & Behavior*, 1972, 8, 765-768.
- BROSGOLE, L. (St. John's Univ., Jamaica, N.Y. 11432), SOBRIAN, S. K., & CONTINO, A. F. Out of the frying pan into the goalbox. *Behavior Research Methods & Instrumentation*, 1972, 4, 147-148.
- CARLSON, K. R. (Dept. of Pharmacol., Univ. of Pittsburgh Sch. of Med., Pittsburgh, Pa. 15213), & SPALLA, L. J. A system for cutaneous electrical stimulation mimicking touch. *Behavior Research Methods & Instrumentation*, 1972, 4, 199-200.
- CLARK, L. D. (Dept. of Psychiat., Univ. of Utah Coll. of Med., Salt Lake City, Utah 84112), & NAKASHIMA, E. N. Measurement of social dominance in squirrel monkeys. *Behavior Research Methods & Instrumentation*, 1972, 4, 143-144.
- CROWELL, C. R. (Univ. of Iowa, Iowa City, Iowa 52240), & FREI, L. A circuit to permit an electronic drinkometer to operate during footshock. *Behavior Research Methods & Instrumentation*, 1972, 4, 193-194.
- HALES, R. S. (Macquarie Univ., Sydney, Australia), CRANCHER, P., & KING, M. G. An apparatus for operant conditioning of *Octopus cyaneus* Gray. *Behavior Research Methods & Instrumentation*, 1972, 4, 145-146.
- LOOP, M. S. (Florida State Univ., Tallahassee, Fla. 32306), & BERKLEY, M. A. Conditioned suppression as a psychophysical technique for the cat. *Behavior Research Methods & Instrumentation*, 1972, 4, 121-124.
- MacNEIL, D. A. (Rsch. Div., Hoffmann-LaRoche Inc., Nutley, N.J. 07110), GOWER, M. M., & KUEHN, A. A device for dispensing small animals. *Behavior Research Methods & Instrumentation*, 1972, 4, 225.
- MAURUS, M. (Max-Planck-Inst. for Psychiat., Dept. of Primate Behav., 8 München 40, Kraepelinstr. 2, West Germany), HÖHNE, A., PEETZ, H., & WANKE, J. Technical requirements for the recording of significant social signals in squirrel monkey groups. *Physiology & Behavior*, 1972, 8, 969-971.
- MORGRET, M. K. (Washington State Univ., Pullman, Wash. 99163), & DENGERINK, H. A. The squeal as an indicator of aggression in mice. *Behavior Research Methods & Instrumentation*, 1972, 4, 138-140.
- PARROTT, R. F. (Dept. of Physiol., Royal Veterinary Coll., Royal College St., London, England), & SMITH, K. S. A punched tape apparatus for computer analysis of male rat sexual behaviour. *Physiology & Behavior*, 1972, 8, 787-789.
- SMITH, S. G. (Dept. of Pharmacol., Univ. of Mississippi, University, Miss. 38677). A comparison of three procedures for automatic magazine and key-peck training in the pigeon. *Psychological Record*, 1972, 22, 211-216.
- THIEL, V. (Depts. of Zool. & Psychol., Univ. of Toronto, Toronto, Ont., Canada), BARNES, D. S., & MROSOVSKY, N. A simple method for recording activity patterns of small animals. *Physiology & Behavior*, 1972, 8, 549-551.
- #### CONDITIONING
- DELACOUR, J. (Centre d'Etudes de Physiologie nerveuse du C.N.R.S., Département de Psychophysiologie, 4, avenue Gordon-Bennett, 75-Paris 16e, France), LIBOUBAN, S., & McNEIL, M. Premotor cortex and instrumental behavior in monkeys. *Physiology & Behavior*, 1972, 8, 299-305.
- GARCIA, J. (State Univ. of New York, Stony Brook, N.Y. 11790), HANKINS, W. G., ROBINSON, J. H., & VOGT, J. L. Bait shyness: Tests of CS-US mediation. *Physiology & Behavior*, 1972, 8, 807-810.
- PARE, W. P. (Pavlovian Rsch. Lab., VA Hosp., Perry Point, Md. 21902). Conditioning and avoidance responding effects on gastric secretion in the rat with chronic fistula. *Journal of Comparative & Physiological Psychology*, 1972, 80, 150-162.
- SMITH, R. F. (Univ. of Utah, Salt Lake City, Utah 84112), GUSTAVSON, C. R., & GREGOR, G. L. Incompatibility between the pigeons' unconditioned response to shock and the conditioned key-peck response. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 147-153.
- SUTTERER, J. R. (Exptl. Psychol. Lab., Syracuse Univ., Archbold Stadium, Syracuse, N.Y. 13210), & OBRIST, P. A. Heart rate and general activity alterations of dogs during several aversive conditioning procedures. *Journal of Comparative & Physiological Psychology*, 1972, 80, 314-326.
- TAIT, R. W. (Univ. of Iowa, Iowa City, Iowa 52240), BLACK, M., KATZ, M., & SUBOSKI, M. D. Discriminative sensory preconditioning. *Canadian Journal of Psychology*, 1972, 26, 201-205.
- Classical Conditioning
- DOSTÁLEK, C. (Lab. of Graphic Diagnostics, Czechoslovak Acad. of Sci., Prague, Czechoslovakia), & KRASA, H. Backward conditioning: One-session vs. ten-session-experiment. *Activitas Nervosa Superior*, 1972, 14, 58-59.
- HOLMES, P. W. (Coll. of Charleston, Charleston, S.C. 29401). Conditioned suppression with extinction as the signalled stimulus. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 129-132.

- HUSTON, J. P. (Inst. of Physiol., Czechoslovak Acad. of Sci., Prague, Czechoslovakia), & BROZEK, G. Attempt to classically condition eating and drinking elicited by hypothalamic stimulation in rats. *Physiology & Behavior*, 1972, 8, 973-975.
- OAKLEY, D. A. (Med. Rsch. Council Unit on Neural Mechanisms of Behav., University Coll. London, London, W.C.1, England), & RUSSELL, I. S. Neocortical lesions and Pavlovian conditioning. *Physiology & Behavior*, 1972, 8, 915-926.
- ROZIN, P. (Univ. of Pennsylvania, Philadelphia, Pa. 19104), & REE, P. Long extension of effective CS-US interval by anesthesia between CS and US. *Journal of Comparative & Physiological Psychology*, 1972, 80, 43-48.
- SHINKMAN, P. G. (Univ. of North Carolina, Chapel Hill, N.C. 27514), & KAUFMAN, K. P. Posttrial hippocampal stimulation and CER acquisition in the rat. *Journal of Comparative & Physiological Psychology*, 1972, 80, 283-292.
- Operant Conditioning
- BUENO, O. F. A. (Setor de Psicofarmacologia, Departamento de Bioquimica e Farmacologia, Escola Paulista de Medicina, São Paulo, Brazil), & CARLINI, E. A. Dissociation of learning in marihuana tolerant rats. *Psychopharmacologia* (Berlin), 1972, 25, 49-56.
- GOLUB, M. S. (Behav. Pharmacol. Lab., Boston Univ. Med. Sch., 80 E. Concord, Boston, Mass. 02118), CHEAL, M. L., & DAVIS, R. E. Effects of electroconvulsive shock and puromycin on operant responding in goldfish. *Physiology & Behavior*, 1972, 8, 573-578.
- HARLESS, M. D. (Midwestern Univ., Wichita Falls, Tex. 76038). Group operant behavior in free-feeding squirrel monkeys. *Psychological Reports*, 1972, 30, 572-574.
- SMITH, S. G. (Dept. of Pharmacol., Univ. of Mississippi, University, Miss. 38677). A comparison of three procedures for automatic magazine and key-peck training in the pigeon. *Psychological Record*, 1972, 22, 211-216.
- DISCRIMINATION LEARNING
- ANTON, B. S., & BENNETT, T. L. (Colorado State Univ., Fort Collins, Colo. 80521). Role of tactal-kinesthetic feedback in transfer of perceptual learning in the golden hamster. *Psychonomic Science*, 1972, 28, 157-158.
- CERASO, J. (Inst. for Cognitive Studies, Rutgers, The State Univ., New Brunswick, N.J. 08903), LONDON, R., & WALLACE, R. Discrimination learning as probability learning. *Canadian Journal of Psychology*, 1972, 26, 71-77.
- MASER, J. D. (Temple Univ., Philadelphia, Pa. 19122), & HAMMOND, L. J. Disruption of a temporal discrimination by the minor tranquilizer, oxazepam. *Psychopharmacologia* (Berlin), 1972, 25, 69-76.
- MEANS, L. W., WOODRUFF, M. L. (Univ. of Florida, Gainesville, Fla. 32601), & ISAACSON, R. L. The effect of a twenty-four hour intertrial interval on the acquisition of spatial discrimination by hippocampally damaged rats. *Physiology & Behavior*, 1972, 8, 457-462.
- NOVÁKOVÁ, V. (Inst. of Physiol., Czechoslovak Acad. of Sci., Prague, Czechoslovakia), SANDRITTER, W., & SCHLUETER, G. Ribonucleic acid and learning in old rats. *Activitas Nervosa Superior*, 1971, 13, 253-258.
- SASLOW, C. A. (Oregon State Univ., Corvallis, Oreg. 97331). Behavioral definition of minimal reaction time in monkeys. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 87-106.
- WARREN, J. M. (Pennsylvania State Univ., University Park, Pa. 16802), & DIVAC, I. Delayed response performance by rhesus monkeys with midprincipalis lesions. *Psychonomic Science*, 1972, 28, 146-148.
- WEISSMAN, A. (Pfizer, Inc., Groton, Conn. 06340). Elicitation by a discriminative stimulus of water-reinforced behavior and drinking in water-satiated rats. *Psychonomic Science*, 1972, 28, 155-156.
- ZIMMERMAN, D. W. (Carleton Univ., Ottawa, Ont., Canada). Discrete operant discrimination maintained by conditioned reinforcement. *Psychonomic Science*, 1972, 28, 33-36.
- Successive Discrimination
- FARTHING, G. W. (Univ. of Maine, Orono, Maine 04473). overshadowing in the discrimination of successive compound stimuli. *Psychonomic Science*, 1972, 28, 29-32.
- MACPHAIL, E. M. (Lab. of Exptl. Psychol., Univ. of Sussex, Sussex, England). Within-day serial reversal of a position discrimination by pigeons. *Quarterly Journal of Experimental Psychology*, 1972, 24, 200-206.
- MANNING, F. J. (Dept. of Exptl. Psychol., Div. of Neuropsychiat., Walter Reed Army Inst. of Rsch., Walter Reed Army Med. Ctr., Washington, D.C. 20012). Serial reversal learning by monkeys with inferotemporal or foveal prestriate lesions. *Physiology & Behavior*, 1972, 8, 177-181.
- TIGHE, T. J. (Dartmouth Coll., Hanover, N.H. 03755), & FREY, K. Subproblem analysis of discrimination shift learning in the rat. *Psychonomic Science*, 1972, 28, 129-133.
- WOODARD, W. T. (Lab. of Sensory Sci., Univ. of Hawaii, Honolulu, Hawaii 96822), & BITTERMAN, M. E. Further studies of reversal learning with singly presented stimuli in pigeons and goldfish. *Psychonomic Science*, 1972, 28, 170-172.
- Simple Discrimination Learning
- BUREŠOVÁ, O. (Inst. of Physiol., Czechoslovak Acad. of Sci., Prague, Czechoslovakia), & BUREŠ, J. Determinants of successful interhemispheric transfer of pattern discrimination in rats. *Activitas Nervosa Superior*, 1972, 14, 18-23.
- CAMPBELL, P. E. (Southern Methodist Univ., Dallas, Tex. 75222), CRUMBAUGH, C. M., MARSHALL, R. L., & SPARLING, C. L. Pattern discrimination based on intermittent punishment. *Psychological Reports*, 1972, 30, 1005-1006.
- FARTHING, G. W. (Univ. of Maine, Orono, Maine 04473), & HEARST, E. Stimulus generalization and discrimination along the click-frequency (flutter) continuum in pigeons. *Perception & Psychophysics*, 1972, 12, 176-182.
- GLENDENNING, R. L. (Duke Univ., Durham, N.C. 27706). Effects of training between two unilateral lesions of visual cortex upon ultimate retention of black-white discrimination habits by rats. *Journal of Comparative & Physiological Psychology*, 1972, 80, 216-229.
- STOLLER, W. L. (Indiana Univ., Kokomo, Ind. 46901). Effects of septal and amygdaloid lesions on discrimination, eating and drinking. *Physiology & Behavior*, 1972, 8, 823-828.
- SUTTON, D. (Exotic Environments Lab., Arizona State Univ., Tempe, Ariz. 85281), & TAYLOR, E. M. Role of visual cuing in force discrimination by monkeys. *Physiology & Behavior*, 1972, 8, 677-681.
- THOMAS, D. R. (Univ. of Colorado, Boulder, Colo. 80302), & SETZER, J. Stimulus generalization gradients for auditory intensity in rats and

- guinea pigs. *Psychonomic Science*, 1972, 28, 22-24.
- THORNE, B. M. (Mississippi State Univ., State College, Miss. 39762). The red nucleus and olfactory discrimination in the rat. *Journal of General Psychology*, 1972, 86, 225-229.
- MAZE & RUNWAY BEHAVIOR**
(See also Reinforcement, Retention)
- CAPALDI, E. D. (Purdue Univ., Lafayette, Ind. 47907). Effect on rats' straight alley performance of shifts in body weight as a function of method of weight maintenance. *Psychonomic Science*, 1972, 28, 44-46.
- DRU, D. (Huntington Inst. of Applied Med. Rsch., Pasadena, Calif. 91100), AGNEW, W. F., & GREENE, E. Effects of tellurium ingestion on learning capacity of the rat. *Psychopharmacologia* (Berlin), 1972, 24, 508-515.
- HICKS, R. E. (Tulane Univ., New Orleans, La. 70118), & DACHOWSKI, L. Relative speed decrement following a change in runway inclination as a function of amount of prior training. *Journal of General Psychology*, 1972, 87, 69-76.
- KOTTLER, P. D. (Reg. Primate Rsch. Ctr., Univ. of Wisconsin, Madison, Wis. 53706), BOWMAN, R. E., & HAASCH, W. D. RNA metabolism in the rat brain during learning following intravenous and intraventricular injections of ³H-cytidine. *Physiology & Behavior*, 1972, 8, 291-297.
- SMITH, H. V. (Trinity Coll., Dublin 2, Ireland). Effects of environmental enrichment on open-field activity and Hebb-Williams problem solving in rats. *Journal of Comparative & Physiological Psychology*, 1972, 80, 163-168.
- THOMAS, J. B. (Oberlin Coll., Oberlin, Ohio 44074). Stimulus perseveration and choice behavior in rats with septal lesions. *Journal of Comparative & Physiological Psychology*, 1972, 80, 97-105.
- TITUS, H. E. (Muskingum Coll., New Concord, Ohio 43762), & COSTANZO, D. J. Effects of puromycin on learning in the toad. *Psychological Reports*, 1972, 30, 627-630.
- Alternation*
- DIVAC, I. (Inst. of Neurophysiol., Julianne Maries Vej 36, Copenhagen Ø, Denmark). Delayed alternation in cats with lesions of the prefrontal cortex and the caudate nucleus. *Physiology & Behavior*, 1972, 8, 519-522.
- GENTILE, A. M. (Teachers Coll., Columbia Univ., New York, N.Y. 10027), & STAMM, J. S. Supplementary cues and delayed-alternation performance of frontal monkeys. *Journal of Comparative & Physiological Psychology*, 1972, 80, 230-237.
- IWAHARA, S. (Tokyo Univ. of Ed., Tokyo, Japan), OISHI, H., YAMAZAKI, S., & SAKAI, K. Effects of chlordiazepoxide upon spontaneous alternation and the hippocampal electrical activity in white rats. *Psychopharmacologia* (Berlin), 1972, 24, 496-507.
- AVOIDANCE & PUNISHMENT**
(See also Conditioned Fear, Aggression)
- CROWLEY, T. P. (Univ. of Southern Mississippi, Hattiesburg, Miss. 39401), & SISEMORE, D. A. The failure of methamphetamine hydrochloride to produce dissociation of an escape response. *Psychonomic Science*, 1972, 28, 50-52.
- NIEMEGEERS, C. J. E. (Janssen Pharmaceutica, Rsch. Labs., B-2340 Beerse, Belgium), VERBRUGGEN, F. J., WAUQUIER, A., & JANSEN, P. A. J. The influence of haloperidol and amphetamine on two different noise-escape situations in rats. *Psychopharmacologia* (Berlin), 1972, 25, 22-31.
- PRICE, K. P. (State Univ. of New York, Stony Brook, N.Y. 11790). Predictable and unpredictable shock: Their pathological effects on restrained and unrestrained rats. *Psychological Reports*, 1972, 30, 419-426.
- Avoidance Learning*
- BAUM, M. (Univ. of Moncton, Moncton, N.B., Canada). Flooding (response prevention) in rats: The effects of immediate vs. delayed flooding and of changed illumination conditions during flooding. *Canadian Journal of Psychology*, 1972, 26, 190-200.
- BEST, P. J. (Univ. of Virginia, Charlottesville, Va. 22901). Effects of shock intensity on transfer of shock avoidance under unilateral spreading depression. *Physiology & Behavior*, 1972, 8, 279-282.
- BIGNAMI, G. (Dept. of Therapeut. Chem., Istituto Superiore di Sanità, Rome, Italy). Facilitation of avoidance acquisition by LSD-25. Possible effects on drive modulating systems. *Psychopharmacologia* (Berlin), 1972, 25, 146-151.
- BRYANT, R. C. (Brain Rsch. Inst. & Dept. of Biochem., Univ. of Tennessee Med. Units, Memphis, Tenn. 38103), SANTOS, N. N., & BYRNE, W. L. Synthetic scotophobin in goldfish: Specificity and effect on learning. *Science*, 1972, 177, 635-636.
- BYRUM, R. P., & MELVIN, K. B. (Univ. of Alabama, University, Ala. 35486). Self-punitive avoidance behavior in the Mongolian gerbil. *Psychonomic Science*, 1972, 28, 13-15.
- DENTI, A. (Instituto de Biología y Medicina Experimental, Obligado 2490, Buenos Aires, Argentina), & EPSTEIN, A. Sex differences in the acquisition of two kinds of avoidance behavior in rats. *Physiology & Behavior*, 1972, 8, 611-615.
- DI GIUSTO, E. L. (Macquarie Univ., Sydney, Australia), & KING, M. G. Magnesium pemoline: Enhancement of performance. *Psychological Reports*, 1972, 30, 863-866.
- GIBBON, J. (722 W. 168th St., New York, N.Y. 10032), & HUNT, H. F. Post-shock discriminations in the acquisition of free-operant avoidance by rats. *Psychological Record*, 1972, 22, 151-159.
- GREENWAY, P. (Univ. of Aberdeen, Aberdeen, Scotland AB9 2UB), & BITTERMAN, M. E. Avoidance conditioning of general activity in the goldfish. *Behavior Research Methods & Instrumentation*, 1972, 4, 201-202.
- GRÖTA, L. J. (Univ. of Rochester Sch. of Med. & Dent., Rochester, N.Y. 14642), & ADER, R. Effects of early experience with electric shock and dexamethasone on avoidance conditioning at adulthood. *Psychonomic Science*, 1972, 28, 10-12.
- HARTMANN, E. (Sleep & Dream Lab., 591 Morton St., Boston, Mass. 01545), & STERN, W. C. Desynchronized sleep deprivation: Learning deficit and its reversal by increased catecholamines. *Physiology & Behavior*, 1972, 8, 585-587.
- HOLLOWAY, F. A. (Dept. of Psychiat. & Behav. Sci., Univ. of Oklahoma Health Sci. Ctr., Oklahoma City, Okla. 73190). Effects of septal chemical injections on asymptotic avoidance performance in cats. *Physiology & Behavior*, 1972, 8, 463-469.
- HOLLOWAY, F. A. (Dept. of Psychiat. & Behav. Sci., Univ. of Oklahoma Health Sci. Ctr., Oklahoma City, Okla. 73190). State-dependent effects of ethanol on active and passive avoidance learning. *Psychopharmacologia* (Berlin), 1972, 25, 238-261.
- HURWITZ, H. M. B. (Catawba Coll., Salisbury, N.C. 28144), ROBERTS, A. E., & GREENWAY, L. Extinction and maintenance of avoidance behavior using response-independent shocks.

- Psychonomic Science, 1972, 28, 176-178.
- IKARD, W. L., BENNETT, W. C., LUNDIN, R. W., & TROST, R. C. (Univ. of the South, Sewanee, Tenn. 37375). Acquisition and extinction of the conditioned avoidance response: A comparison between male rats and estrus and non-estrus female rats. *Psychological Record*, 1972, 22, 249-254.
- KULKARNI, A. S. (Dept. of Pharmacol., Dow Human Health Resch Labs., Zionsville, Ind. 46077). Selective increase in avoidance responding by methamphetamine in naive rats. *Psychopharmacologia* (Berlin), 1972, 24, 449-455.
- LOCKARD, J. S. (Dept. of Neurol. Surg., Univ. of Washington, Seattle, Wash. 98195), EHLE, A. L., & FOLTZ, E. L. Diurnal variation of ileum motility in monkey during different feeding and avoidance-conditioning schedules. *Physiology & Behavior*, 1972, 8, 195-200.
- MARTINSEN, D. L., & KIMELDORF, D. J. (Radiation Ctr., Oregon State Univ., Corvallis, Oreg. 97331). Conditioned spatial avoidance behavior of ants induced by X-rays. *Psychological Record*, 1972, 22, 225-232.
- MORRISON, C. F. (Tobacco Rsch. Council Labs., Harrogate, England), & STEPHENSON, J. A. Drug effects on unconditioned light-avoidance in the rat. *Psychopharmacologia* (Berlin), 1972, 24, 456-461.
- PARE, W. P. (Pavlovian Rsch. Lab., VA Hosp., Perry Point, Md. 21902). Conditioning and avoidance responding effects on gastric secretion in the rat with chronic fistula. *Journal of Comparative & Physiological Psychology*, 1972, 80, 150-162.
- PARSONS, P. J., & SPEAR, N. E. (Rutgers-The State Univ., New Brunswick, N.J. 08903). Long-term retention of avoidance learning by immature and adult rats as a function of environmental enrichment. *Journal of Comparative & Physiological Psychology*, 1972, 80, 297-303.
- RIESS, D. (Rsch. Hosp., Galesburg, Ill. 61401). Vicarious conditioned acceleration: Successful observational learning of an aversive Pavlovian stimulus contingency. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 181-186.
- RIESS, D. (Rsch. Hosp., Galesburg, Ill. 61401), & FARRAR, C. H. Unsignalled avoidance in a shuttlebox: A rapid acquisition, high-efficiency paradigm. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 169-178.
- SIECK, M. H. (Univ. of California, Riverside, Calif. 92502). The role of the olfactory system in avoidance learning and activity. *Physiology & Behavior*, 1972, 8, 705-710.
- SPEVACK, A. A. (Virginia Polytech. Inst. & State Univ., Blacksburg, Va. 24061). The permanence of ECS effects in a one-trial discriminated avoidance paradigm. *Psychonomic Science*, 1972, 28, 41-43.
- SPROTT, R. L. (Jackson Lab., Bar Harbor, Maine 04609). Passive-avoidance conditioning in inbred mice: Effects of shock intensity, age, and genotype. *Journal of Comparative & Physiological Psychology*, 1972, 80, 327-334.
- THOMAS, J. B. (Oberlin Coll., Oberlin, Ohio 44074), & VAN ATTA, L. Hyperirritability, lever-press avoidance, and septal lesions in the albino rat. *Physiology & Behavior*, 1972, 8, 225-232.
- THOMPSON, R. W. (Western Washington State Coll., Bellingham, Wash. 98225), & NIELSEN, C. (The effect of scopolamine on the Kamin effect: A test of the parasympathetic overreaction hypothesis. *Psychonomic Science*, 1972, 28, 140-142.
- VAN HOESEN, G. W. (Neurol. Unit., Harvard Med. Sch., Boston City Hosp., Boston, Mass. 02118), WILSON, L. M., MacDOUGALL, J. M., & MITCHELL, J. C. Selective hippocampal complex deafferentation and deafferentation and avoidance behavior in rats. *Physiology & Behavior*, 1972, 8, 873-879.
- ### Shuttle Avoidance
- ASHE, V. M. (Univ. of Colorado, Boulder, Colo. 80302), & McCAIN, G. Comparison of one-way and shuttle-avoidance performance of gerbils and rats. *Journal of Comparative & Physiological Psychology*, 1972, 80, 293-296.
- PAGANO, R. R. (Univ. of Washington, Seattle, Wash. 98195), & LOVELY, R. H. Diurnal cycle and ACTH facilitation of shuttlebox avoidance. *Physiology & Behavior*, 1972, 8, 721-723.
- ROŠIĆ, N. (Dept. of Pharmacol., Med. Faculty, Univ. of Belgrade, Belgrade, Yugoslavia), & MILOŠEVIC, M. Two-way (shuttle-box) avoidance in rats after paraoxon treatment. *Activitas Nervosa Superior*, 1971, 13, 241-245.
- ### Passive Avoidance
- AQUINO-CÍAS, J. (I. C. B. "Victoria de Girón," Facultad de Ciencias Medicas, Universidad de la Habana, Calle 146 y Avenida 31, Marianao, Havana, Cuba), ANEIRO-SIBA, R., FERNÁNDEZ-YERO, F., & HERNÁNDEZ-MESA, N. Effects of epileptic foci in the visual cortex of the rat on passive avoidance learning. *Physiology & Behavior*, 1972, 8, 957-961.
- BARCIK, J. D. (Windham Coll., Putney, Vt. 05346), & COLLINS, D. E. Shock-elicited defensive behavior and passive avoidance performance. *Psychonomic Science*, 1972, 28, 37-40.
- DEADWYLER, S. A. (Dept. of Psychobiol., Univ. of California, Irvine, Calif. 92664), MONTGOMERY, D., & WYERS, E. J. Passive avoidance and carbachol excitation of the caudate nucleus. *Physiology & Behavior*, 1972, 8, 631-635.
- SPROTT, R. L. (Jackson Lab., Bar Harbor, Maine 04609). Passive-avoidance conditioning in inbred mice: Effects of shock intensity, age, and genotype. *Journal of Comparative & Physiological Psychology*, 1972, 80, 327-334.
- ### Aversive Learning
- CHURCH, R. M. (Brown Univ., Providence, R.I. 02912), & GETTY, D. J. Some consequences of the reaction to an aversive event. *Psychological Bulletin*, 1972, 78, 21-27.
- FIBIGER, H. C. (Div. of Neurol. Sci., Dept. of Psychiat., Univ. of British Columbia, Vancouver, B.C., Canada), MERTZ, P. H., & CAMPBELL, B. A. The effect of para-chlorophenylalanine on aversion thresholds and reactivity to foot shock. *Physiology & Behavior*, 1972, 8, 259-263.
- MARX, M. H. (Univ. of Missouri, Columbia, Mo. 65201). Unconditioned chewing response in the rat as a measure of reaction to frustration. *Psychological Reports*, 1972, 30, 613-614.
- RIESS, D. (Rsch. Hosp., Galesburg, Ill. 61401). Vicarious conditioned acceleration: Successful observational learning of an aversive Pavlovian stimulus contingency. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 181-186.
- ### Punishment
- CAMPBELL, P. E. (Southern Methodist Univ., Dallas, Tex. 75222), CRUMBAUGH, C. M., MARSHALL, R. L., & SPARLING, C. L. Pattern discrimination based on intermittent punishment. *Psychological Reports*, 1972, 30, 1005-1006.
- CARMAN, J. B. (Univ. of North Dakota, Grand Forks, N. Dak.

- 58201). Generalization of activity following discriminative punishment training. *Psychonomic Science*, 1972, 28, 19-21.
- SHANAB, M. E. (Fresno State Coll., Fresno, Calif. 93710), & WHITE, R. Positive contrast obtained with punishment. *Journal of General Psychology*, 1972, 86, 247-251.
- SODETZ, F. J. (Dept. of Exptl. Psychol., Walter Reed Army Inst. of Rsch., Washington, D.C. 20012), & KOPPELL, S. Suppressive effects of punishment of operant responding in rats with septal lesions. *Physiology & Behavior*, 1972, 8, 837-840.
- ### REINFORCEMENT
- ANTON, B. S., & BENNETT, T. L. (Colorado State Univ., Fort Collins, Colo. 80521). Role of tactual-kinesthetic feedback in transfer of perceptual learning in the golden hamster. *Psychonomic Science*, 1972, 28, 157-158.
- CREED, T. L., & FERSTER, C. B. (American Univ., Washington, D.C. 20016). Space as a reinforcer in a continuous free-operant environment. *Psychological Record*, 1972, 22, 161-167.
- DINSMOOR, J. A. (Indiana Univ., Bloomington, Ind. 47401), BROWNE, M. P., & LAWRENCE, C. E. A test of the negative discriminative stimulus as a reinforcer of observing. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 79-85.
- DUNCAN, B., & FANTINO, E. (Univ. of California, San Diego, La Jolla, Calif. 92037). The psychological distance to reward. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 23-34.
- WILTON, R. N. (Univ. of Texas, Austin, Tex. 78712), & CLEMENTS, R. O. A failure to demonstrate behavioral contrast when the S⁺ and S⁻ components of a discrimination schedule are separated by about 23 hours. *Psychonomic Science*, 1972, 28, 137-139.
- ### Schedules of Reinforcement (See also Extinction for Partial Reinforcement)
- BYRD, L. D. (New England Reg. Primate Rsch. Ctr., Harvard Med. Sch., Southborough, Mass. 01772). Responding in the squirrel monkey under second-order schedules of shock delivery. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 155-167.
- CAMPBELL, P. E. (Southern Methodist Univ., Dallas, Tex. 75222), & FIXSEN, D. L. Contingent and noncontingent schedules of continuous and partial reward in rats. *Psychological Reports*, 1972, 30, 975-982.
- FANTINO, E. (Univ. of California, San Diego, La Jolla, Calif. 92037), SQUIRES, N., DELBRÜCK, N., & PETERSON, C. Choice behavior and the accessibility of the reinforcer. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 35-43.
- FISCHER, G. J. (Washington State Univ., Pullman, Wash. 99163). Maximizing and role of correction method in probability learning in chicks. *Journal of Comparative & Physiological Psychology*, 1972, 80, 49-53.
- KILLEEN, P. (Arizona State Univ., Tempe, Ariz. 85281). A yoked-chamber comparison of concurrent and multiple schedules. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 13-22.
- RANDOLPH, J. J. (Gen. Pharmacol. Dept., Abbott Labs., North Chicago, Ill. 60064). A switching analysis of behavior controlled by an adjusting ratio schedule. *Psychological Record*, 1972, 22, 259-265.
- SCHNEIDER, J. W. (McMaster Univ., Hamilton, Ont., Canada). Choice between two-component chained and tandem schedules. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 45-60.
- SMITH, J. B. (Univ. of Mississippi, University, Miss. 38677), & CLARK, F. C. Two temporal parameters of food postponement. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 1-12.
- TOPPING, J. S. (Mississippi State Univ., State College, Miss. 39762), & LARMI, O. K., JR. Behavioral contrast as a function of changes in reinforcement frequency. *Psychological Reports*, 1972, 30, 583-587.
- VAN HOESEN, G. W. (Neurol. Unit, Harvard Med. Sch., Boston City Hosp., Boston, Mass. 02118), MACDOUGALL, J. M., & MITCHELL, J. C. Discrimination of emitted behavior following septal area lesions in rats. *Journal of Comparative & Physiological Psychology*, 1972, 80, 106-122.
- ### Interval Schedules
- BOREN, M. C. P. (Univ. of Maryland, College Park, Md. 20742), & GOLLUB, L. R. Accuracy of performance on a matching-to-sample procedure under interval schedules. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 65-77.
- LATTAL, K. A. (West Virginia Univ., Morgantown, W. Va. 26506). Response-reinforcer independence and conventional extinction after fixed-interval and variable-interval schedules. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 133-140.
- PIERCE, C. H. (Dept. of Recreation, Univ. of Waterloo, Waterloo, Ont., Canada), HANFORD, P. V., & ZIMMERMAN, J. Effects of different delay of reinforcement procedures on variable-interval responding. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 141-146.
- ### Reward
- CAMPBELL, P. E. (Southern Methodist Univ., Dallas, Tex. 75222), & KNOUSE, S. B. Extinction following delayed reward: A review. *Psychonomic Monograph Supplements*, 1972, 4(15, Whole No. 63).
- COUSSENS, W. R. (Univ. of Mississippi, University, Miss. 38677). Imparting reinforcing property to the taste of morphine through morphine injections. *Psychonomic Science*, 1972, 28, 134-136.
- FOX, P. A. (Appalachian State Univ., Boone, N.C. 28607). Reward- and nonreward-produced stimuli and performance to patterned reinforcement in rats. *Journal of Comparative & Physiological Psychology*, 1972, 80, 342-348.
- GONZALEZ, R. C. (Bryn Mawr Coll., Bryn Mawr, Pa. 19010). Patterning in goldfish as a function of magnitude of reinforcement. *Psychonomic Science*, 1972, 28, 53-55.
- HOBBS, S. H. (Univ. of Georgia, Athens, Ga. 30601), & BUNNELL, B. N. DRL performance in hamsters with septal lesions. *Psychonomic Science*, 1972, 28, 143-145.
- LAMBERT, J. V., & HAMMOND, L. J. (Temple Univ., Philadelphia, Pa. 19122). Specificity of reinforcer expectancy and the frustration effect. *Journal of Experimental Psychology*, 1972, 94, 329-334.
- LENZER, I. I. (St. Mary's Univ., Halifax, N.S., Canada). Differences between behavior reinforced by electrical stimulation of the brain and conventionally reinforced behavior: An associative analysis. *Psychological Bulletin*, 1972, 78, 103-118.
- MABRY, P. D. (Princeton Univ., Princeton, N.J. 08540), & PEELER, D. F. Effect of septal lesions on response to frustrative nonreward. *Physiology & Behavior*, 1972, 8, 909-913.
- SINGH, D. (Univ. of Texas, Austin, Tex. 78712). Preference for mode of obtaining reinforcement in rats

- with lesions in septal or ventromedial hypothalamic area. *Journal of Comparative & Physiological Psychology*, 1972, 80, 259-268.
- SLANGEN, J. L. (Rudolf Magnus Inst. for Pharmacol., Med. Faculty, Univ. of Utrecht, Vondellaan 6, Utrecht, The Netherlands). The reinforcing effect of electrical stimulation of the tongue in thirsty rats. *Physiology & Behavior*, 1972, 8, 565-568.
- S L O N A K E R , R . L . , & HOTHERSALL, D. (Lab. of Comp. & Physiol. Psychol., Ohio State Univ., Columbus, Ohio 43212). Collateral behaviors and the DRL deficit of rats with septal lesions. *Journal of Comparative & Physiological Psychology*, 1972, 80, 91-96.
- TONDAT, L. M., & DALY, H. B. (State Univ. of New York, Oswego, N.Y. 13126). The combined effects of frustrative nonreward and shock on aggression between rats. *Psychonomic Science*, 1972, 28, 25-28.
- TOPPING, J. S. (P.O. Drawer PF, Mississippi State Univ., State College, Miss. 39762), PICKERING, J. W., & JACKSON, J. A. Comparison of omission and extinction following FR reinforcement training. *Psychological Record*, 1972, 22, 221-224.
- WEISSMAN, A. (Pfizer, Inc., Groton, Conn. 06340). Elicitation by a discriminative stimulus of water-reinforced behavior and drinking in water-satiated rats. *Psychonomic Science*, 1972, 28, 155-156.
- ZIMMERMAN, D. W. (Carleton Univ., Ottawa, Ont., Canada). Discrete operant discrimination maintained by conditioned reinforcement. *Psychonomic Science*, 1972, 28, 33-36.
- ### EXTINCTION
- CAMPBELL, P. E. (Southern Methodist Univ., Dallas, Tex. 75222), & KNOUSE, S. B. Extinction following delayed reward: A review. *Psychonomic Monograph Supplements*, 1972, 4(15, Whole No. 63).
- FRIED, P. A. (Carleton Univ., Ottawa, Ont., Canada). The effect of differential hippocampal lesions and pre- and postoperative training on extinction. *Canadian Journal of Psychology*, 1972, 26, 61-70.
- GRAY, J. A. (Dept. of Exptl. Psychol., Univ. of Oxford, Oxford, England). Effects of septal driving of the hippocampal theta rhythm on resistance to extinction. *Physiology & Behavior*, 1972, 8, 481-490.
- GRAY, J. A. (Dept. of Exptl. Psychol., Univ. of Oxford, Oxford, England), ARAUJO-SILVA, M. T., & QUINTÃO, L. Resistance to extinction after partial reinforcement training with blocking of the hippocampal theta rhythm by septal stimulation. *Physiology & Behavior*, 1972, 8, 497-502.
- GRAY, J. A. (Dept. of Exptl. Psychol., Univ. of Oxford, Oxford, England), QUINTÃO, L., & ARAUJO-SILVA, M. T. The partial reinforcement extinction effect in rats with medial septal lesions. *Physiology & Behavior*, 1972, 8, 491-496.
- HOLMES, P. W. (Coll. of Charleston, Charleston, S.C. 29401). Conditioned suppression with extinction as the signalled stimulus. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 129-132.
- HURWITZ, H. M. B. (Catawba Coll., Salisbury, N.C. 28144), ROBERTS, A. E., & GREENWAY, L. Extinction and maintenance of avoidance behavior using response-independent shocks. *Psychonomic Science*, 1972, 28, 176-178.
- IKARD, W. L., BENNETT, W. C., LUNDIN, R. W., & TROST, R. C. (Univ. of the South, Sewanee, Tenn. 37375). Acquisition and extinction of the conditioned avoidance response: A comparison between male rats and estrus and non-estrus female rats. *Psychological Record*, 1972, 22, 249-254.
- LATTAL, K. A. (West Virginia Univ., Morgantown, W. Va. 26506). Response-reinforcer independence and conventional extinction after fixed-interval and variable-interval schedules. *Journal of the Experimental Analysis of Behavior*, 1972, 18, 133-140.
- MC COY, D. F. (Univ. of Kentucky, Lexington, Ky. 40506). Some effects of scopolamine on acquisition and extinction performance in rats. *Psychological Reports*, 1972, 30, 867-873.
- ORENSTEIN, H. B., SCHUMSKY, D. A., ROTH, T. (Dept. of Psychiat., Coll. of Med., Univ. of Cincinnati, Cincinnati, Ohio 45221), & BRUNNER, R. Spontaneous recovery and generalization of extinction. *Journal of General Psychology*, 1972, 86, 173-180.
- PONICKI, E. (Psychiat. Rsch. Unit, Univ. of Minnesota, Minneapolis, Minn. 55455), & THOMPSON, T. The effects of extinction of food-reinforced responding on schedule-induced polydipsia. *Psychonomic Science*, 1972, 28, 5-6.
- TOPPING, J. S. (P.O. Drawer PF, Mississippi State Univ., State College, Miss. 39762), PICKERING, J. W., & JACKSON, J. A. Comparison of omission and extinction following FR reinforcement training. *Psychological Record*, 1972, 22, 221-224.
- ### RETENTION
- LEWIS, D. J. (Univ. of Southern California, Los Angeles, Calif. 90007), & BREGMAN, N. J. The cholinergic system, amnesia and memory. *Physiology & Behavior*, 1972, 8, 511-514.
- MAH, C. J. (Univ. of British Columbia, Vancouver 8, B.C., Canada), ALBERT, D. J., & JAMIESON, J. L. Memory storage: Evidence that consolidation continues following electroconvulsive shock. *Physiology & Behavior*, 1972, 8, 283-286.
- MCGAUGH, J. L. (Dept. of Psychobiol., Sch. of Biol. Sci., Univ. of California, Irvine, Calif. 92650). Impairment and facilitation of memory consolidation. *Activitas Nervosa Superior*, 1972, 14, 64-74.
- MEDIN, D. L. (Rockefeller Univ., New York, N.Y. 10021). Evidence for short- and long-term memory in monkeys. *American Journal of Psychology*, 1972, 85, 117-120.
- MILLER, R. R. (Brooklyn Coll. of CUNY, Brooklyn, N.Y. 11210), & SPRINGER, A. D. Induced recovery of memory in rats following electroconvulsive shock. *Physiology & Behavior*, 1972, 8, 645-651.
- PARSONS, P. J., & SPEAR, N. E. (Rutgers-The State Univ., New Brunswick, N.J. 08903). Long-term retention of avoidance learning by immature and adult rats as a function of environmental enrichment. *Journal of Comparative & Physiological Psychology*, 1972, 80, 297-303.
- SANDMAN, C. A., MILLER, L. H., KASTIN, A. J. (Endocrinol. Sec., VA Hosp., 1601 Perdido St., New Orleans, La. 70146), & SCHALLY, A. V. Neuroendocrine influence on attention and memory. *Journal of Comparative & Physiological Psychology*, 1972, 80, 54-58.
- ### Amnesia
- AZMITIA, E. C., JR. (Rockefeller Univ., New York, N.Y. 10021), McEWEEN, B. S., & QUARTERMAIN, D. Prevention of ECS-induced amnesia by reestablishing continuity with the training situation. *Physiology & Behavior*, 1972, 8, 853-855.
- CHERKIN, A. (Psychobiol. Rsch. Lab., VA Hosp., Sepulveda, Calif. 91343). Retrograde amnesia in the chick: Resistance to the reminder effect. *Physiology & Behavior*, 1972, 8, 949-955.