

# CURRICULUM VITÆ

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Peter R. Killeen

## CHITS

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## BITS

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## EDUCATION

Michigan State University  
Harvard University

B.S. Psychology 1964  
Ph.D. Experimental Psychology 1969

## APPOINTMENTS

Assistant; Associate; Professor;	1968, '73, '78
Emeritage. Psychology, ASU	2009
Director Experimental/Physiological Program	1976-79, 1989-92
Chairman, Department of Psychology	1979-1983
Visiting Scholar, University of Texas, Austin	1984-1985
Visiting Scholar, Cambridge University	1992
Visiting Scholar, Centre for Advanced Study, Oslo	2004-2005
Visiting Scholar, University of Madrid	2012
Visiting Gardener, Ravens' Croft, Prescott	2010-

## HONORS, AWARDS, & ASSOCIATIONS

Woodrow Wilson, NSF, and NIMH Graduate Fellowships  
Graduate Student *Faculty of the Year* Award  
Fellow: American Psychological Association, American Psychological Society,  
Association for Behavior Analysis; Member, Psychonomic Society  
Society of Experimental Psychologists ([SEP](#), 1997; Secretary/Treasurer 2000 - '03)  
Sigma Xi (President, ASU Chapter, 1986 - 87)  
Senior Scientist Award ([K05](#), 1996; NIMH)  
President, Society for the Quantitative Analysis of Behavior ([SQAB](#), 1999 - 2002)  
*Poetry in Science* Award Soc. Quant. Anal. Beh. 2002  
F. J. McGuigan Lectureship on Understanding the Human Mind APA Hawaii 2004  
Ernest and Josephine Hilgard Award for the *Best Theoretical Paper* (Killeen & Nash, 2003)  
Faculty of 1000 Citation as *Must Read* (Russell et al., 2006, Response variability in AD/HD)  
Featured [Emerging Research Front](#) paper on Thomson Reuters SCIENCEWATCH Oct 2010  
*Quad-L Lectureship* on the Laws of Learning University of New Mexico 2010  
President, 3<sup>rd</sup> Internatl Seminar on Behavior & Behavioral Applications (SINCA), Ocotlán, 2011  
Med Associates' *Distinguished Contributions to Basic Research* Award APA Orlando 2012  
*Banco de Santander* Research Prize Madrid, Spain 2012  
Moore Institute Visiting Research Fellowship, National University of Ireland, Galway 2015

## The Second Page: Recent & Memorable Pubs

### Some Recent

- Killeen, P. R. (2015). Signal Detection Theory. In H. L. Miller (Ed.), *Encyclopedia of Theory in Psych.*
- Killeen, P. R. (2015). Killeen's (2005)  $p_{\text{rep}}$ : the probability of replicating an effect. In R. L. Cautin & S. O. Lillienfeld (Eds.), *The Encyclopedia of Clinical Psychology*. Hoboken, NJ: Wiley & Sons, Inc.
- Killeen, P. R. (2015). The logistics of choice. *Journal of Experimental Analysis of Behavior*, in review.
- Killeen, P. R. (2015). Models of ADHD: Five ways smaller sooner is better. *J. Neurosci. Meth.* 10.1016/j.jneumeth.2015.01.011
- Killeen, P. R. (2015). The arithmetic of discounting. *Journal Exp. Analysis Behavior*, 10.1002/jeab.130
- Killeen, P. R. (2014). Pavlov + Skinner = Premack. *International Journal of Comparative Psychology*, 27(4) 1-25
- Killeen, P. R. (2014). A theory of behavioral contrast. *J. Exp. Anal. Behav.*, 102, 3. DOI: 10.1002/jeab.107
- Killeen, P. R. (2014). Maxwell structures. *Conductual*, 2, 4-12.
- Killeen, P. R. (2013). The structure of scientific evolution. *The Behavior Analyst*, 36, 325-344.
- Killeen, P. R. (2013) Finding time. *Behavioural Processes*, DOI: <http://dx.doi.org/10.1016/j.beproc.2013.08.003>
- Killeen, P. R. (2013) Absent without leave: Neuroenergetics and mind-wandering. *Frontiers in Psychology*.
- Killeen, P. R., Russell, V. A., & Sergeant, J. A. (2013). A behavioral neuroenergetics theory of ADHD. *Neuroscience & Biobehavioral Reviews*, 37, 625-657.
- Killeen, P. R., & Pellón, R. (2013) Adjunctive behaviors are operants. *Learning & Behavior*, 43, 1-24.

### Oldies but Goodies

- Bradshaw, C. M., & Killeen, P. R. (2012). A theory of behaviour on PR schedules. *Psychopharmacology*.
- Killeen, P. R., Tannock, R., & Sagvolden, T. (2012). The Four Causes of ADHD: A Framework. In S. C. Stanford & R. Tannock (Eds.), *Current Topics in Behavioral Neurosciences*, 9, 391-425.
- Killeen, P. R. (2011) Markov model of smoking cessation. *Proceedings National Academy of Sciences*.
- Killeen, P. R. (2009). An additive-utility model of delay discounting. *Psychological Review*, 116, 602-19.
- Johansen, E. B., Killeen, P. R., Russell, V. A., Tripp, G., Wickens, J. R., Tannock, R., et al. (2009). Origins of altered reinforcement effects in ADHD. *Behavioral and Brain Functions*, 5, 7.
- Killeen, P. R. (2006). Beyond statistical inference: A decision theory for science. *Psychonomic Bull Rev.*
- Russell, V.A., Oades, R., Tannock, R., Killeen, P. R., et al. (2006). Response variability in ADHD: A neuronal and glial energetics hypothesis. *Behavioral and Brain Functions*, 2:30.
- Killeen, P. R. (2005). An alternative to null hypothesis statistical tests. *Psychological Science* 345-353.
- Killeen, P. R., & Nash, M. R. (2003). The four causes of hypnosis. *The International Journal of Clinical and Experimental Hypnosis*, 51, 195-231.
- Killeen, P. R., & Taylor, T. J. (2000). How the propagation of error through stochastic counters affects time discrimination and other psychophysical judgments. *Psychological Review*, 107, 430-459.
- Killeen, P. R. (1994). Mathematical principles of reinforcement. *Behavioral and Brain Sci.*, 17, 105-72.
- Killeen, P. R., & Fetterman, J. G. (1988). A behavioral theory of timing. *Psychological Rev*, 95, 274-295.
- Killeen, P. R., & Weiss, N. (1987). Optimal timing and the Weber function. *Psychol. Review*, 94, 455-68.
- Kluender, K. R., Diehl, R. L., & Killeen, P. R. (1987). Japanese quail can learn phonetic categories. *Science*, 237, 1195-1197.
- Killeen, P. R., Hanson, S. J. & Osborne, S. R. (1978). Arousal.... *Psychological Review*, 85, 571-581.
- Killeen, P. R. (1978). Superstition: A matter of bias, not detectability. *Science*, 199, 88-90.
- Killeen, P. (1975). On the temporal control of behavior. *Psychological Review*, 82, 89-115.

## Selected Publications (h/i-10 = 43/93; Erdős = 3)

Search at [PubMed](#), or get all [here](#)

- Killeen, P. On the measurement of reinforcement frequency in study of preference. *Journal of the Experimental Analysis Behavior*, 1968, **11**, 263-269.
- Killeen, P. Reinforcement frequency and contingency as factors in fixed-ratio behavior. *Journal of the Experimental Analysis of Behavior*, 1969, **12**, 391-95.
- Killeen, P. Preference for fixed-interval schedules of reinforcement. *Journal of the Experimental Analysis of Behavior*, 1970, **14**, 127-131.
- Killeen, P. The matching law. *Journal of the Experimental Analysis of Behavior*, 1972, **17**, 489-495.
- Killeen, P. A yoked-chamber comparison of concurrent and multiple schedules. *Journal of the Experimental Analysis of Behavior*, 1972, **18**, 13-22.
- Conger, R., & Killeen, P. The use of concurrent operants in small group research. *Pacific Sociological Review*, 1974, **17**, 399-416.
- Killeen, P. On the temporal control of behavior. *Psychological Review*, 1975, **82**, 89-115.
- Eubanks, J. L., Killeen, P., Hamilton, B., & Wald, B. A. The effect of timeout on performance on a VI schedule of electric shock presentation. *Journal of the Experimental Analysis of Behavior*, 1975, **23**, 457-463.
- Killeen, P. R. Superstition: A matter of bias, not detectability. *Science*, 1978, **199**, 88-90.
- Killeen, P. R. Stability criteria. *Journal of Experimental Analysis of Behavior*, 1978, **29**, 17-25.
- Killeen, P. R., Hanson, S. J. & Osborne, S. R. Arousal: Its genesis and manifestation as response rate. *Psychological Review*, 1978, **85**, 571-581.
- Killeen, P. R., Smith, J. P., & Hanson, S. J. Central place foraging in *Rattus Norvegicus*. *Animal Behaviour*, 1981, **29**, 64-70.
- Hanson, S. J., & Killeen, P. R. Measurement and modeling of behavior under fixed-interval schedules of reinforcement. *Journal of Experimental Psychology: Animal Behavior Processes*, 1981, **7**, 129-139.
- Killeen, P. R. Learning as causal inference. In M. Commons & J. A. Nevin (Eds.), *Quantitative studies of behavior*. New York: Pergamon, 1981, pp. 289-312.
- Killeen, P. R. Incentive Theory. In D. J. Bernstein (Ed.), *Nebraska symposium on motivation, 1981: Response structure and organization*. Lincoln: Univ Nebraska Press, 1982. pp. 169-216.
- Killeen, P. R. Incentive theory: II. Models for choice. *Journal of the Experimental Analysis of Behavior*, 1982, **38**, 217-232.
- Eubanks, J. L., & Killeen, P. R. An application of signal detection theory to air combat training. *Human Factors*, 1983, **25**, 449-456.
- Killeen, P. R., & Smith, J. P. Perception of contingency in conditioning: Scalar timing, response bias, and the erasure of memory by reinforcement. *Journal of Experimental Psychology: Animal Behavior Processes*, 1984, **10**, 333-345.
- Killeen, P. R. Incentive theory III: Adaptive Clocks. In J. Gibbon & L. Allen (Eds.), *Timing and time perception. Annals of the New York Academy of Sciences*, 1984, pp. 515-527.
- Killeen, P. R. (1985). Incentive theory IV: Magnitude of reward. *Journal of the Experimental Analysis of Behavior*, **143**, 407-417.
- Killeen, P. R. (1987). Emergent Behaviorism. In S. Modgil & C. Modgil (Eds.), *B.F. Skinner: Consensus and Controversy*. London: Falmer, 1987. pp. 219-238. Reprinted in *Behaviorism*, 1984, **12**, 25-39.

- Killeen, P. R., & Amsel, A. The kinematics of locomotion toward a goal. *Journal of Experimental Psychology: Animal Behavior Processes*, 1987, **13**, 92-101.
- Killeen, P. R., & Weiss, N. (1987). Optimal timing and the Weber function. *Psychological Review*, **94**, 455-468.
- Kluender, K. R., Diehl, R. L., & Killeen, P. R. (1987). Japanese quail can learn phonetic categories. *Science*, **237**, 1195-1197.
- Killeen, P. R., & Fetterman, J. G. (1988). A behavioral theory of timing. *Psychological Review*, **95**, 274-295.
- Killeen, P. R. (1988). The reflex reserve. *Journal of the Experimental Analysis of Behavior*, **50**, 319-331.
- Killeen, P. R. (1989). Behavior as a trajectory through a field of attractors. In *The Computer & the brain: Perspectives on human and artificial intelligence*. J. R. Brink & C. R. Haden (Eds.) Elsevier, 53-82.
- Killeen, P. R., & Fantino, E. (1990). Unification of models for choice between delayed reinforcers. *Journal of the Experimental Analysis of Behavior*, **53**, 189-200.
- Fetterman, J. G., & Killeen, P. R. (1990). A componential analysis of pacemaker-counter timing systems. *Journal of Experimental Psychology: Human Perception and Performance*, **16**, 766-780.
- MacEwen, D. & Killeen, P. R. (1991). The effects of rate and amount of reinforcement on the speed of the pacemaker in pigeons' timing behavior. *Animal Learning & Behavior*, **19**, 164-170.
- Killeen, P. R. (1991). Behavior's time. In G. H. Bower (Ed.), *The psychology of learning and motivation, Vol 27. Advances in research and theory*. New York: Academic Press, pp. 295-334.
- Killeen, P. R. (1991). Behavioral geodesics. In D. S. Levine & J. S. Levin (Eds.) *Motivation, emotion, and goal direction in neural networks*. Hillsdale, NJ: Erlbaum, pp. 91-114.
- Fetterman, J. G., & Killeen, P. R. (1991). Time discrimination in *Columba livia* and *Homo sapiens*. *Journal of Experimental Psychology: Animal Behavior Processes*, **18**, 80-94.
- Killeen, P. R. (1992). Counting the minutes. In F. Macar, V. Pouthas, & W. J. Friedman (Ed.), *Time, action and cognition*. Dordrecht: Kluwer Academic Publishers. pp. 203-214.
- Killeen, P. R. (1993). Mechanics of the animate. *Journal of the Experimental Analysis of Behavior*, **57**, 429-463.
- Killeen, P. R., & Fetterman, J. G. (1993). Behavioral theory of timing: Transition analyses. *Journal of the Experimental Analysis of Behavior*, **60**, 411-422.
- Killeen, P. R., Cate, H., and Trung, T. (1993). Scaling pigeons' preferences for feeds: Bigger is better. *Journal of the Experimental Analysis of Behavior*, **60**, 203-217.
- Morgan, L., Killeen, P. R., & Fetterman, J. G. (1993). Changing reinforcement rate perturbs the flow of time. *Behavioural Processes*, **30**, 259-272. PMC2601655
- Killeen, P. R. (1994). Mathematical principles of reinforcement. *Behavioral and Brain Sciences*, **17**, 105-172.
- Johnson, R., Rissing, S., & Killeen, P. R. (1994). Differential learning and memory by co-occurring ant species. *Insectes Sociaux*, **41**, 165-177.
- Fetterman, J. G., & Killeen, P. R. (1995). Categorical scaling of time: Implications for clock-counter models. *Journal of Experimental Psychology: Animal Behavior Processes*, 1995, **21**, 43-63.
- Killeen, P. R. (1995). Economics, ecologies, and mechanics: The dynamics of responding under conditions of varying motivation. *Journal of the Experimental Analysis of Behavior*, **64**, 405-431:  
[http://www.envmed.rochester.edu/wwwvgl/jeab\\_articles/1995/killeen-64-405.pdf](http://www.envmed.rochester.edu/wwwvgl/jeab_articles/1995/killeen-64-405.pdf)
- Killeen, P. R., Palombo, G.-M., Gottlob, L. R., & Beam, J. J. (1996). Bayesian analysis of foraging by pigeons (*Columba livia*). *Journal of Experimental Psychology: Animal Behavior Processes*, **22**, 480-496. [Link](#)

- Bizo, L. A., & Killeen, P. R. (1997). Models of ratio schedule performance. *Journal of Experimental Psychology: Animal Behavior Processes*, **23**, 351-367. [Link](#)
- Killeen, P. R., Fetterman, J. G., & Bizo, L. A. (1997). Time's Causes. In C. M. Bradshaw & E. Szabadi's *Advances in Psychology (120): Time and Behavior: Psychological and Neurobehavioural Analyses*, Amsterdam: Elsevier, pp. 79-139.
- Killeen, P. R. (1998). The first principle of reinforcement. In C. Wynne & J. E. R. Staddon (Eds.), *Models of Action* (pp. 127-156). Mahwah, NJ: Erlbaum.
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- Killeen, P. R. (1998). Fechner's magic. In S. Grondin & Y. Lacouture (Eds.), *Fechner Day 98: Proceedings of the Fourteenth Annual Meeting of the International Society for Psychophysics*, Québec, CA, August 1998, 1-9 (Keynote address).
- Bizo, L. A., Bogdanov, S. V., & Killeen, P. R. (1998). Satiation causes within-session decreases in instrumental responding. *Journal of Experimental Psychology: Animal Behavior Processes*, **24**, 439-452.
- Beam, J. J., Killeen, P. R., Bizo, L. A., & Fetterman, J. G. (1998). How reinforcement context affects temporal production and categorization. *Animal Learning & Behavior*, **26**, 388-396.
- Fetterman, J. G., Killeen, P. R., & Hall, S. (1998). Watching the clock. *Behavioural Processes*, **44**, 211-224.
- Killeen, P. R., Hall, S. & Bizo, L. A. (1999). A clock not wound runs down. *Behavioural Processes*, **45**, 129-139. [PMC2601657](#)
- Killeen, P. R. & Uttal W. R. (Eds.) (1999). *Fechner Day 99: The End of 20th Century Psychophysics*. Proceedings of the 15th annual meeting of the International Society for Psychophysics. Tempe, AZ, USA: The International Society for Psychophysics, pp. 1-402.
- DeMarse, T. B., Killeen, P. R., & Baker, D. (1999). Satiation, capacity, and within-session responding. *Journal of the Experimental Analysis of Behavior*, **72**, 407-423.
- Killeen, P. R., & Taylor, T. J. (2000). How the propagation of error through stochastic counters affects time discrimination and other psychophysical judgments. *Psychological Review*, **107**, 430-459.
- Killeen, P. R., & Taylor, T. J. (2000). Stochastic adding machines. *Nonlinearity*, **13**, 1189-1903. [PMI: C2651092](#)
- Bizo, L. A., Kettle, L. C. & Killeen, P. R. (2001). Animals don't always respond faster for more food: The paradoxical incentive effect. *Animal Learning & Behavior*, **29**, 66-78.
- Killeen, P. R. (2001). Writing and overwriting short-term memory. *Psychonomic Bulletin & Review*, **8**, 18-43.
- Killeen, P. R., & Hall, S. (2001) The principal components of response strength. *Journal of the Experimental Analysis of Behavior*, **75**, 111-134: [http://www.envmed.rochester.edu/wwwvgl/jeab\\_articles/2001/killeen-75-111.pdf](http://www.envmed.rochester.edu/wwwvgl/jeab_articles/2001/killeen-75-111.pdf)
- Killeen, P. R. (2001). Modeling games from the 20<sup>th</sup> century. *Behavioural Processes*, **54**, 33-63. [PubMed: 11369459](#)
- Killeen, P. R., & Machado, A. M. (Eds). (2001) The Longer View: 20<sup>th</sup> Century Quantitative Analysis of Behavior. *Behavioural Processes*, **54**, pp. 1-165.
- Killeen, P. R. (2001). The four causes of behavior. *Current Directions in Psychological Science*, **10**, 136-140. [PMC2600470](#)
- Killeen, P. R. (2002) Scalar counters. *Learning & Motivation*, **33**, 63-87.
- Machado, A. M., & Killeen, P. R., (Eds). (2002) Looking Ahead: 21<sup>st</sup> Century Quantitative Analysis of Behavior. *Behavioural Processes*, **57**, pp. 1 - 278.

- Killeen, P. R., Hall, S., Reilly, M. P., & Kettle, L. C. (2002) Molecular analysis of the principal components of response rate. *Journal of the Experimental Analysis of Behavior*, **78**, 127-160:  
[http://www.envmed.rochester.edu/wwwvgl/jeab\\_articles/2002/killeen-78-127.pdf](http://www.envmed.rochester.edu/wwwvgl/jeab_articles/2002/killeen-78-127.pdf)
- Killeen, P. R. (2003). Complex dynamic processes in sign-tracking with an omission contingency (Negative Automaintenance). *Journal of Experimental Psychology: Animal Behavior Processes*, **29**, 49-61.  
<http://www.pubmedcentral.gov/articlerender.fcgi?tool=.nihms&artid=2643130>
- Killeen, P. R., & Sitomer, M. (2003). MPR. *Behavioural Processes*, **62**, 49-64. PubMed:2724598
- Killeen, P. R., & Machado, A. M. (Eds). (2003) Theories in Progress: Proceedings of the meeting of the Society for the Quantitative Analyses of Behavior. *Behavioural Processes*, **62**, pp. 1-200.
- Killeen, P. R., & Nash, M. R. (2003). The four causes of hypnosis. *The International Journal of Clinical and Experimental Hypnosis*, **51**, 195-231.
- Killeen, P. R., (2003). The yins  $\text{Jy}$ angs of science. *Behavior and Philosophy*, **31**, 251-258.
- Killeen, P. R., (2004). Minding behavior. *Behavior and Philosophy*, **32**, 125-147.
- Gorelick, R., Bertram, S. M., Killeen, P. R., Fewell, J. H. (2004). Normalized mutual entropy in biology: quantifying division of labor. *The American Naturalist*, **164**, 677-682.
- Killeen, P. R., & Taylor, T. J. (2004). Symmetric receiver operating characteristics. *Journal of Mathematical Psychology*, **48**, 432-434.
- Killeen, P. R. (2005). An alternative to null hypothesis statistical tests. *Psychological Science*, **16**, 345-353.
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- Killeen, P. R. (2005). Replicability, confidence, and priors. *Psychological Science*, **16**, 1009-1012. **PMC1440522**
- Posadas-Sanchez, D. & Killeen, P. R. (2005). Does satiation close the open economy? *Learning & Behavior*, **33**, 387-398.
- Bizo, L. A., Chu, J. Y. M., Sanabria, F. & Killeen, P. R. (2006). The failure of Weber's law in time perception and production. *Behavioural Processes*, **71**, 201-210.
- Killeen, P. R. (2006). The problem with Bayes. *Psychological Science*, **17**, 643-644.
- Sanabria, F., Sitomer, M. T., & Killeen, P. R. (2006). Negative automaintenance omission training is effective. *Journal of the Experimental Analysis of Behavior*, **86**, 1-10.
- Kleen, J. K., Killeen, P. R., Conrad, C. D. (2006). Chronic stress impairs spatial memory and motivation for reward. *Behavioral Neuroscience*, **120**, 842-851.
- Russell, V. A., Oades, R. D., Tannock, R., Killeen, P. R., Auerbach, J. G., Johansen, E. B., & Sagvolden, T. (2006). Response variability in Attention-Deficit/Hyperactivity Disorder: a neuronal and glial energetics hypothesis. *Behavioral and Brain Functions*, **2**:30 (23 Aug). [Behavioral and Brain Fun#399347](#)
- Sanabria, F., & Killeen, P. R. (2007). Temporal generalization gradients account for response resurgence in the peak procedure. *Behavioural Processes*, **74**, 126-141.
- Killeen, P. R. (2006). Beyond statistical inference: A decision theory for science. *Psychonomic Bulletin & Review*, **13**, 549-562. **PMC2593477**
- Killeen, P. R. (2007). Replication Statistics. In J. W. Osborne (Ed.), *Best practices in quantitative methods* (pp. 103-124). Thousand Oaks, CA: Sage.
- Sanabria, F., & Killeen, P. R. (2007). Better Statistics for Better Decisions: Rejecting Null Hypotheses Statistical Tests in Favor of Replication Statistics. *Psychology in the Schools*, **44**, 471 - 481.
- Johansen, E. B., & Killeen, P. R., Sagvolden, T. (2007). Behavioral variability, elimination of responses, and delay-of-reinforcement gradients in SHR and WKY rats. *Behavioral and Brain Functions*. **3**:6 (20 Nov)

- Sanabria, F., Acosta, J. I., Killeen, P. R., Neisewander, J. L., & Bizo, L. A. (2008). Modeling the effects of fluoxetine on food-reinforced behavior. *Behavioural Pharmacology*, **19**, 61-70.
- Sanabria, F., & Killeen, P. R. (2008). Evidence for impulsivity in the Spontaneously Hypertensive Rat drawn from complementary response-withholding tasks. *Behavioral and Brain Functions*, **4**:7 (8 Feb 08). [Link](#)
- Killeen, P. R., Posadas-Sanchez, D., & Johansen, E. B. Thraillkill, E. (2009) Progressive ratio schedules of reinforcement. *Journal of Experimental Psychology: Animal Behavior Processes*, **35**, 35-50.
- Johansen, E. B., Killeen, P., Russell, V., Tripp, G., Wickens, J., Tannock, R., Williams, J., & Sagvolden, T. (2009). Origins of altered reinforcement effects in ADHD. *Behavioral and Brain Functions*, **5**, 7. [Link](#)
- Avila, I., Reilly, M. P., Sanabria, F., Posadas-Sanchez, D., Chavez, C. L., Banerjee, N., Killeen, P., Castaneda, E. (2009). Modeling operant behavior in the Parkinsonian rat. *Behavioural Brain Research*, **198**, 298-305.
- Grondin, S., & Killeen, P. R. (2009). Effects of singing and counting during successive interval productions. *NeuroQuantology*, **7**, 1, 66-76.
- Sanabria, F., Thraillkill, E. A., & Killeen, P. R. (2009). Timing with opportunity cost: Concurrent schedules of reinforcement improve peak timing. *Learning & Behavior*, **37**, 217-229.
- Roussel, M.-E., Grondin, S., & Killeen, P. R. (2009). Spatial effects on temporal categorization. *Perception*, **38**, 748-762.
- Killeen, P. R. (2009). An additive-utility model of delay discounting. *Psychological Review*, **116**, 602-619.
- Killeen, P. R., Sanabria, F., & Dolgov, I. (2009) Dynamics of conditioning and extinction. *Journal of Experimental Psychology: Animal Behavior Processes*, **35**, 447-472. [doi](#)
- Grondin, S., & Killeen, P. R. (2009). Tracking time with song and count: Different Weber functions for musicians and non-musicians. *Attention, Perception, and Psychophysics*, **71**, 1649-1654.
- Cabrera, F., Sanabria, F., Shelley, D., & Killeen, P. R. (2009). The lurching effect: Pigeons track motion towards food more than motion away from it. *Behavioural Processes*, **82**, 229-235.
- Sagvolden, T., Johansen, E. B., Wøien, G., Walaas, S. I., Storm-Mathisen, J., Bergersen, L. H., Killeen, P. R., et al. (2009). The spontaneously hypertensive rat model of ADHD--The importance of selecting the appropriate reference strain. *Neuropharmacology*, **57**(5-8), 619-626.
- Fetterman, J. G., & Killeen, P. R. (2010) Prospective and retrospective timing by pigeons. *Learning & Behavior*, **38**, 119-125.
- Lecoutre, B., & Killeen, P. R. (2010). Replication is no coincidence. *Psychonomic Bull. & Review*, **17**, 263-269.
- Killeen, P. R. (2010)  $P_{rep}$  replicates. *Psychological Methods*, **15**, 199-202.
- Fetterman, J. G., & Killeen, P. R. (2010) Categorical counting. *Behavioural Processes*, **85**, 28-35.
- Killeen, P. R., & Glenberg, A. (2010) Resituating cognition. *Comparative Cognition & Behavior Rev*, **4**, 66-85.
- Barker, D. J., Sanabria, F., Lasswell, A., Thraillkill, E. A., Pawlak, A. P., & Killeen, P. R. (2010). Brief light as a practical aversive stimulus for the albino rat. *Behavioral Brain Research*, **214** (2), 402-408.
- Killeen, P. R. (2011) Models of trace decay, eligibility for reinforcement, and delay of reinforcement gradients, from exponential to hyperboloid. *Behavioural Processes*, **87**, 57-63 DOI: 10.1016/j.beproc.2010.12.016
- Killeen, P. R. (2011). A Markov model of smoking cessation. *Proceedings of the National Academy of Sciences*, **108**, 15549-15556, DOI: 10.1073/pnas.1011277108
- Fetterman, J. G., & Killeen, P. R. (2011). Interactions of numerical and temporal stimulus characteristics on the control of response location by brief flashes of light. *Learning & Behavior*, **39**, 3, 191-201.
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## MISCELLANEOUS

### *Boards of Editors:*

Journal of the Experimental Analysis of Behavior (1975-1981; 1999-2010).  
 Behavior and Philosophy (Editor: 1980-1985)  
 Behavioural Processes (1981-2005; 2012--present)  
 Journal of Experimental Psychology: Animal Behavior Processes (1983-1986)  
 Psychonomic Bulletin & Review (1995--present)  
 Psychological Review (1999--present)  
 Brain & Behavioral Functions (2004 -- present)  
 Comparative Cognition & Behavior Review (2004 --present)  
 Learning & Behavior (2008-2014)

### *Governing Board:*

Councilor (Experimental Psychology), Association for Behavior Analysis International (2014-2017)

### *Review Panels, etc:*

NIMH IRGs: BBP, '79-82; Physio., Behav., & Neurosci, 1996-98; McGuigan Fellowship, 2007; NIDA 2011

Media: [e-cigarettes](#): youtube [2014](#)

*Invited Addresses*

Florida State University	<i>Collaborative Learning</i>	1994
College on Drug Dependence, Phx	<i>The Balance-Pan Model of Reinforcement</i>	1998
Internat'l Society for Psychophysics	<i>Fechner's Magic; KEYNOTE ADDRESS</i>	1998
Vancouver BC Crisis Points SIG	<i>A series of 4 lectures</i>	1998
UC Irvine	<i>Fechner's Staircase</i>	1998
Rutgers NJ, Special symposium	<i>Metonymic Psychology</i>	1998
Society for Quantitative Analysis Beh.	<i>Presidential Address</i>	2000
John Pierce Foundation	<i>Maximum Entropy Psychophysics</i>	2001
Univ. Guadalajara	<i>Minding Behavior</i>	2002
Tennessee Conference on Hypnotism	<i>The 4 causes of hypnotism</i>	2002
University of Stockholm Centenary	<i>Minding Plato's Cave: Psychophysical Epistemology</i>	2003
NSF Workshop	<i>Dynamic systems and learning theory</i>	2003
Georgia Tech	<i>Reject the Null Hypothesis Test</i>	2004
NIDA Symposium Turkey	<i>Mathematical Principles of Reinforcement</i>	2004
APA McGuigan Lecture '04	<i>Greek Mind, Geek Mind: Chaos, Complementarity, Consciousness</i>	
Centre for Advanced Study, Oslo	<i>The Epistemology of ADHD</i>	2004
Macmaster University Siegel Festschrift	<i>Continual Reconditioning</i>	2005
Washington University	<i>A Decision Theory for Scientific Inference</i>	2006
Syracuse, NY Wrkshp Model Comparison	<i>Parsimony, Goodness of Fit, &amp; Validity Generalization</i>	2006
Winter Conference on Animal Learning	Keynote Address: <i>The 3 Ms of Analysis:</i>	
	<i>Minding, Mining and Modeling Data</i>	2007
Colombian Psychological Assoc.	<i>The Law of Affect</i>	2008
Eastern Psychological Association	<i>The Mother of all Discount Functions</i>	2009
NIDA, DC	<i>Nicotine is Not Addictive</i>	2009
<a href="#">Last Lecture</a> to ASU	<i>A Scientific Traveller</i>	2009
Soria Moria Oslo Norway	<i>A compartment model of ADHD</i>	2010
Nat'l Acad. of Sci. A M. Sackler Colloq.	<a href="#">Macroinformation from microdata</a>	2010
University of New Mex. Quad-L Lecture	<i>The Law of Affect</i>	2010
Budapest	<i>Reinforcement processes in ADHD</i>	2011
SINCA, Mexico	<i>Adjunctive behaviors are operants</i>	2011
Univ North Dakota	<i>The Royal Road to Knowledge</i>	2012
APA Distinguished Contrib Award Lect	<i>Three rings for the Elven Kings</i>	2012
European Assoc. Beh. Anal., Lisboa	<i>Neuroenergetics and ADHD</i>	2012
UNED Madrid	<i>The 4 Causes of ADHD</i>	2012
ABAI Santa Fe	<i>Theories of Learning are Necessary</i>	2012
Utah State University	<i>The Arithmetic of Discounting</i>	2014