

Review of Research of the 1940s and 1950s

From Interviews with Dr. Francis Mechner & Dr. Murray Sidman

Cathy Polakoff

The author interviewed Drs. Mechner and Sidman by email in the spring of 2011 as part of a project for a History of Behavior Analysis class at the University of North Texas. The information below is derived from those interviews. PDFs of the actual interview with Dr. Mechner can be found on his personal page on this website, with links to the 1940s and 1950s sections of the 'When' page. Dr. Sidman responded to the interview questions with two previously published journal articles, which are listed on his personal page on this website, again with links to the 1940s and 1950s sections of the 'When' page. Finally, a journal article by Hefferline, and two others that he co-authored, are listed on his personal page and linked to the 1950s section of the 'When' page. It should also be noted that Dr. Mechner mentions in his interview that during the 1940s and 1950s, Behavior Analysis was referred to as "learning theory". All articles can also be found listed under the 'References' section below.

1950s

Recollections of Important Areas of Research

Individual features of and effects of reinforcer presentation for operant responses

Avoidance behavior and free operant studies

Biofeedback (developed in large part by Hefferline)

Quantitative models of learning

Conditioned reinforcers and stimulus-response chains

Skinner's teaching machines and "verbal summators"

Behavioral pharmacology

Stimulus control – with pigeons, with electrical resistors, and with the U.S. Navy (a study on radar-watching behavior in sailors)

Scientific ethics

Recommended Readings

Keller, F.S. & Schoenfeld, W.N. (1950). *Principles of Psychology: A Systematic Text in the Science of Behavior*, New York: Appleton-Century-Crofts. (This was an introductory psychology textbook that became one of the first textbooks in Behavior Analysis.)

Sidman, M. (1952). A note on functional relations obtained from group data, *Psychological Bulletin*, vol. 8. (Reprinted in *Psychological Bulletin*, 49, 263-269.)

Sidman, M. (1953b). Two temporal parameters of the maintenance of avoidance behavior by the white rat. *Journal of Comparative and Physiological Psychology*, 46, 253-261. (Doctoral dissertation)

Skinner, B.F. (1953). *Science and Human Behavior*, Pearson Education. (Reprinted by the B.F. Skinner foundation (2005).

Skinner, B.F. (1957). *Verbal Behavior*, Copley Publishing Group: Acton, Massachusetts.

Interviewee Recollections of Important People

B.F. Skinner (*Mechner, Sidman*)

Bill Cumming (*Sidman*)

Bob Schuster (*Sidman*)

Charles Crocetti (*Sidman*)

Charles Ferster (*Sidman*)

Clarence Graham (*Sidman*)

Claude Shannon (*Mechner*)

Connie Mueller (*Sidman*)

Donald Blough (*Sidman*)

Donald A. Cook (*Mechner, Sidman*)

Fred Keller (*Mechner, Sidman*)

J.R. Kantor (*Sidman*)

Jim Dinsmoor (*Sidman*)

Jim Holland (*Sidman*)

Joe Antonitis (*Mechner, Sidman*)

Joe Brady (*Sidman*)

Mike Kaplan (*Sidman*)

Murray Sidman (*Mechner*)

Nat Schoenfeld (*Mechner, Sidman*)

Ogden Lindsley (*Sidman*)

Peter Dews (*Sidman*)

Phil Bersh (*Sidman*)
Ralph Hefferline (*Sidman*)
Thom Verhave (*Sidman*)
W. Winnick (*Sidman*)

References

Hefferline, R.F. (1950). An Experimental Study of Avoidance, *Genetic Psychology Monographs*, 42, 231-334.

Hefferline, R.F., Keenan, B., & Harford, R.A. (1959). Escape and avoidance conditioning in human subjects without their observation of the response, *Science*, 130, 1338-1339.

Hefferline, R.F. & Perera, T.B. (1963). Proprioceptive discrimination of a covert operant without its observation by the subject, *Science*, 139, 834-835.

Keller, F.S. & Schoenfeld, W.N. (1950). *Principles of Psychology: A Systematic Text in the Science of Behavior*, New York: Appleton-Century-Crofts.

Schoenfeld, W.N. (1950). *An experimental approach to anxiety, escape and avoidance behavior*. In P.H. Hoch & J. Zubin (Eds.) *Anxiety* (pp. 70-99), New York: Grune & Stratton.

Sidman, M. (1952). A note on functional relations obtained from group data, *Psychological Bulletin*, vol. 8. (Reprinted in *Psychological Bulletin*, 49, 263-269.)

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