

## **VITA**

Michael David Biderman

### **Born**

November 20, 1943  
Kansas City, Kansas

### **Marital Status**

Married; two children

### **Present Address**

Department of Psychology  
University of Tennessee at Chattanooga  
Chattanooga, TN 37403

### **Undergraduate Study**

Iowa State University, 1962-1963  
University of Iowa, B. S., Psychology, 1967

### **Graduate Study**

University of Iowa, M. A., Psychology, 1971  
University of Iowa, Ph.D., Psychology, 1972

### **Master's Thesis**

A comparison of two mathematical models in signal detection tasks in which no signal was presented.

### **Dissertation**

A signal detection model and procedure for estimating one-interval slope and intercept parameters from two-interval data.

## **Research Training and Experience**

Research Assistant, 1967-1968 under Dr. H. P. Bechtoldt. Research on various problems in visual perception. Duties included construction of appropriate apparatus.

Research Assistant, 1968-1971 under Dr. D. D. Dorfman. Research on various problems in auditory signal detection. Duties included setting up a laboratory for research in auditory signal detection, design and construction of apparatus and electronic equipment, and writing of FORTRAN programs to apply various mathematical models to signal detection data.

Established a laboratory for research in auditory signal detection at The University of Tennessee at Chattanooga, 1973-1974. This laboratory was built around a Honeywell H-316 minicomputer. The work involved design and construction of interfaces and other electronic apparatus, and the writing of assembly language and BASIC language programs for the on-line control of experiment conducted in the lab.

Wrote computer programs for conduct of research on simple decision processes using the Macintosh Computer.

## **Teaching and Professional Experience**

Teaching Assistant, Fall 1970; under Dr. D. D. Dorfman; taught discussion section in General Psychology.

Teaching Assistant, Spring 1971; under Dr. D. D. Dorfman; laboratory assistant in Experimental Psychology course perception.

Instructor in Psychology, 1971-1972; at Cornell College, Mt. Vernon, Iowa.

Assistant Professor of Psychology, 1972-1978; at The University of Tennessee at Chattanooga, Chattanooga, Tennessee.

Associate Professor of Psychology, 1978-1986; at The University of Tennessee at Chattanooga, Chattanooga, Tennessee.

Professor of Psychology, 1986 - present; at The University of Tennessee at Chattanooga, Chattanooga, Tennessee.

Coordinator, UTC Industrial Organizational Master's Program, 1983-1990; 1999-present.

Statistical consultant, Dept. of Surgery, Erlanger, Hospital, 1994-present.

## **Awards**

University of Tennessee National Alumni Association Outstanding Teacher of 1990.

UTC Student Government Association Outstanding Professor of 2000

Salem Carpet Professorship in Industrial/Organizational Psychology: 2000-2004.

## **Fellowships**

NDEA IV Predoctoral Fellowship

NIH 4th Year Predoctoral Fellowship

## **Workshops**

Invited Participant: Workshop on Multidimensional Scaling, University of Pennsylvania, PA, June 1972.

## **Workshops Taught**

CHIPS: Computer Happenings in Personal Systems (An Introduction to Computers for Children.)

Computer Basics for Managers: An Introduction to Computers for Managers.

How to Use a Personal Business Computer.

Introduction to Visicalc.

Introduction to HyperCard

Introduction to SPSS for Windows.

Structural Equation Modeling.

## **Papers**

Biderman, M. D. & Dorfman, D. D. Comparison of two models for signal detection behavior in a task where the signal is absent. Midwestern Psychological Association meetings, 1971.

Biderman, M. D. An interactive graphics package for the Radio Shack Color Computer. Science Association of Tennessee Fall Meeting, 1983.

Kleiman, L., Biderman, M., & Faley, R. H. Correlates of perceived fairness and accuracy of performance appraisals: Race and sex as moderators. National conference of the Association of Human Resources Management and Organizational Behavior, 1985.

Streicher, S., & Biderman, M. Using a computerized jigsaw puzzle program to teach geometric concepts. The First Annual Southeastern Small College Computing conference, 1987.

- Streicher, S. & Biderman, M. Using HyperCard to Implement a Mental Rotation Paradigm. Presented at the Third Annual Southeastern Small College Computing Conference, November 10-11, 1989.
- Wilson, Robert & Biderman, M. Good Ol' Boys and Yankees: Factors affecting user acceptance of decision support. Paper presented at the fourth annual meeting of the Southeastern Small College Computing Conference, November 9, 1990.
- Havard, Jesse & Biderman, M. Statistical process control: Its effects on organizational culture and job characteristics. Presented at the 39th Annual Meeting of the Southeastern Psychological Association, March 24, 1993.
- Fletcher, C. & Biderman, M. Factors affecting the use of computer decision aids. Chet Fletcher and Michael Biderman. Paper presented at Meeting of Southeastern Psychological Association, 1995.
- Helton, George, Ray, Barbara, and Biderman, Michael. School Psychologists' and special education teachers' responses to ethical dilemmas -II. Paper presented at the Presentation at Tennessee Association of School Psychologists Fall convention, 1998
- Cofer, J. B., Biderman, M. D., Lewis, P. L., Potts, J. R., Laws, H. L., O'Leary, J. P., & Richardson, J. D. Quality of surgical residency applicants: Is it deteriorating? Results of a national survey. Paper presented at Association of Program Directors in Surgery, Phoenix, Arizona, April, 2000.
- Biderman, M. D. Overview of statistics and sample size considerations. Invited presentation at University of Tennessee College of Medicine - Chattanooga Unit and Erlanger Health System Research Symposium, Chattanooga, TN, September, 2000.
- Caldwell, Q., Mack, D., Johnson, D., & Biderman, M. (2002). Value for diversity as a moderator of organizational relationships. Paper to be presented at the 17<sup>th</sup> annual conference of the Society for Industrial and Organizational Psychology, Toronto, Canada - April.
- Nguyen, N. T., McDaniel, M. A., & Biderman, M. D. (2002). Faking in situational judgment tests: An empirical examination of the work judgment survey. Symposium paper to be presented at the 17<sup>th</sup> annual conference of the Society for Industrial and Organizational Psychology, Toronto, Canada - April.
- Biderman, M., Davison, H. K., Swartout, K., & Newsome, M. (2003). Selecting for retention: Predicting turnover using alternative analytic techniques. Paper accepted for presentation at 18<sup>th</sup> annual conference of the Society for Industrial and Organizational Psychology. Orlando, FL.
- Rieth, T., & Biderman, M. (2003). The relationship between organizational effectiveness and authority boundary. Paper presented at 18<sup>th</sup> annual conference of the Society for Industrial and Organizational Psychology. Orlando, FL.- April.
- Biderman, M. & Nguyen, N.(2004). Structural equation models of faking ability in repeated measures designs. Paper presented at 19th annual conference of the Society for Industrial and Organizational Psychology. Chicago, IL. – April.

- Wrensen, L. B., & Biderman, M. D. (2005). Factors related to faking ability: A structural equation model application. Paper presented at 20th annual conference of the Society for Industrial and Organizational Psychology. Los Angeles, CA. – April.
- Biderman, M. D., & Nguyen, N. T. (2006). Measuring response distortion using structural equation models. Paper presented at the conference, New Directions in Psychological Measurement with Model-Based Approaches. Georgia Institute of Technology, Atlanta, GA. February.
- Clark III, J. M., & Biderman, M. D. (2006). A structural equation model measuring faking propensity and faking ability. Paper presented at the 21st annual conference of the Society for Industrial and Organizational Psychology. Dallas, TX - May.
- Biderman, M. D. (2007, January). Method variance and Big Five correlations. Paper presented at the 7th annual conference of the Association for Research in Personality. Memphis, TN.
- Biderman, M. D., Sebren, J., & Nguyen, N. T. (2007, April). Time on task mediates the conscientiousness-performance relationship. Paper presented at the 22nd annual conference of The Society for Industrial and Organizational Psychology, New York, NY.
- Biderman, M. D. (2007, April). Variability indicators in structural equation models. Part of symposium, Examining old problems with new tools: Statistically modeling applicant faking, presented at the 22nd annual conference of The Society for Industrial and Organizational Psychology, New York: NY.

### **Publications**

- Dorfman, D. D. & Biderman, M. A learning model for a continuum of sensory states. Journal of Mathematical Psychology, 1971, 8, 264-284.
- Biderman, M., Dorfman, D. D., & Simpson, J. A learning model for signal detection theory - temporal invariance of learning parameters. Bulletin of the Psychonomic Society, 1975, 6, 329-330.
- Biderman, M. D., McBrayer, W. C., & La Montagne, M. Effects of social influence on a recognition task of auditory intensity: A temporary shift in criterion. Perceptual and Motor Skills, 1976, 42, 75-85.
- Hood, R. W., & Biderman, M. D. Social comparison and effects of discrimination among levels of originality on self-assessed originality. Psychological Reports, 1976, 38, 439-446.
- Green, E. J., Booth, C. E., & Biderman, M. D. Cluster analysis of burglary M/O's. Journal of Police Science and Administration, 1976, 4, 382-388.
- Biderman, M. D. A statistical package for the HP 2000/Access. Behavioral Research Methods and Instrumentation, 1978, 10, 417-418.
- Hood, R. W., Hall, J. R., Watson, P. J., and Biderman, M. Personality correlates of the report of mystical experience. Psychological Reports, 1979, 44, 804-806.

- Ottenbacher, K., Watson, P. J., Short, M. A., & Biderman, M. Nystagmus and ocular fixation difficulties in learning-disabled children. The American Journal of Occupational Therapy, 1979, 33, 717-721.
- Watson, P. J., & Biderman, M. D. Emergence of deprivation induced drinking: Implications for hypothalamically elicited behavior. International Journal of Neuroscience, 1981, 12, 15-19.
- Watson, P. J., Biderman, M. D., & Warfield, D. R. Eating induced by injection of 2-deoxy-D-glucose in neurologically intact hypodipsic rats. International Journal of Neuroscience, 1981, 15, 95-98.
- Watson, P. J., Swindoll, M. L., & Biderman, M. D. Body weight reduction prior to quinine adulteration of water: Interactive complexities in measures of ingestive behavior. Bulletin of the Psychonomic Society, 1982, 20, 97-100.
- Watson, P. J., & Biderman, M. D. Failure of rats deprived of water to increase food intake during glucoprivation induced by 2-deoxy-D-glucose. Pharmacology, Biochemistry, and Behavior, 1982, 17, 955-959.
- Biderman, M. Concatenation of crosstabulations. Issues for users of SPSS INC. Software, 1983.
- Watson, P. J., Grisham, S. O., Trotter, M. V., & Biderman, M. D. Narcissism and empathy: Validity evidence for the narcissistic personality inventory. Journal of Personality Assessment, 1984, 48, 301-305.
- Emery, C. L., Watson, J. L., Watson, P. J., Thompson, D. M., & Biderman, M. D. Variables related to body weight status of mentally retarded adults. American Journal of Mental Deficiency, 1984, 90, 34-39.
- Biderman, M. D. Statistics in Psychology. In Crider, A. B., Goethals, G. R., Kavanaugh, R. D., & Solomon, P. R. Psychology, 2nd Edition. Glenview, Illinois: Scott, Foresman and Company, 1986.
- Kleiman, L., Biderman, M., & Faley, R. H. An examination of employee perceptions of a subjective performance appraisal system. Journal of Business and Psychology, 1987, 2, 112-121.
- Watson, P. J., Biderman, M. D. & Boyd, C. Androgyny as synthetic narcissism: Sex role measures and Kohut's psychology of the self. Sex Roles, 1989, 21, 175-207.
- Watson, P. J. & Biderman, M. D. Failure of only-child status to predict narcissism. Perceptual and Motor Skills, 1989, 69, 1346.
- Watson, P. J., Biderman, M. D. & Boyd, C. (1989). Androgyny as synthetic narcissism: Sex role measures and Kohut's psychology of the self. Sex Roles, 21, 171-203.
- Watson, P. J., Morris, R. J., Hood R. W., Jr. & Biderman, M. D. (1990). Religious orientation types and narcissism. Journal of Psychology and Christianity, 9, 40-45
- Sawrie, S. M., Watson, P. J., & Biderman, M. D. (1991) Aggression, sex role measures, and Kohut's Psychology of the self. Sex Roles, 25, 141-161.

- Watson, P.J., Sawrie, S. M., & Biderman, M. D. (1991). Personal control, assumptive worlds, and narcissism. Journal of Social Behavior and Personality, 6, 929-941.
- Watson, P. J., Little, T., Sawrie, S. M., & Biderman, M. D. (1992). Measures of the narcissistic personality: Complexity of relationships with self-esteem and empathy. Journal of Personality Disorders, 6, 433-448.
- Watson, P. J., & Biderman, M. D. (1993). Narcissistic personality inventory factors, splitting, and self-consciousness. Journal of Personality Assessment, 61, 41-57.
- Watson, P. J. & Biderman, M. D. (1994). Narcissistic Traits Scale: Validity evidence and sex differences in narcissism. Personality and Individual Differences, 16 (3), 501-504.
- Watson, P.J., Biderman, M. D., & Sawrie, S. M. (1994). Empathy, sex role orientation, and narcissism. Sex Roles, 30, 701-723.
- Hinton, M. & Biderman, M. D. (1995). Empirically Derived Job Characteristics Measures and the motivating potential score. Journal of Business and Psychology. 9 (4), 355-364.
- Helton, G., Ray, B., & Biderman, M. (2000). Responses of school psychologists and special education teachers to administrative pressures to practice unethically: A national survey. Special Services in the Schools, 16 (1, 2) 111-134.
- Cofer, J., Biderman, M. D., Lewis, P. L., Potts, J. R., Laws, H. L., O'Leary, J. P., & Richardson, J. D. (2001). Quality of surgical residency applicants: Is it deteriorating? Results of a national survey. The American Journal of Surgery, 181, 44-49.
- Allen, R. S., Biderman, M., & White, C. S. (2004). Emotional intelligence and its relation to equity sensitivity and responses to under-reward situations. The Journal of Behavioral and Applied Management. 5, 114-136.
- Cockerham, T., Cofer, J. B., Biderman, M. D., Lewis, P.L., & Roe, S. M. (2004). Is there declining interest in general surgery training? Current Surgery, 61, 1-5.
- Nhung, N. T., Biderman, M. D., & McDaniels, M. (2005). Effects of response instructions on faking a situation judgment test. International Journal of Selection and Assessment, 13, 250-260.

### **Other manuscripts**

- Biderman, M. D. (1979). ALBOB: A Little Bit of BASIC. An introductory BASIC language text used in Enrichment courses in computing for children.
- Biderman, M. D. (1985). Analyzing Data with QSTAT, 3rd Edition. A 180-page manual describing the analyses available in QSTAT.
- Magoffin, C. J., Cohen, W., Beavert, C. S., Biderman, M., Hadley, R. A., Han, C., Klingman, D., Lee, D., & Hardy, A. (1996). Building and Applying a Guideline-Based Performance Measurement System: Benign Prostatic Hyperplasia. Volume 1. Contract #282-91-0074 Deliverable 30.

Prepared for Agency for Health Care Policy and Research. Department of Health and Human Services.

Biderman, M. D. (1999). Psychology 201 Laboratory Manual.

### **Computer programs**

PSY: An interactive statistical package for the Hewlett Packard 2000.

QSTAT Version 1.0 An interactive statistical package for the HP 3000. A major revision and extension of PSY. A program designed for use in introductory and intermediate undergraduate and graduate statistics courses performing virtually all of the analyses required for such courses including features found in major statistical packages. Released September, 1985.

QSTAT for the Macintosh.

Computer Aided Instruction module for Introductory Statistics.

GEOPUZ. A computerized 3-dimensional Jigsaw Puzzle designed to provide drill and practice in conceptualization and visualization in three dimensions.

3DPLUS. A general purpose interactive graphics program designed to display figures in 3-D perspective and to allow the displayed figures to be translated along any of the three axes, rotated in any of the three planes, expanded, contracted, etc.

### **Grants**

Equipment to Support Classroom Demonstrations using the Macintosh Computer. UTC Instructional Excellence Grant for \$1119 awarded on February 27, 1989.

Hardware and Software Support for Instruction in 300- and 400-level Psychology Courses. UTC Instructional Excellence Grant for \$1485 awarded in May, 1990.

Hardware and Software Support for Social Science Computing. UTC CCI grant for \$1999 awarded on July 12, 1990.

Statistical Software for Instruction in Psychology. UTC Instructional Excellence Grant for \$1825 awarded on November 16, 1990.

Pattern Recognition Hardware and Software for Instruction in Psychology. UTC CCI Development/Research Grant for \$1300 awarded on March 22, 1991.

A Laboratory Exercise Package for Psychology 312. UTC Instructional Excellence Grant for \$1440 awarded on March 5, 1996.

Hardware and Software to facilitate teaching of Sensation and Perception. U. T. Chattanooga Technology Innovation Fund grant for \$1200 awarded December 1997.

Structural Equations Models for Repeated Measures Designs. UTC Summer Fellowship awarded May 1999.

Statistics Hardware and Software for Psychology Computer Laboratory. UTC Computer Curriculum Integration grant awarded March 1999.

Software for Research Methods in Psychology. UTC Computer Curriculum Integration grant awarded in March 2000.

Software for Research Methods in Psychology (with Brian O’Leary). UTC Computer Curriculum Integration grant awarded in March 2002.

Computer Program to Facilitate Qualitative Analysis. (with Lauri Hyers). UTC Instructional Excellence grant awarded in March 2003.

Enhancement of Psychology 312: Sensation and Perception. UTC Computer Curriculum Integration grant awarded in January 2004.

### **Teaching Experience**

Undergraduate Introductory Statistics 1972- present.

Undergraduate Research Methods 1972-1980.

Sensation and Perception 1972-present.

Survey of Industrial Psychology, 1981-1989.

Graduate Statistics / Research Methods 1983-present.

Graduate Statistics / Reliability/Validity/Survey Method/Multiple regression 1985-present.

Advanced applications of SPSS, 1998-present.

Introduction to SAS. 2002-present.

Job and Performance Measurement 2002.

### **Research Interests**

Issues in the measurement of organizational constructs.

Structural Equation models of behavior.

Faking of personality questionnaires