UNIFORM VITA AND BIOGRAPHICAL DATA SHEET

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EDUCATION

Year	Degree	Specialization	University
1984	Ph.D.	Educational Psychology (measurement/statistics)	Southern Illinois University
1978	M.S.	AJ (counseling)	Southern Illinois University
1974	B.S.	Psychology	Western Illinois University

PROFESSIONAL EXPERIENCE

2007-present	Professor	College of Education University of Alabama
1998-2007	Professor	College of Education University of North Texas UNT Health Science Center
1991-1997	Associate Professor	College of Education University of North Texas UNT Health Science Center
1996	Visiting Scholar, Professional Development Leave Director, Educational Research Lab	University of Chicago University of North Texas
1988-1990	Assistant Professor	University of North Texas

PROFESSIONAL ACTIVITIES

Professional Associations

    American Psychological Association - Division 5
    American Statistical Association
    National Council on Measurement in Education
    American Educational Research Association-
     Special Interest Groups:
           Multiple Linear Regression
           Survey Research
           Educational Statistician
           Structural Equation Modeling
           Rasch Measurement
           Professors of Educational Research
    Southwest Educational Research Association
    Midwestern Educational Research Association

Offices Held

Educational Research Program Chair	(1988-1990)
Executive Committee	(1990-1993)
Educational Technology Committee	(1990-1993)
Structural Equation Modeling, Founder and Chair	(1988-1993)
Southwest Educ. Research Association-Editorial Board	(1991-1995)
National Council on Measurement in Education-Review Board	(1991-1995)
University Tenure Committee	(1994-1997)
University Faculty Load Committee	(1994-1997)
University Research Committee	(1995-1997)
Phi Delta Kappa, Research Representative	(1988-1992)
Phi Delta Kappa, Vice President for Programs	(1993-1994)
President, Southwest Educational Research Association	(2001-2002)

Journals (Editorial Board)

Measurement: Interdisciplinary Research & Perspectives (**Editor**)	(2017- 2023)
Multiple Linear Regression Viewpoints	(1991-1996)
Journal of Educational Measurement	(1991-1996)
Educational Research Quarterly	(1991-1999)
Structural Equation Modeling - **Founder & Emeritus Editor**	(1993-2011)
Texas Researcher	(1993-1998)
Journal of Outcome Measurement	(1997-2001)
Multiple Linear Regression - **Co-Editor, Editor**	(1998-2001)
Multiple Linear Regression – **Emeritus Editor**	(2005-2011)
Educational and Psychological Measurement	(1995-2020)
Journal of Applied Measurement	(2015-2020)

Areas of Expertise

Structural Equation Modeling
Multiple Regression
Multivariate Statistics
Psychometric Theory
    Classical measurement
    Assessment and certification exams
    Computer adaptive testing
    Latent Trait and Generalizability Theory
Program evaluation and assessment
Research Design and Mixed Methods
SAS, SPSS, and R software applications

Consulting

Australian Survey of Farmers, Suppliers, and Creditors	1984
American Sociological Association Index (1971-1985)	1987
Illinois Department of Corrections -Budget & Planning	1987
Illinois Law Enforcement Training Board - Certification	1988
Professional Development Institute - DOA Certification	1989
Illinois Law Enforcement Training Board - Validation	1989
Lewisville ISD - Technology Based Science Instruction	1990
Colleyville/Grapevine ISD - Community Survey	1990
Professional Development Institute - Wilkerson Audit	1990
Irving ISD - DF/W Airport Expansion Impact Survey	1991
Lewisville ISD - Texas Learning Technology Group	1991
National Science Center Foundations - Learning Logic	1992
Texas College of Osteopathic Medicine - KBIT	1992
Texas Academy of Math & Science - Alumni Evaluation	1992
Carrollton-Farmers Branch ISD - Cognitive Coaching	1993
Texas Academy of Math & Science - 3 year evaluation	1993
Carrollton-Farmers Branch ISD - Follow-up Evaluation	1994
UNT-Health Science Center - KBIT, DDX, CAT grants	1993-97
Assessment Corporation, San Antonio Texas - Incredible Universe	1995-96
Region XI Service Center grants	1997-2000
Grapevine/Colleyville ISD – Special Education Transition Services	2000
Dallas ISD – Title I Evaluation grants	2000-02
American Disability Physicians	2008-14
ELM Metrics	2000-15
Food Service Industry Exams	2008-20
State of Alabama Licensure Exams	2015-22

UNIVERSITY COMMITTEES & COUNCILS

1988-2007   Program Chair, Federation of North Texas Area Universities
Tenure and Promotion Committee
Faculty Research Grants Committee
Faculty Workload Committee
Research Advisory Board Member, Texas Academy of Math & Science
Research Advisory Committee Member - North Texas Community College Consortium
University Dissertation Committees
Student Selection Committee - Texas Academy of Math & Science
Vice President Programs - Phi Delta Kappa Chapter 50 UNT/TWU

2022-2024   Premier Awards Committee
Alabama Research Institute on Aging (ARIA) Associate
Center for Interconnected Behavioral and Mental Health Systems (CIBMHS) Associate

SCHOOL/COLLEGE COMMITTEES & COUNCILS

1988-2016

Major Professor - Educational Research Dissertations:

> Melanie Kidd
> Joan Bush
> Karen Bembry
> Katy Denson
> Robert Mount
> Cindy Anderson
> Marjorie Whitmore
> Jung Bang
> Surintorn Suanthong
> Suchittra Cheevatnarak
> Stacy Hughey-Surman
> Dheeraj Raju
> Marcus L. McBride (co-Chair w/Dr. Thoma)
> Lauren Holmes
> Lisa Besnoy
> Amy Tilford
> Judy Pugh

Minor Professor - College of Education Dissertations:
> James Jessup
> Carol Campbell
> Larry Clutter
> Mark Harris
> David Saeva

Dissertation Committee Memberships:

Kent Conwell	- Vocational Education
Michael Brasel	- Educational Research
James Jessup	- Adult/Continuing Education
Charles S. Gaede	- College Teaching
Richard Roberts	- Counselor Education
Carol Hillman	- Applied Training and Development
Ashley Carroll	- Educational Psychology
Sally Zengaro	- Educational Psychology
Yang Zhang	- Kinesiology
Travis Illian	- Kinesiology
C.M. Laurent	- Kinesiology
J-K Davis	- Kinesiology
Amy Fineburg	- Kinesiology
M.A. Kennamer	- Educational Administration
John Kinkead	- Higher Education
George Boszikov	- Educational Leadership
Guillermo Melius	- Engineering
Shiri D. Vivek	- Marketing
Ian Clara	- Osteopathic Medicine
Will Wright	- Kinesiology
Alice Daugherty	- Higher Education Administration

2023-2024

Advisor   Emine Beyza
                 Samuel Nwami

Mentor   Dr. Alan Webb
                 Angela Dobbins

1988-2024

University Graduation Planning Committee
College Doctoral Qualifying Exam Reviewer
Faculty Marshall, Spring Commencement (May 13, 1989)
Faculty Marshall, Summer Commencement (August 12, 1989)
Lead Marshall, Fall Commencement   (December 16, 1989)
College of Education Newsletter (March 1990)
Co-Chair, Educational Technology Committee
Faculty Search Committee, Dept. of Higher Education
Faculty Search Committee, Dept. of Educational Studies
Faculty Issues Committee, College of Education (2010-2016)
UA Presidents Premier Awards Committee (2022-2023)
Chair, Faculty Promotion Committee – Joni Lakin (2021)

Director of International Programs applicant (2023)
Alabama Research Institute on Aging (2022-2024)
Faculty Senate nominee (2024)
Graduate Student Council nominee (2024)
Faculty Research Committee (COE – 2024)

DEPARTMENT/DIVISION COMMITTEES & COUNCILS

1988-2024

Educational Research Committee
Faculty Search Committee, Special Education - Gifted & Talented
Faculty Search Committee, Special Education - Early Childhood
Faculty Search Committee, Educational Research
Department Executive Committee
Budget Committee
Resource and Curriculum Committee
BER Program Committee
Summer Institute (2024 – Planning)
Department Tenure and Promotion nominee (2024)

Community Service (Public)

2019 – Tuscaloosa One's Place, Tuscaloosa Family Resource Center, Inc.
Juveniles Supported Through Integrated Community Engagement (JUSTICE)

Tuscaloosa's One Place, A Family Resource Center created the Juveniles Supported Through Integrated Community Engagement (*JUSTICE*) program to fill the void of juvenile reentry services in Tuscaloosa County. The *JUSTICE* program provided case management, goal mentoring, GED curriculum, legal assistance, grievance counseling, and mental health counseling for 28 juveniles released to the community from July to December 2018. Individual case narratives reveal each juvenile set of circumstances with a common theme of having the loss of one or more parent, poor home environment, and lack of routine and discipline. Probability of success in program was highly predictable based on number of days in the program and knowing the number of prior crimes. Juvenile records were expunged by legal services if successfully completed program. Recommended funding for additional years of JUSTICE program support given effectiveness and low-cost versus the incarceration and detention annual costs for juveniles.

2023 - *Community Juvenile Delinquency Prevention Project*

I developed the project narrative, budget, and proposal with Tyler Fezzey, doctoral student in College of Business, that was submitted to the Tuscaloosa City Council. The project and budget was fully funded.

Programs and initiatives started by Donnie, Lee Jr., Ivy Foundation, was designed to reduce juvenile detention recidivism, mentor at-risk youth, and guide them toward college, GED, trade school, and general community re-entry. The programs have already generated great success and have been in regular contact with different constituents like the police department and Tuscaloosa city schools who have issued their support and funding, e.g. gift cards, tutoring after school, and sport activities.

GRANTS

PI; Co-PI; Senior Personnel: Investigator – Submitted (Pending or Non-funded)

1. PI – Lisa Scherff/Co-PI Randall Schumacker
   Reading Interventions in High Schools: Instructional Variables that Make a Difference
   U.S. Department of Education: National Center for Education Research
   Submitted: 10/31/07

2. PI – Lisa Hooper/Investigator Randall Schumacker
   Rural Primary Care Physician's Treatment of Depressed Adolescent Patients
   National Institute of Health
   Submitted: 10/08/2007

3. PI – Marcia Rock/Co-PI Randall Schumacker
   Virtual Bug-in-Ear Project
   U.S. Dept. of Education
   Submitted: 9/4/2008

4. PI – Daniel J. Fonseca/Co-PI's Gary P. Moynihan; Asghar Iran Nejad; Randall Schumacker; Terry
        Brumback
   Determination of Problem-Solving Skills for Undergraduate Engineering Students
   National Science Foundation
   Submitted: 4/30/08

5. PI – Randall Schumacker/Co-PI Aaron Kuntz
   Subcontract with Governor's Office for Faith-Based and Community Initiatives
   Alabama State Department
   Submitted: 4/11/2008

6. PI – Dennis Sunal/Co-PI's Miguel Mantero; Cynthia Sunal; Randall Schumacker; Stan T. Jones
   The Interaction of Science and Hispanic English Language Learner Education (ISELLE)
   National Science Foundation
   Submitted: 1/8/2008

7. PI – Ken McGrew/Co-PI's Marcia Rock; Randall Schumacker
   Strengthening Qualitative Innovation through Methodological Innovation and Integration
   National Science Foundation
   Submitted: 1/13/2009

8. PI – Randall Schumacker/Statistician Dheeraj Raj
   Alabama Math and Science Technology Institute Evaluation
   Alabama State Department/UA Office of Community Affairs
   Submitted: 3/30/2009

9. PI – Ken McGrew/Co-PI's Marcia Rock; Randall Schumacker; Tom Skrtic; Clifton Tanabe
   Exploring the Relationship Between Teacher Preparation and Student Learning with
   Improved Methods Aided by New Technologies
   U.S. Department of Education
   Submitted: 10/1/2009

10. PI - Norma Cuellar/Investigators: Randall Schumacker, Michael Innis-Jiménez, Kenneth Lichstein
    A Comparison of Sleep and Health Outcomes in Hispanics and non-Hispanics in Alabama
    Academic Research Enhancement Award (Parent R15)
    National Institutes of Health
    Dates: 1/2011 to 12/2012

11. PI – Phillip Bishop; Thomas Bernard (Univ. South Florida)/Investigators: Randall
    Schumacker
    Increasing Safety and Productivity Workers in Protective Clothing: Modeling the
    Microenvironment
    National Institute for Occupational Safety and Health
    Dates: January 2016 to December 2017

12. PI – Brett Nickerson
    Improving Clinical Diagnosis of Obesity Beyond BMI: Development of a New Body Fat Prediction
    Method with Ultrasonography for Hispanic Adults
    National Institute of Health
    Dates: July 1, 2022 to June 30, 2027

13. PI – Marie Hammond
    Defining Contextual Affordances in Social Cognitive Career Theory: Impact on Persistence among
    African American and Women STEM students
    National Science Foundation – NSF 21-588
    Dates: August, 2020 – July, 2023

14. PI – Rachel Breman
    A Measure for Shared Decision Making in Maternity Care through communicating
    CHOICEs, CHildbirth Options, Information, and person-Centered Explanation
    National Institute of Health - R01 HS028984-01
    Dates: July 1, 2022 to June 30, 2025

Funded

1. Classification of Two-Year Institutions
   Bill J. Priest Center, UNT Foundation
   Purpose: Classify Two-Year Institutions according to Carnegie Foundation standards
   Dates: September 2001 to August 31, 2002

2. Teaching with Technology
    Center for Distributed Learning, UNT
    Purpose: EDER 6020 – Research Methods Web Course
    Dates: September 1, 1999 to August 31, 2000

3. Teaching with Technology
    Center for Distributed Learning, UNT
    Purpose: EDER 6005 – Statistical Theory and Simulation Web Course
    Dates: September 1, 2000 to August 31, 2001

4. Faculty Research Grant
    Austin, We have a problem: An analysis of TAAS Items by subgroups
    Purpose: Item analysis by gender and ethnic subgroups
    Dates: September 1, 2000 to August 31, 2001

5. Charn Uswachoke International Development Fund
    UNT Provost Office
    University of North Texas
    Purpose: Faculty and student development in Thailand
    Dates: September 1, 1998 to August 31, 1999

6. Departmental Technology Grant
    UNT Provost Office
    University of North Texas
    Purpose: Develop a Graduate Web-based Research Course
    Date: September 1, 1998 to August 31, 1999

7. Gifted-at-risk Talented students: Identification, remediation, and discrimination
    Office of Research and Academic Grants
    University of North Texas
    Denton, TX
    Purpose: To investigate the importance of learning styles
    and study strategies on the selection of gifted
    students for the Texas Academy of Math & Science.
    Dates: January 1, 1992 to August 31, 1993

8. Transfer of Learning in High School: A Follow-up Study
    MEADOWS Foundation
    Dallas, TX
    Purpose: To investigate transfer of learning hypothesis
    in high school students and compare results
    with earlier findings among TAMS students.
    Dates: October 1, 1991 to August 1, 1992

9. Defining Quality Indicators for Schools
   Texas Education Agency
   Department of Program Evaluation
   Austin, TX
   Purpose: To conduct research and analysis to determine
   quality indicators of elementary and secondary
   schools
   Dates: January 1990 to August, 1990

10. Instructional Technology Impact Upon Statistical
    Understanding Among University Graduate Students
    Office of Research and Academic Grants
    University of North Texas
    Denton, TX
    Purpose: To discover whether computer based tutorial
    software in statistical concepts increases
    understanding among graduate students
    Dates: January 1990 to August 1990

11. Defining Quality Indicators
    Texas Education Agency
    Department of Program Evaluation
    Austin, TX
    Purpose: To conduct research and analysis to indicate
    quality outcome measures of school district
    performance.
    Dates: January, 1989 to August, 1989

12. Meta Analytic Review of Link between Learning
    Disabilities and Juvenile Delinquency
    Research Initiation Grant
    Vice President of Academic Affairs
    University of North Texas
    Purpose: Review literature and conduct meta-analysis
    of statistical findings in research articles
    for preparation of journal article on subject.
    Dates: January, 1989 to August, 1989

13. Jailer Basic Training Exam Development
    Illinois Law Enforcement Training Board
    Lincoln Tower, suite 400
    Springfield, IL 62702
    Purpose: To develop a 400 item test pool from basic
    curriculum content. Develop 4 parallel forms of a
    120 item test. Analyze item discrimination
    indexes, reliability, and validity of core tasks,
    related behavior, and test objectives.
    Dates: July, 1986 to July 1989

14. Monitoring and Evaluating the Services for Correctional Inmates
    Illinois Department of Corrections
    Springfield, IL 62702
    Purpose: Initiate a research phase, development phase, and
    implementation phase for parolee offender
    tracking. This includes establishing evaluation
    model and identifying employment relationship to
    institutional training with subsequent feedback
    to host prison.
    Dates: August 1986 to October 1987

15. Membership Survey
    Illinois Dietetic Association
    Chicago, IL
    Purpose: Survey attributes of dietitians and their involvement in district activities.
    Dates: March, 1987 to July, 1987

16. Evaluation of Phoenix Industries Program: A supported work project for
    probationers.
    National Institute of Justice
    Washington, DC
    Purpose: Evaluation of Phoenix Industries program effectiveness.
    Dates: October, 1983 to April, 1984

17. Police and Community Enterprise: A Survey Research
    of Attitudes toward Crime and Crime Prevention
    National Institute of Justice
    Washington, DC
    Purpose: Research and analysis community perceptions
    towards police department and make recommendations
    concerning neighborhood watch programs.
    Dates: April, 1983 to August, 1983

18. Assessment for Vocational Program Needs and Development
    in Illinois Correctional Institutions
    Illinois Office of Education &
    Department of Adult, Vocational, and Technical Education
    Springfield, IL 62702
    Purpose: Evaluate all adult and juvenile vocational
    education programs and make recommendations.
    Dates: October 1976 to July 1977

GRANTS (External Evaluator)

1. Alabama Department of Education
    AMSTI 2009 Summer Institutes
    June – August 2009

2. Frank Papa
    An artificial intelligence based tutorial designed to support the development of diagnostic
     competencies in medical students.
     National Institute of Health, 2008 - 2011
     Submitted: 6/01/08

3. Kathleen Swigger & Robert Braille
    Improving the Performance of Global Software Development Learning Teams
    National Science Foundation, 2007-2010
    $ 499,252
    Grant # IIS-0705638

4. Patti Hamilton, R.N., PhD.
     Principal Investigator
    SBAR's Effect on Nurse -Physician Communication and
    Nursing-Sensitive Measures in a Pediatric Setting
     Robert Wood Johnson Foundation, 2007
    $ 300,000

    Susan Sportman, R.N., PhD.
    Principal Investigator
    High Fidelity Patient Simulation
    Texas Higher Education Coordinating Board, 2005 - 2007
    $ 1,270,000
    Grant # NIGP-D-05

5. Oscar Garcia, PhD.; Reza Mirshams, PhD. & Kathleen Swigger, PhD.
    Principal Investigators
    Innovative Electrical Engineering Program
    National Science Foundation, 2002- 2003
    $ 100,000
    Grant # 0343263

6. Gerald Knezek, Ph.D.
     Principal Investigator
     Millennium II:
     Preparing Tomorrows
     Teachers to Bridge the Digital Divide
     U.S. Dept. of Education, 2000-2003
     $ 779,500
    Grant # P342A000123A

7. Gerald Knezek, Ph.D.
    Principal Investigator
    The Millennium Project: Pathways for Preparing Tomorrows Teachers to Infuse Technology
     U.S. Dept. of Education, 1999-2000
      $ 162,700
    Grant # P342A990474

8. James Poirot, PhD.
    Principal Investigator
    South Central Regional Technology in Education Consortium
     U.S. Department of Education – Southwest Educational Development Lab (SEDL), 2002-2004
      $ 599,998 (SEDL subcontract to UNT)
    UNT Grant # 72268 (2002); Grant # 72271 (2003); and Grant # 72027 (2004)

9. Barbara Ashmore, Ph.D.
    Principal Investigator
    Texas School Administrator Administration Network
    Texas Business Education Coalition, 2003
     $ 60,000 (UNT Grant # 70089)

10. James Poirot, Ph.D.
     Principal Investigator
    Technology Leadership Institute, 1999-2003
    U.S. Department of Education
     $ 1,920,000
    Grant # P342A-9990323

11. James Poirot, PhD.
    Principal Investigator
    National Educational Technology Standards (NETS)
    For Teachers: Establishing Performance based Standards
    And Assessments for Improving Technology Competence
    In Pre-Service Education
    U.S. Dept. of Education, 1999-2002
    $ 1,944,000
    Grant # P342A-990498

12. Frank Papa, PI
    Principal Investigator
    Computer Adaptive Medical Licensure Examinations
    U.S. Dept. of Education, 1995-1997
    $ 370,650
    Grant # P116852224

13. Frank Papa, PI
    Expert System Based Clinical Tutorial Project
    U.S. Department of Education, 1989-1992
    $ 263,178
    Grant 3 P116890120

15. Dantzler, John, PI
    East Central Children's Mental Health Initiative
    Department of Mental Health, SAMHSA 2011-2012
    $ 266,500

16. Hobbs, Mary, PI
    National Science Foundation: Teacher Professional Continuum
    University of Texas, *Project Instrument Development*, 2006-2009
    NSF 0554468
    $286,311

17. Rock, M. L.
    Virtual Coaching and Feedback Impact on Student Engagement:
    Exploring Mediator Variables
    Institute for Educational Sciences (IES), Goal 1 (2013)
    Special Education Research Professional Development for Teachers and Related Services Providers
    (CFDA 84.324A).
    $ 800,000

18. M. Hammond, J. Hall, S.K. Hargove, & A. Young-Seigler
   Career Commitment and Retention in STEM: The Intersection of Professional Identity and Career Management Skills
   National Science Foundation (NSF 15-509)
   $ 1.5 million

19. Runchang Lin, Selina Merelis, & Hoonandara R. Goonatilake (2016).
    College of Arts & Science Community-aid (CASC-Aid)
    National Science Foundation (NSF S-STEM, # 1643797)
    $ 999,989

20. Gurbuz, S.Z., Crawford, C.S., Griffin, D., & Gurbuz, A.C. (2018)
    A Deaf-centric Approach to Designing, Implementing, and Evaluating Radar-Based ASL Technologies
    National Science Foundation (NSF 18-520)
    IIS – S&CC: Smart & Connected Community
    $ 1,261,927

21. Schumacker, R. & Morgan, H. (2019).
    Principal Leadership: An Investigation of Direct and Indirect Relations Between Principals, Teachers, Parents, and Student Data
    Program Solicitation: NSF 17-584
    DRK-12 Program Strand/Project Type*: Teaching Strand / Exploratory Study*
    $ 449,809

22. Schumacker, R. & Morgan, (2019).
    Examining Teacher Quality Relationship to Student Achievement of at-risk Students
    Program Solicitation: NSF 17-584
    DRK-12 Program Strand/Project Type: *Teaching Strand / Exploratory Study*
    $ 458,000

23. Fedewa, M., Esco, M., Schumacker, R., Gan, Y. (2019).
    The Validity and Reliability of a 2-Dimensional Body Composition Imaging Method in Adults Across the Life Span
    Program Solicitation: Alabama Life Research Institute
    $ 24,000

24. Fedewa, M., Esco, M., Schumacker, R., Gan, Y. (2019).
    A 2-Dimensional Body Composition Imaging Method in Military-Style Training
    Program Solicitation: U.S. Department of Defense
    $ 695,074

25. Fedewa, M., Esco, M., Schumacker, R., Gan, Y. (2019).
    A 2-Dimensional Body Composition Imaging Method in Adults across the Lifespan
    Program Solicitation: National Institute of Health
    $ 148,055

26. Fedewa, M., Esco, M., Schumacker, R., Gan, Y. (2021).
     The Validity and Reliability of a 2-Dimensional Body Composition Imaging
     Method in Adults Across the Life Span
     Program Solicitation: Alabama Life Research Institute
     $ 25,000

27. Yun-Ruei Corinne Ku & Schumacker, R. E. (2022)
     Rasch Rating Scale Analysis of the 10-item Connor-Davidson Scale
     In an International sample
     College of Education
     University of Alabama
     Dean's Summer Doctoral Research Program

PUBLICATIONS & CREATIVE ACTIVITIES

Refereed Publications

Schumacker, R. & D. Anderson (1979). An attitude factor in juvenile court decision-making. *Juvenile and Family Court Journal, 30(3),* 31-35.

Schumacker, R. & D. Leitner (1979). A survey of principal's perceptions towards vandalism, record keeping, and prevention measures in Southern Illinois. *Illinois School Research and Development, 16(1),* 27-37.

Schumacker, R.E., J. Scheer, D. Leitner (1980). Backgammon: Winning with probability. *The Illinois Mathematics Teacher, 31(1)*, 13-19.

Schumacker, R. (1981). Comprehension differences are important in studies of conformity, influence, persuasion. *Psychological Reports, 48*, 583-586.

Lehr, B., A. Allen, & R. Schumacker (1982). Inhibition of motor neuron pools as revealed in non-averaged but statistically sampled fourier transforms of EMG signals. *Zdravstveni Vestnik, 51(1),* 157-158.

Leitner, D. & R. Schumacker (1984). Comparative analysis of books on multiple regression. *Multiple Linear Regression Viewpoints, 13(1)*, 1-13.

Sharma, M. & R. Schumacker (1985). The impact of international students on U.S. students. *Journal of International Student Personnel, 2(1),* 29-33.

Anderson, D. & R.E. Schumacker (1986). Assessment of job training programs. *Journal of Offender Counseling, Services & Rehabilitation, 10(4)*, 41-48.

Anderson, S., Anderson, D, & R.E. Schumacker (1990). How members perceive district associations: A case study. *Journal of the American Dietetic Association, 90(4),* 581-582.

Beyerlein, M. & R.E. Schumacker (1990). Causal Modeling of Measured and Latent Variable Networks: A Tutorial. *Southwest Division of the Academy of Management, 1*, 53-55.

Beyerlein, M., Schumacker, R.E., & K. Kamalesh (1990). Norm Referenced Test Construction. *International Academy of Management and Marketing, 2,* 377-379.

Schumacker, R.E. & W.K. Brookshire (1990). Defining Quality Indicators. *Texas Study of Secondary Education Research Journal, 46*, 31-34.

Schumacker, R.E., Anderson, D, & S. Anderson (1990). Vocational and academic indicators of parole success. *The Journal of Correctional Education, 41(1),* 8-13.

Schumacker, R.E. & P.G. Hossain (1990). Computer use in education: faculty perception and use of a computer learning center. *Journal of Computer-Based Instruction, 17(3),* 87-90.

Schumacker, R.E. (1990). Review: The desktop publisher's legal handbook. *National Association of Desktop Publishers Journal, 4(2),* 13-15.

Anderson, D., Schumacker, R.E., & S. Anderson (1991). Releasee characteristics and parole success. *Journal of Offender Rehabilitation, 17(12),* 133-145.

Lupkowski, A. & R.E. Schumacker (1991). Mathematics anxiety among talented students: should we be concerned? *Journal of Youth and Adolescence, 20(6),* 563-572.

Mount, R.E. & R.E. Schumacker (1991). Rehabilitation administrator perceptions of graduate curriculum needs: a guide to curriculum development. *Rehabilitation Education, 5*, 53-58.

Schumacker, R.E. (1991). Relationship between multiple regression, path, factor, and LISREL analyses. *Multiple Linear Regression Viewpoints, 18(1),* 28-46.

Schumacker, R.E. & W.K. Brookshire (1991). Factor Analysis of Quality Indicators for Elementary and Secondary Schools. *Texas Researcher, 1*, 81-89.

Schumacker, R.E. & Miyashita, K. (1992). Differential involvement by Japanese parents in Texas schools. *Texas Teacher Education Forum, 17*, 65-69.

Schumacker, R.E. & Brookshire, W.K. (1992). Defining Quality Indicators for Secondary Schools. *Educational Research Quarterly, 15(4)*, 5-10.

Schumacker, R.E. (1992). Rasch Rating Scale Analysis of Quality Indicators of Elementary and Secondary School Performance. *Educational Research Quarterly, 15(4),* 11-20.

Schumacker, R.E. & Miller, J.E. (1992). Problem solving differences in mathematics with accelerated students. *Texas Researcher, 3*, 23-29.

Papa, F.J., Stone, R.C., & Schumacker, R.E. (1992). Artificial intelligence-based differential diagnosis assessment procedures: Theoretical advantages. In Harden, R.M., Hart, I.R. and Mulholland, H. (Ed.). *Approaches to the assessment of clinical competence: Part I.* Norwich, Great Britain: Page Brothers Publishers, 447-451.

Schumacker, R.E. (1993). Rasch Quick Norms, *Rasch Measurement, 7(1),* 270-271.

Schumacker, R.E. & Williams, J.D. (1993). Teaching ordinal and criterion scaling in multiple regression, *Multiple Linear Regression Viewpoints, 20(1),* 25-31.

Schumacker, R.E. (1993). Developing Structural Equation Models. *Midwestern Educational Researcher, 6(3),* 25-28.

Schumacker, R.E. (1994). Elementary school accountability: Predicting comparison measures. *Journal of Texas Public Education, 2*, 47-52.

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Schumacker, R.E. (1989, March). Relationship between multiple regression and selected multivariable methods. American Educational Research Association, San Francisco, California.

Schumacker, R.E. (1990, March). Norm Referenced Test Construction: A Workshop International Academy of Management and Marketing, Dallas, Texas.

Schumacker, R.E. (1990, January). EQS/PC versus LISREL/PC: Which shall I use?
    Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (1990, January). Defining Quality Indicators: A Qualitative-Quantitative Approach.
    Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (1990, March). Causal Modeling of Measured and Latent Variable
    Networks: A Tutorial. Southwestern Federation of Administrative Disciplines, Dallas, Texas.

Schumacker, R.E. (1990, March). Human Resource Management - Performance Evaluation Discussant
    International Academy of Management and Marketing, Dallas, Texas.

Schumacker, R.E. (1990, September). Current Qualitative Research Books: A Comparative Review
    Conference on Computers and Qualitative Research, Breckenridge, Colorado.

Schumacker, R.E. (1991, January). Transfer of learning: should we be concerned?
    Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1991, January). Coding strategies in multiple regression
    Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1991, January). Criterion-referenced test reliability: An Ideal Loss Function Index
    Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1991, January). Defining quality indicators for schools
    Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1991, March). Rasch Rating Scale Analysis Of Quality Indicators
    of Elementary and Secondary School Performance. Fifth Annual Texas Testing Conference
    Austin, Texas.

Schumacker, R.E. (1991, April). Rasch-based Factor Analysis of Dichotomously-scored Item
    Response Data. American Educational Research Association, Chicago, Illinois.

Schumacker, R.E. (1991, April). Reliability and Confidence Envelope Usage in Item Response Theory
    American Educational Research Association, Chicago, Illinois.

Schumacker, R.E. (1991, May). Structural Equation Modeling. College of Education, University of North
    Texas, Denton, Texas.

Schumacker, R.E. (1992, January). Mathematics Anxiety Rating Scale Analysis of Gifted and Talented
    Students. Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1992, February). Transfer of Learning in High School: A follow-up study
    Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1992, February). Ordinal and Criterion Scaling in Multiple Regression
Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1992, April). Goodness-of-Fit Criteria in Structural Equation Modeling
American Educational Research Association, San Francisco, California.

Schumacker, R.E. (1992, April). Factors Affecting Regression-Discontinuity
American Educational Research Association, San Francisco, California.

Schumacker, R.E. (1993, January). An Overview of Research Projects Underway in Texas Schools.
Texas Research and Evaluation Network Conference Invited Address, Jointly sponsored by the
Intercultural Development Research Association, Southwest Educational Development Lab, Southwest
Educational Research Association, and Texas Center for Educational Research, Austin, Texas.

Schumacker, R.E. (1993, January). Math Attitudes and Achievement of Algebra I Students:
A Comparative Study of Computer Assisted and Traditional Lecture Methods of Instruction.
Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (1993, January). Impact of Instructional Technology on Statistical Understanding and
Attitudes. Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (1993, January). Generalizability Theory Workshop
Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (1993, January). Gifted at-risk students: identification, remediation, and discrimination.
Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (1993, April). Confirmatory Factor Analysis using Dichotomous Data
International Academy of Business Disciplines, New Orleans, LA.

Schumacker, R.E. (1993, April). Quick Norms with Rasch Measurement
American Educational Research Association, Atlanta, GA.

Schumacker, R.E. (1993, April). Assessing Stability of Structural Equation Model Goodness-of-fit
Indictors using Bootstrap Procedures. American Educational Research Association, Atlanta, GA.

Schumacker, R.E. (1993, April). Chair, AERA Division D Session: Developments in Applications in
Covariance Structure Analysis. American Educational Research Association, Atlanta, GA.

Schumacker, R.E. (1993, April). Chair, AERA SEM SIG: A Beginners Guide to Structural Equation Modeling
and LISPATH. American Educational Research Association, Atlanta, GA.

Schumacker, R.E. (1994, January). A Comparison of Best Model Selection Criteria in Multiple Regression
Southwest Educational Research Association, San Antonio, TX.

Schumacker, R.E., Thompson, B., Daniel, L., and Tullis, R. (1994, January). Chair, Symposium: Methodological Issues in Research. Southwest Educational Research Association, San Antonio, TX

Schumacker, R.E., Harwell, K., Hawkins, L., and McCallon, E. (1994, January).   Cognitive Coaching: An Alternative to the Texas Teacher Appraisal System.   Southwest Educational Research Association, San Antonio, TX.

Schumacker, R.E. (1994, January). Structural Equation Modeling Workshop. Southwest Educational Research Association, San Antonio, TX

Schumacker, R.E., Frerichs, D., and Hamilton, C. (1994, January).   The State Anxiety Inventory: A Rasch analysis. Southwest Educational Research Association, San Antonio, TX.

Schumacker, R.E., Byrne, B., Harlow, L., and Baldwin, B. (1994, April).   Chair, Symposium: Current Issues and Techniques in Structural Equation Modeling. American Educational Research Association, New Orleans, LA.

Schumacker, R.E. (1994, April).   A Comparison of the Mallows C(p) and Principal Component Criteria for Best Model Selection in Multiple Linear Regression. American Educational Research Association, New Orleans, LA

Schumacker, R.E., Smith, R., and Bush, Joan, M. (1994, April).   Examining Replication Effects on Rasch Fit Statistics. American Educational Research Association, New Orleans, LA

Schumacker, R.E. & Denson, K. (1994, April). A Johnson-Neyman approach to interpreting significant discrete time periods in survival analysis. American Educational Research Association, New Orleans, LA.

Papa F.J., Stone R.C., Aldrich D.G. & Schumacker R. (1994, June). Correlation Between Prototypicality and Error Variance Measures of Case Vignettes Used in Problem-Specific Diagnostic Competency Exams. Sixth International Ottawa Conference on Medical Education. Toronto, Ontario, Canada.

Schumacker, R.E., Smith, R., and Bush, Joan, M. (1995, April).   Using Item Mean Squares to Evaluate Fit to the Rasch Model.   American Educational Research Association, San Francisco, CA

Schumacker, R.E. & Bembry, K. (1995, April).   Centering Effects in HLM Level-1 Predictor Variables. American Educational Research Association, San Francisco, CA

Schumacker, R.E. (1995, April).   Testing Interaction Effects in Structural Equation Models. American Educational Research Association, San Francisco, CA.

Schumacker, R.E. & Papa, F.J. (1995, October). Assessing Disease Class-Specific Diagnostic Ability: A Practical Adaptive Test Approach. Midwestern Educational Research Association, Chicago, IL.

Papa, F.J., Schumacker, R., Stone, R.C. & Aldrich, D.G. (1995, October). Assessing Differences in Disease
    Class-Specific Diagnostic Ability Between Experts and Novices. Mid-Western Educational Research
    Association (MWERA), Chicago, IL.

Papa, F.J., Aldrich, D.G., Stone, R.C. & Schumacker, R. (1996, March). The Use of Computer Adaptive
    Testing in the Research and Implementation of the Virtual Classroom via the World Wide Web. The
    Thirteenth International Conference on Technology and Education (ICTE). New Orleans, LA.

Schumacker, R.E. (1996, April). Discussant: AERA Structural Equation Modeling SIG,
    Extension and Applications of Structural Equation Modeling. American Educational Research
    Association, New York, N.Y.

Schumacker, R.E. (1996, April). Reliable assessments of disease class-specific diagnostic competencies:
    Toward an alternative medical assessment paradigm. American Educational Research Association,
    New York, N.Y.

Schumacker, R.E. (1996, April). School choices: Using competing risks model of survival analysis.
    American Educational Research Association. New York, N.Y.

Schumacker, R.E. (1996, April). Facet selection criteria: Examining residuals and more.
    American Educational Research Association, New York, N.Y.

Papa F.J., Schumacker, R.E., Aldrich, D.G., Stone, R.C. (1996, April). Assessing Disease Class-Specific
    Diagnostic Ability: A Practical Adaptive Test Approach. American Education Research Association
    American Educational Research Association. New York, N.Y.

Harasym, P.H., Papa, F.J., Schumacker, R.E., Stone, R.C. & Aldrich, DG. (1996, June).   The Structure of
    Medical Knowledge reflected in Clinician's Estimates of the probabilities of signs/symptoms within
    Diseases. Seventh Ottawa Conference on Medical Education, Maascricht, The Netherlands.

Papa, F.J., Stone, R.C., Aldrich, D.G. & Schumacker R (1996, June).   Disease-specific, computer adaptive
    testing on the Internet. Seventh Ottawa Conference on Medical Education. Maascricht, The
    Netherlands.

Papa, F.J., Stone, R.C., Aldrich, D.G., Schumacker, R. & Harasym, P. (1996, June). The use of typicality
    estimates to calibrate test case vignettes for use in Computer Adaptive Testing: The introduction of
    concept-referenced assessments of diagnostic capabilities. Seventh Ottawa Conference on Medical
    Education, Maascricht, The Netherlands.

Papa, F.J., Stone, R.C., Aldrich, D.G., Schumacker, R. & Harasym, P.(1996, June). Disease Class-Specific,
    Typicality-Graded' Test Case Vignettes: Towards 'Construct-Referenced' Assessments of Diagnostic
    Performance. Seventh International Ottawa Conference on Medical Education. Maascricht, The
    Netherlands.

Schumacker, R.E. (1997, January). Chair: Measurement Symposium on Test Equating.
    Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1997, January).   Publish, Don't Perish Symposium.
Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1997, January). Special Education Effectiveness Study.
Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1997, March).   Many-Faceted Rasch Analysis of Faculty Research Grant Peer Ratings.
International Objective Measurement Workshop, University of Chicago, Chicago, IL.

Papa, F.J., Schumacker, R.E., Stone, R.C. & Aldrich, D.G. (1997, March). A Many-Facet Rasch Model for Assessing Disease Class-Specific Diagnostic Abilities in Medical Students. American Education Research Association (AERA), Chicago, IL.

Schumacker, R.E. (1997, March). Using Logistic Regression Diagnostics to Improve Survival Analysis Parameter Estimates. American Educational Research Association, Chicago, Illinois.

Schumacker, R.E. (1997, March). Chair, Hierarchical Linear Model Applications.
American Educational Research Association, Chicago, Illinois.

Schumacker, R.E. (1997, March). Program Chair, Multiple Linear Regression SIG & Business Meeting
American Educational Research Association, Chicago, Illinois.

Schumacker, R.E. (1998, April). Chair, Methodological Issues in Structural Equation Modeling.
American Educational Research Association, San Diego, California.

Schumacker, R.E. (1998, April).   Identifying Measurement Disturbance Effects Using Rasch Fit Statistics
American Educational Research Association, San Diego, California.

Schumacker, R.E. (1998, April).   Institute for Objective Measurement Educator Forum.
American Educational Research Association, San Diego, California.

Schumacker, R.E. (1998, April).   An Investigation of Factors Affecting Test Equating.
American Educational Research Association, San Diego, California.

Schumacker, R.E. (1998, January). The Effectiveness of Using Problem Solving Strategies in Teaching Mathematics. Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1998, January). Do's and Don'ts of Publishing.
Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1998, January).   Chair: IRT Test Equating: The Equate Program.
Southwest Educational Research Association, Houston, Texas.

Schumacker, R.E. (1998, January). Texas Special Education Effectiveness Study
Southwest Educational Research Association, Houston, Texas.

Papa, F.J., Harasym, P., Schumacker, R., Aldrich, D. & Stone, R. (1998, November). The Impact of an Alternative Approach to Construct Definition upon the Reliability and Utility of Diagnostic Performance Measures. The 109th Annual Association of American Medical Colleges (AAMC), Research in Medical Education (RIME) Conference, New Orleans, LA.

Schumacker, R.E. (1999, January). Latent Growth Models. Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1999, January). Structural Equation Modeling. Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1999, January). Rasch Measurement Models. Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (1999, March).   LISREL Workshop. Southern Methodist University, Dallas, Texas.

Schumacker, R.E. & Bentler, P. (1999, April).   A Second Course in Structural Equation Modeling Theory and EQS 6.0 Implementation, Professional Development Session, American Educational Research Association, Montreal, Canada.

Schumacker, R.E., Marcoulides, G.A., Lomax, R.G., and Bryne, B.M. (1999, April). Structural Equation Modeling Book & Journal Session (Moderator, Peter M. Bentler, UCLA).   American Educational Research Association, Montreal, Canada.

Schumacker, R.E. (1999, April). General Linear Model and Multilevel Modeling and Its Relationship to Neural Nets. American Educational Research Association, Montreal, Canada.

Schumacker, R.E. (1999, April). Logit Regression: Best Model Selection. American Educational Research Association, Montreal, Canada.

Schumacker, R.E. (1999, April). Chair: The General Linear Model as it relates to Violations Of Assumptions and Non-independence of Observations.   American Educational Research Association, Montreal, Canada.

Papa, F.J., Aldrich, D. & Schumacker, R. (1999, October). The Effects of Immediate On-line Feedback upon Diagnostic Performance. The 110th Annual Association of American Medical Colleges (AAMC), Research in Medical Education (RIME) Conference, Washington, DC.

Schumacker, R.E. & Martin, M. (2000, January). Latent Growth Modeling Workshop. Southwest Educational Research Association, Dallas, Texas.

Schumacker, R.E., Mortenson, M., Daily, E.M., and Whitworth, C. (2000, January). Testing and Evaluation Issues for an Internet Course (Symposium). Southwest Educational Research Association, Dallas, Texas.

Schumacker, R.E. & Norris, D. L. (2000, January). Texas Special Education Effectiveness Study: Adult Outcome Follow-up Study. Southwest Educational Research Association, Dallas, Texas.

Schumacker, R.E., Box, K., and Tedford, S. (2000, January). Survey Research Methods: New Developments and Techniques. Southwest Educational Research Association, Dallas, Texas.

Schumacker, R.E., Daniel, L.G., Dufrene, D.D., Snyder, P. and Thompson, B. (2000, January). Getting Published: Advice from Successful Authors and Editors (Workshop). Southwest Educational Research Association, Dallas, Texas.

Schumacker, R.E. & Martin, M. (2000, January). Latent Growth Curve Modeling. Southwest Educational Research Association, Dallas, Texas.

Schumacker, R.E. & Mount, R. (2000, April).   Identifying Different Item Performance by Subgroups in Rasch Measurement: A comparison of Classical and Rasch Measurement Approaches. American Educational Research Association, New Orleans, Louisiana.

Schumacker, R.E.& Cheevatanarak, S. (2000, April). A comparison of normal and elliptical estimation methods in Structural Equation Modeling. American Educational Research Association, New Orleans, Louisiana.

Schumacker, R.E. (2000, April).   Educational Research Methods: A web course. American Educational Research Association, New Orleans, Louisiana.

Schumacker, R.E., Sherron, T., Allen, J. (2000, April). A fixed effects panel data model: Mathematics achievement in the U.S. American Educational Research Association, New Orleans, Louisiana.

Schumacker, R.E. (2000, June). President Roast. Lawrence Erlbaum, Erlbaum Associates, Publishers, Inc. American Psychological Society, Miami Beach, Florida.

Schumacker, R.E. Monahan, M.P., & Mount, R.E. (2002, February).   A Comparison of OLS to LTS and MM Robust Regression in S-PLUS. Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. & Mount, R.E. (2002, February). Improving Basic Educational Programs for Minority Students. Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (2002, April). Multiple Regression and Discriminant Analysis Revisited. American Educational Research Association, New Orleans, LA.

Schumacker, R.E. & Monahan, M.P. (2003, February). Rating Scale Analysis: The FACETS program. Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (2003, February). Presidents Invited Speaker. Southwest Educational Research Association, San Antonio, Texas.

Schumacker, R.E., Si, B., & Mount, R. (2003, April). Ability Estimation Under Different Item
      Parameterization and Scoring Models. American Educational Research Association, Division D,
      Methods in Educational Measurement and Statistics, Chicago, Illinois.

Schumacker, R.E. (2003, April). Chair: Growth Curve Modeling Using Structural Equation Modeling.
      American Educational Research Association, SEM SIG, Chicago, Illinois.

Schumacker, R.E., Anderson, C., & Mount, R. (2003, April). A comparison of five robust regression methods
      with ordinary least squares: Relative efficiency, bias, and test of the null hypothesis.
      American Educational Research Association, MLR: GLM SIG, Chicago, Illinois.

Schumacker, R.E., Seaman, M., & Roberts, K. (2003, April). An Introduction to S-PLUS 6 Statistical
      Software. American Educational Research Association, Professional Training Session, Chicago,
      Illinois.

Schumacker, R.E. (2003, April). Chair: Advances in Causal Modeling.
      American Educational Research Association, Division D, Chicago, Illinois.

Schumacker, R.E. (2003, April).   Chair: Recent Progress in Rasch Measurement Theory.
      American Educational Research Association, Rasch SIG, Chicago, Illinois.

Schumacker, R.E. (2003, April). Reliability in Rasch Measurement: Avoiding the Rubber Ruler.
      American Educational Research Association, SIG: Rasch Measurement, Rasch Measurement Issues
      and Practices, Chicago, Illinois.

Schumacker, R.E. & Bembry, K. (2003, April). Investigating a Classroom Effectiveness Measure Over Time
      American Educational Research Association, Division H, Chicago, Illinois.

Schumacker, R.E. & Smith, E. (2003, April). Reliability in Rasch Measurement.
      International Objective Measurement Conference, Festschrift in honor of Benjamin Drake Wright,
      Rehabilitation Institute of Chicago, Chicago, Illinois.

Schumacker, R.E. & Marcoulides, G.A. (2004, April). Conducting Specification Searches in SEM: New
      Strategies and Procedures.   American Educational Research Association, San Diego, CA.

Schumacker, R.E. (2004, February). Specification Search in Statistical Models. Southwest Educational
      Research Association, Dallas, Texas.

Schumacker, R.E. & Roberts, K. (2004, April). Using S-PLUS: Basic Statistics to Simulation. American
      Educational Research Association, Professional Development Training Session, San Diego, CA.

Schumacker, R.E. & Mount, R. (2005, April). Effect Size and Confidence Intervals in General Linear Models
      for Categorical Data Analysis. American Educational Research Association, Montreal, Canada.

Schumacker, R.E., Mount, R. & Marcoulides, G.A. (2005, April). Detecting measurement disturbance effects: the graphical display of item characteristics. American Educational Research Association, Montreal, Canada.

Schumacker, R.E., Starobin, S., Laanan, F., & Katsinas, S. (2005, April). Predicting self-concept of community college students in science, mathematics, and engineering. American Educational Research Association, Montreal, Canada.

Schumacker, R.E. & Sherron, T. (2005, April). Basic Statistics to Simulations Using S-PLUS. American Educational Research Association, Professional Development Training Session, Montreal, Canada.

Schumacker, R.E. (2005, April). Chair: Rasch SIG Business Meeting. American Educational Research Association, Montreal, Canada.

Schumacker, R.E. (2005, April). Chair: Rasch Measurement: Philosophical, Biological, and Attitudinal Impacts. American Educational Research Association, Montreal, Canada.

Schumacker, R.E., Hughes, K., Sherron, T., and Dimock, V.K. (2005, April). Assessment of Technology Proficiency in K-12: Establishing Valid and Reliable Measures Using Mixed Methods. American Educational Research Association, SIG – Professional Licensure & Certification, Montreal, Canada.

Schumacker, R.E. (2005, April). Discussant: Issues in Multiple Linear Regression. American Educational Research Association, SIG – MLR: GLM, Montreal, Canada.

Schumacker, R.E. (2006, February). Latent Trait Reliability using Rasch Measurement Models. Southwest Educational Research Association, Austin, Texas.

Schumacker, R.E. (2007, March). Regression Discontinuity Models and the Variance Inflation Factor. American Educational Research Association, SIG – MLR: GLM, New York, New York.

Schumacker, R.E. (2008, March). Chair: Longitudinal Data Analysis using SEM. American Educational Research Association, SIG – SEM, New York, New York.

Brumback, T. & Schumacker, R.E. (2008, October). A Meta-Analysis of Studies of Cognition in Engineering Education. Mid-South Educational Research Association annual meeting. Knoxville, TN.

Schumacker, R.E. & Robinson, Cecil (2009, April). Interaction Effects in Multiple Regression: Centering, Variance Inflation Factor, and Interpretation Issues. American Educational Research Association, SIG – MLR: GLM, San Diego, CA.

Zhang Y, Bishop PA, Schumacker RE, Green JM, Richardson M. Evaluation of a Novel Personal Cooling Device for Workers in Hot Environments. Abstract submitted at National ACSM Conference, Baltimore, MD, USA (June 2009).

Zhang Y, Bishop PA, Schumacker RE, Green JM, Richardson M. Evaluation of a Novel Personal Cooling Device for Workers in Hot Environments. Abstract submitted at Southeast ACSM Conference, Greenville, SC, USA (February 2009).

Harring, J. R. & Schumacker, R.E. (2010, April). Investigating the Use of Normal Scores to Lessen the Impact of Non-Normality in Latent Variable Interaction Models. American Educational Research Association, SIG – Structural Equation Modeling, Denver, CO.

Hobbs, M., Moreland, A., Schumacker, R., and Barufaldi, J. (2010, April) *Exploring the professional growth continuum: A methodological approach.* Paper presented in the Mixed-Methods SIG, at the American Educational Research Association (AERA) conference, Denver, CO.

Papanastasiou, E.C. & Schumacker, R.E. (2010, April). Rasch Rating Scale Analysis of the Attitudes Toward Research Scale. American Educational Research Association, SIG - Survey Research, Denver, CO.

Brumback, T., Schumacker, R., and Fonseca, D. (2010, June). *A meta-analysis of studies of cognition in engineering education*. Presented at the 2010 Annual Conference and Exposition of the American Society of Engineering Education, Louisville, KY.

Schumacker, R. (2011, April). Survey Research Scales and Score Interpretation: A Rasch Rating Scale Analysis. American Educational Research Association, New Orleans, LA.

Schumacker, R. (2011, November). Evaluation of Evaluators Who Rate Proposals. American Evaluation Association. Anaheim, CA.

Schumacker, R. (2011, November). Evaluators Use of Questionnaires and Score Interpretation. American Evaluation Association. Anaheim, CA.

Robinson, C., Tomek, S., & Schumacker, R. (2012, August). Interaction versus main effects and the threat of Type II error in linear regression. Poster presented at the 2012 Annual Meeting for the American Psychological Association in Orlando, Florida.

Robinson, C., Tomek, S., & Schumacker, R. (2013, April). Interaction versus Simple Effects and the Threat of Type II Error in Linear Regression. Multiple Linear Regression: General Linear Model SIG. American Educational Research Association, San Francisco, CA.

Schumacker, R.E. (2013, July). Synthesis of Research Findings Using R. UseR! 2013 Conference, July 9 -12, 2013, University of La Mancha, Albacete Spain.

Schumacker, R.E. (2013, November). Meta-Analysis Using R. MidSouth Educational Research Association, November 6 - 8, 2013. Pensacola, Fl.

Schumacker, R.E. (2015, April). Dimensionality of Survey Rating Scales. American Educational Research Association, Chicago, Illinois

Schumacker, R.E. (2015, April). Chair: Criteria and Bias in Measuring Latent Constructs and Classes. American Educational Research Association, Chicago, Illinois

Schumacker, R.E. (2015, April). Chair, Symposium: Multiple Regression: Principle & Practices. American Educational Research Association, Chicago, Illinois

Schumacker, R.E. (2015, April). Discussant: Multiple Regression: Modern Issues & Techniques. American Educational Research Association, Chicago, Illinois

Schumacker, R.E. (2016, October). Chair/Presenter, Symposium. Synthesis of Presentations and Publications in Evaluation Journals. American Evaluation Association, Atlanta, Georgia.

Wind, S. & Schumacker, R.E. (2017, April). Exploring Within-Rater Category Ordering: A Simulation Study using Adjacent-Categories Mokken Scale Analysis. National Council on Measurement in Education, San Antonio, Texas.

Porter, M., Schumacker, R., & Tilford, A. (2017, April). Summary of Evaluation Presentations at *AERA:* 2011-2015. American Educational Research Association, San Antonio, Texas.

Schumacker, R.E. (2017, June). Structural Equation Models and Applications: Educational Administration. Beijing Normal University, Beijing, China.

Schumacker, R.E. (2017, June). Structural Equation Models and Applications: Teacher Effectiveness. Nanjing Normal University, Nanjing, China.

Schumacker, R.E. (2017, June). Structural Equation Models and Applications: The Basics. Tianhua College, Shanghai, China.

Schumacker, R.E. (2017, June). Structural Equation Models and Applications: Science, Technology, Engineering, and Math (STEM). East China Normal University, Shanghai, China.

Schumacker, R.E. (2017). Structural Equation Model Applications. Tennessee State University, Nashville, TN.

Leithwood, K., Sun, J.-P. & Schumacker, R. (2018, April). How School Leadership Influences Student Learning. A Test of "The Four Paths Model". American Educational Research Association, New York, NY.

Schumacker, R.E. (2018, April). SEM Models and Applications. East China Normal University, Shanghai, China.

Schumacker, R.E. (2018, April). Defining Latent Variable Classes. East China Normal University, Shanghai, China.

Schumacker, R.E. (2018, April). School System Effectiveness. East China Normal University, Shanghai, China.

Schumacker, R.E. (2018, April). Principal Leadership Studies. East China Normal University, Shanghai, China.

Schumacker, R.E. (2018, April). Multi-level SEM. Nanjing Normal University, Nanjing, China.

Schumacker, R.E. (2018, April). Principal Leadership Studies. Nanjing Normal University, Nanjing, China.

Schumacker, R.E. (2018, April). Rasch Measurement Models. Nanjing Normal University, Nanjing, China.

Schumacker, R.E. (2018, April). Longitudinal Growth, Mixture, and Latent Transition Analysis. Beijing Normal University, Beijing, China.

Schumacker, R.E. (2018, April). Multivariate Statistics using R. Beijing Normal University, Beijing, China.

Schumacker, R.E. (2018, April). SEM Using R. Beijing Normal University, Beijing, China.

Schumacker, R.E. (2018, April). Defining Latent Variables. Beijing Normal University, Beijing, China.

Schumacker, R.E. (2018, April). MIMIC models. Beijing Normal University, Beijing, China.

Schumacker, R.E. (2019, April). Introduction to R Software and Applications. National Council on Measurement in Education. Toronto, Canada.

Schumacker, R.E. & Wind, S.A. (2019, April). Evaluating the Dimensionality of Ordinal Survey Rating Scales: A Comparison of Methods. American Educational Research Association, Toronto, Canada.

Schumacker, R.E.(2019, April). Chair, Methodological Considerations of Rasch Models. American Educational Research Association, Toronto, Canada.

Schumacker, R.E. (2019, April). *Measurement: Interdisciplinary Research and Perspectives*: Journal Talk. American Educational Research Association, Toronto, Canada.

Schumacker, R. E. (2020, November). Longitudinal Growth Modeling: Mixture Distributions. Mid-South Educational Research Association annual meeting, New Orleans, LA.

Wind, S.A. & Schumacker, R.E. (2020, April). Exploring the Impact of Missing Data on Principal Component Analysis of Residuals. American Educational Research Association, San Francisco, CA.

Schumacker, R.E. & Cai, Yonghong (2020, April). Principal leadership support as a mediating variable in predicting teacher expertise and competency. American Educational Research Association, San Francisco, CA.

Schumacker, R.E. & Holmes, L. (2020, April). Can We Identify Effective Teachers? Latent Class Analysis of Teacher Characteristics. American Educational Research Association, San Francisco, CA.

Ma, Wenchao, Jiang, Z. & Schumacker, R.E. (2020, April). Modeling Omitted Items in Cognitive Diagnosis Models. American Educational Research Association, San Francisco, CA.

Jiang, Zhehan, Ma, Wenchao, Schumacker, R.E. & Zhang, I. (2020, April). Fully-Bayesian Model Selection Methods in Diagnostic Classification Models. American Educational Research Association, San Francisco, CA.

Schumacker, R.E. & Yonghong, Cai (2021, April). Principal Leadership Effect on Teaching: Does it Matter? American Educational Research Association, Orlando, FL.

Wind, S.A. & Schumacker, R.E. (2021, April). Exploring the Impact of Missing Data on Residual-Based Dimensionality Analysis for Measurement Models. American Educational Research Association, Orlando, FL.

Hoi, Ka Weng & Schumacker, R.E. (2021, April). Meta-Analytic Structural Equation Modeling: A Comparison of Teacher-Student Relations from 2011 to 2018. American Educational Research Association, Orlando, FL.

Schumacker, R.E. (2021, April). Chair: Measurement Invariance and Longitudinal Modeling, Structural Equation Modeling SIG. American Educational Research Association, Orlando, FL.

Schumacker, R.E. (2022, March). Measurement Instrument Databases. World Education Summit. Building a Legacy of Learning. Osiris Educational (osiriseducational.co.uk).

Schumacker, R.E. (2022, April). Identifying Number of Curves in Longitudinal Growth Models. Educational Statistician SIG, American Educational Research Association, San Diego, CA.

Schumacker, R.E. & Holmes, L. (2022, April). Testing Individual vs Group Mean Differences in Social Science Research. Multiple Linear Regression: General Linear Model SIG, American Educational Research Association, San Diego, CA.

Schumacker, R.E. (2022, April). Chair: Multilevel SIG Business Meeting. American Educational Research Association, San Diego, CA.

Schumacker, R.E. (2022, April). Discussant: Rasch Measurement SIG. American Educational Research Association, San Diego, CA.

Leithwood, K., Sun, J.-P., Schumacker, R., & Hua, C. (2023, April). Psychometric Properties of the Successful School Leadership Survey. Educational Leadership SIG. American Educational Research Association, Chicago, Illinois.

Schumacker, R.E. (2023, April). Rasch Model and Linear Logistic Test Model Practice Effects. Rasch Measurement SIG. American Educational Education Association, Chicago, IL.

Lugu, B., Ma, W., Guo, W., & Schumacker, R. (2023, April). Cognitive Diagnosis Model for Disengaged Behaviors. National Council on Measurement Education, Chicago, IL.

Schumacker, R. E. (2023, April). Chair. Rasch Analysis in K-12 Settings. Rasch Measurement SIG. American Educational Education Association, Chicago, IL.

Schumacker, R. E. (2023, April). Chair. Measurement Invariance, Model Selection, and Measurement Uncertainty in Structural Equation Modeling. Structural Equation Modeling SIG. American Educational Education Association, Chicago, IL.

Schumacker, R. E. (2023, April). Chair. Statistical Modeling and Related Issues in the Implementation to Empirical Educational Data. General Linear Modeling SIG. American Educational Education Association, Chicago, IL.

Schumacker, R.E. (2023, March). Modeling Student Practice Effects on Test Scores. World Education Summit. World Education Summit. Sapporo, Japan.

Papa, F.J., Selby, S., Tierney, N., & Schumacker, R. (May 2024). Improvements in the Clinical Competencies of year two Medical students trained with a high-fidelity abdominal simulator. University of Texas Southwestern 7th Annual Charles Morris Ginsburg Simulation-Based Quality Improvement and Research Conference, Dallas, Texas. https://www.utsouthwestern.edu/departments/simulation-center/.

Schumacker, R.E. & Sherron, T. (April 2024). Difference-in-Differences Regression Model and Comparable Methods. Linear, Nonlinear, Latent and Machine Learning for Educational Research. American Educational Research Association, Philadelphia, PA.

Waltemate, B. & Schumacker, R. (April, 2024). Statistics in R (Part 1 and Part 2). SUGR'S 16th Annual Symposium, Angelo Bruno Business Library, University of Alabama.

CONFERENCES (Organized & Administered)

Southwest Educational Research Association
2002 Program Chair / President-Elect
February 14-16, 2002, Austin, Texas

Solutions For At-Risk Students
Federation of North Texas Area Universities
and UNT/TWU Chapter of Phi Delta Kappa
University of North Texas, June 21, 1989, Denton, Texas

Texas School Report Card: School and Program Evaluation
Federation of North Texas Area Universities and UNT/TWU Chapter of Phi Delta Kappa
University of North Texas, June 21, 1991, Denton, Texas

Evaluation Strategies: Teacher Assessment of Student Progress
Federation of North Texas Area Universities and UNT/TWU Chapter of Phi Delta Kappa
University of North Texas, June 18, 1993, Denton, Texas

AWARDS & HONORS

President, Southwest Educational Research Association, 2002-2003
Marquis Who's Who in American Education, 1996-1997, 2003-2009
Marquis Who's Who in Medicine and Healthcare, 2000-2009
Center Distributed Learning Pioneer Award, 1999
Charn Uswachoke International Award, 1998
Strathmore's Who's Who in International Education, 1998-1999

Marquis Who's Who in the South and Southwest, 1997-98
Marquis Who's Who in the World, 1997-98; 2008
UNT Scholar Award, 1996
Phi Delta Kappa - Vice President Programs, 1994
Apple iPad Award - College of Education, 2011 (May) - *DecisionKit*
CIT Faculty Technology Award, 2012 (March) - *Decision Tools for Selecting Measurement,*
 Statistics, and Research Designs
McCrory Faculty Excellence in Research Award, 2013 - UA College of Education
Structural Equation Modeling Service Award, 2014 - American Education Research Association
U.S. Core Fulbright Award 2016-2017, East Pacific Rim (China)

Course Improvement

BER 643 Multivariate Statistics
- Created R programs, SPSS programs, SAS Programs for Book Chapters
- Created Data Sets for Book Chapters
- Created Power Point Slides for all Book Chapters
- Created Exercises for student grading for all Book Chapters
- Created Answers to Exercises for all Book Chapters
- Created Final Project w/examples and scoring rubric

BER 646 Structural Equation Modeling
- Updated with additional new R programs, LISREL, and Mplus programs
- Updated Data Sets for new programs
- Updated Power Point Slides with new material
- Created additional Exercises for student assignments
- Created Answers to additional Exercises
- Updated Final Project options

BER 660 Evaluation Theory I
- Created Power point Slides for All chapters in Book
- Created narrated Welcome message
- Created 4 exams (25 questions each)
- Created Final Project w/examples and scoring rubric

Professional Development

Attendee - NSF Directorate for the Social, Behavioral and Economic Sciences (2024)
 Culverhouse College of Business, February 23rd, Hewson Hall, rm 015

Attendee - Science Bites Series Presentation (Dr. Courtney O'Grady)
 Center for Interconnected Behavioral and Mental Health Systems
 Friday 3/22/2024 -Autherine Lucy Hall 102

CITI Training – Non-Medical Human Subjects Certificate (2024)
CITI Training – Conflict of Interest Certificate (2024)